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)	5290017.39	17.39
100%		-30	5290071.84	71.84
100%		-20	5290065.20	65.20
100%		-10	5290059.03	59.03
100%		0	5290054.97	54.97
100%		+10	5290051.06	51.06
100%		+30	5290051.22	51.22
100%		+40	5290060.82	60.82
100%		+50	5290065.99	65.99
LOW	3.65	+20	5290063.90	63.90
HIGH	4.47	+20	5290064.77	64.77

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)	5530011.68	11.68
100%		-30	5530035.30	35.30
100%		-20	5530028.25	28.25
100%		-10	5530021.91	21.91
100%		0	5530017.07	17.07
100%		+10	5530014.93	14.93
100%		+30	5530015.16	15.16
100%		+40	5530025.22	25.22
100%		+50	5530030.39	30.39
LOW	3.65	+20	5530029.51	29.51
HIGH	4.47	+20	5530027.03	27.03

Note:

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

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

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5775031.09	31.09
100%		-30	5775036.44	36.44
100%		-20	5775028.97	28.97
100%		-10	5775022.37	22.37
100%		0	5775017.85	17.85
100%		+10	5775013.99	13.99
100%		+30	5775014.86	14.86
100%		+40	5775023.50	23.50
100%		+50	5775028.52	28.52
LOW	3.65	+20	5775028.20	28.20
HIGH	4.47	+20	5775030.51	30.51

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)	5210027.37	27.37
100%		-30	5210050.53	50.53
100%		-20	5210043.11	43.11
100%		-10	5210036.52	36.52
100%		0	5210033.34	33.34
100%		+10	5210030.96	30.96
100%		+30	5210029.73	29.73
100%		+40	5210039.18	39.18
100%		+50	5210042.61	42.61
LOW	3.65	+20	5210046.94	46.94
HIGH	4.47	+20	5210042.58	42.58

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)	5290015.71	15.71
100%		-30	5290039.39	39.39
100%		-20	5290033.23	33.23
100%		-10	5290026.57	26.57
100%		0	5290022.13	22.13
100%		+10	5290018.23	18.23
100%		+30	5290018.02	18.02
100%		+40	5290026.82	26.82
100%		+50	5290031.15	31.15
LOW	3.65	+20	5290034.38	34.38
HIGH	4.47	+20	5290030.55	30.55

Note:

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

OPERATING BAND: UNII Band 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)	5530033.17	33.17
100%		-30	5530056.85	56.85
100%		-20	5530050.08	50.08
100%		-10	5530043.73	43.73
100%		0	5530040.32	40.32
100%		+10	5530037.34	37.34
100%		+30	5530035.79	35.79
100%		+40	5530045.53	45.53
100%		+50	5530050.57	50.57
LOW	3.65	+20	5530051.13	51.13
HIGH	4.47	+20	5530047.97	47.97

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)	5775023.20	23.20
100%		-30	5775057.20	57.20
100%		-20	5775050.05	50.05
100%		-10	5775043.98	43.98
100%		0	5775039.43	39.43
100%		+10	5775035.69	35.69
100%		+30	5775036.52	36.52
100%		+40	5775046.88	46.88
100%		+50	5775050.38	50.38
LOW	3.65	+20	5775048.17	48.17
HIGH	4.47	+20	5775052.96	52.96

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)	5210022.18	22.18
100%		-30	5210046.30	46.30
100%		-20	5210039.15	39.15
100%		-10	5210032.66	32.66
100%		0	5210028.89	28.89
100%		+10	5210025.15	25.15
100%		+30	5210025.95	25.95
100%		+40	5210034.93	34.93
100%		+50	5210039.50	39.50
LOW	3.65	+20	5210040.61	40.61
HIGH	4.47	+20	5210036.18	36.18

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)	5290045.58	45.58
100%		-30	5290046.21	46.21
100%		-20	5290038.45	38.45
100%		-10	5290031.46	31.46
100%		0	5290027.81	27.81
100%		+10	5290024.79	24.79
100%		+30	5290026.11	26.11
100%		+40	5290035.90	35.90
100%		+50	5290039.22	39.22
LOW	3.65	+20	5290037.00	37.00
HIGH	4.47	+20	5290040.84	40.84

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)	5530027.54	27.54
100%		-30	5530051.29	51.29
100%		-20	5530044.38	44.38
100%		-10	5530037.65	37.65
100%		0	5530033.60	33.60
100%		+10	5530030.35	30.35
100%		+30	5530031.17	31.17
100%		+40	5530040.83	40.83
100%		+50	5530046.73	46.73
LOW	3.65	+20	5530044.64	44.64
HIGH	4.47	+20	5530041.42	41.42

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)	5775046.26	46.26
100%		-30	5775050.97	50.97
100%		-20	5775043.53	43.53
100%		-10	5775038.18	38.18
100%		0	5775034.18	34.18
100%		+10	5775030.40	30.40
100%		+30	5775030.80	30.80
100%		+40	5775038.90	38.90
100%		+50	5775042.17	42.17
LOW	3.65	+20	5775042.31	42.31
HIGH	4.47	+20	5775047.29	47.29

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.

[ANT.2]

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)	5210017.06	17.06
100%		-30	5210041.88	41.88
100%		-20	5210034.06	34.06
100%		-10	5210027.14	27.14
100%		0	5210022.79	22.79
100%		+10	5210019.79	19.79
100%		+30	5210020.69	20.69
100%		+40	5210031.27	31.27
100%		+50	5210034.67	34.67
LOW	3.65	+20	5210036.66	36.66
HIGH	4.47	+20	5210030.30	30.30

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)	5290027.74	27.74
100%		-30	5290040.73	40.73
100%		-20	5290034.59	34.59
100%		-10	5290029.29	29.29
100%		0	5290025.09	25.09
100%		+10	5290022.75	22.75
100%		+30	5290019.54	19.54
100%		+40	5290029.65	29.65
100%		+50	5290033.63	33.63
LOW	3.65	+20	5290032.54	32.54
HIGH	4.47	+20	5290036.81	36.81

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)	5530031.07	31.07
100%		-30	5530054.66	54.66
100%		-20	5530047.24	47.24
100%		-10	5530041.81	41.81
100%		0	5530038.27	38.27
100%		+10	5530035.37	35.37
100%		+30	5530034.33	34.33
100%		+40	5530044.29	44.29
100%		+50	5530048.31	48.31
LOW	3.65	+20	5530050.05	50.05
HIGH	4.47	+20	5530045.22	45.22

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)	5775017.88	17.88
100%		-30	5775055.25	55.25
100%		-20	5775048.12	48.12
100%		-10	5775041.87	41.87
100%		0	5775037.19	37.19
100%		+10	5775033.24	33.24
100%		+30	5775034.47	34.47
100%		+40	5775043.58	43.58
100%		+50	5775048.68	48.68
LOW	3.65	+20	5775047.67	47.67
HIGH	4.47	+20	5775049.16	49.16

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)	5210040.27	40.27
100%		-30	5210063.97	63.97
100%		-20	5210057.07	57.07
100%		-10	5210051.14	51.14
100%		0	5210047.61	47.61
100%		+10	5210044.97	44.97
100%		+30	5210043.03	43.03
100%		+40	5210053.08	53.08
100%		+50	5210057.02	57.02
LOW	3.65	+20	5210059.33	59.33
HIGH	4.47	+20	5210056.30	56.30

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)	5290018.86	18.86
100%		-30	5290064.41	64.41
100%		-20	5290058.28	58.28
100%		-10	5290051.48	51.48
100%		0	5290046.61	46.61
100%		+10	5290043.43	43.43
100%		+30	5290042.57	42.57
100%		+40	5290050.90	50.90
100%		+50	5290054.36	54.36
LOW	3.65	+20	5290055.23	55.23
HIGH	4.47	+20	5290058.48	58.48

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)	5530026.42	26.42
100%		-30	5530049.35	49.35
100%		-20	5530042.69	42.69
100%		-10	5530036.44	36.44
100%		0	5530031.81	31.81
100%		+10	5530028.41	28.41
100%		+30	5530029.03	29.03
100%		+40	5530038.81	38.81
100%		+50	5530044.67	44.67
LOW	3.65	+20	5530043.56	43.56
HIGH	4.47	+20	5530040.10	40.10

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)	5775036.27	36.27
100%		-30	5775061.14	61.14
100%		-20	5775053.49	53.49
100%		-10	5775047.77	47.77
100%		0	5775043.95	43.95
100%		+10	5775041.42	41.42
100%		+30	5775039.08	39.08
100%		+40	5775048.48	48.48
100%		+50	5775052.99	52.99
LOW	3.65	+20	5775054.76	54.76
HIGH	4.47	+20	5775049.95	49.95

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)	5210047.27	47.27
100%		-30	5210070.42	70.42
100%		-20	5210064.31	64.31
100%		-10	5210057.30	57.30
100%		0	5210052.60	52.60
100%		+10	5210050.26	50.26
100%		+30	5210049.66	49.66
100%		+40	5210058.86	58.86
100%		+50	5210062.76	62.76
LOW	3.65	+20	5210066.37	66.37
HIGH	4.47	+20	5210062.95	62.95

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)	5290019.69	19.69
100%		-30	5290071.89	71.89
100%		-20	5290065.13	65.13
100%		-10	5290059.51	59.51
100%		0	5290054.61	54.61
100%		+10	5290051.59	51.59
100%		+30	5290049.75	49.75
100%		+40	5290060.41	60.41
100%		+50	5290064.13	64.13
LOW	3.65	+20	5290062.49	62.49
HIGH	4.47	+20	5290066.21	66.21

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)	5530014.66	14.66
100%		-30	5530039.10	39.10
100%		-20	5530031.84	31.84
100%		-10	5530026.64	26.64
100%		0	5530022.33	22.33
100%		+10	5530019.71	19.71
100%		+30	5530016.82	16.82
100%		+40	5530027.04	27.04
100%		+50	5530031.65	31.65
LOW	3.65	+20	5530033.05	33.05
HIGH	4.47	+20	5530029.58	29.58

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)	5775030.37	30.37
100%		-30	5775039.32	39.32
100%		-20	5775032.17	32.17
100%		-10	5775026.07	26.07
100%		0	5775021.96	21.96
100%		+10	5775018.29	18.29
100%		+30	5775017.92	17.92
100%		+40	5775025.75	25.75
100%		+50	5775029.39	29.39
LOW	3.65	+20	5775029.80	29.80
HIGH	4.47	+20	5775032.26	32.26

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.

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)	5210037.09	37.09
100%		-30	5210061.89	61.89
100%		-20	5210053.91	53.91
100%		-10	5210047.86	47.86
100%		0	5210043.42	43.42
100%		+10	5210041.17	41.17
100%		+30	5210039.22	39.22
100%		+40	5210048.20	48.20
100%		+50	5210053.28	53.28
LOW	3.65	+20	5210055.01	55.01
HIGH	4.47	+20	5210052.60	52.60

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)	5290045.18	45.18
100%		-30	5290061.00	61.00
100%		-20	5290053.25	53.25
100%		-10	5290047.98	47.98
100%		0	5290044.82	44.82
100%		+10	5290042.05	42.05
100%		+30	5290040.19	40.19
100%		+40	5290049.00	49.00
100%		+50	5290053.20	53.20
LOW	3.65	+20	5290052.79	52.79
HIGH	4.47	+20	5290054.88	54.88

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)	5530044.59	44.59
100%		-30	5530067.52	67.52
100%		-20	5530060.59	60.59
100%		-10	5530054.02	54.02
100%		0	5530049.73	49.73
100%		+10	5530047.52	47.52
100%		+30	5530048.36	48.36
100%		+40	5530057.40	57.40
100%		+50	5530063.07	63.07
LOW	3.65	+20	5530061.92	61.92
HIGH	4.47	+20	5530058.50	58.50

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)	5775036.76	36.76
100%		-30	5775060.08	60.08
100%		-20	5775051.99	51.99
100%		-10	5775046.34	46.34
100%		0	5775041.30	41.30
100%		+10	5775038.66	38.66
100%		+30	5775039.16	39.16
100%		+40	5775048.45	48.45
100%		+50	5775054.23	54.23
LOW	3.65	+20	5775053.98	53.98
HIGH	4.47	+20	5775051.10	51.10

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

[ANT.1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5709.32	15.68
802.11n(HT20)				5709.16	15.84
802.11ac(VHT20)				5709.20	15.80
802.11a	UNII 3	5720	144	5730.52	5.52
802.11n(HT20)				5730.60	5.60
802.11ac(VHT20)				5730.60	5.60

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5690.00	35.00
802.11ac(VHT40)				5689.92	35.08
802.11n(HT40)	UNII 3	5710	142	5729.92	4.92
802.11ac(VHT40)				5730.08	5.08

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5649.08	75.92
	UNII 3	5690	138	5730.44	5.44

Note:

[UNII 2C] 26dB Bandwidth = 5 725 MHz **-** Measured Frequency[MHz]

[UNII 3C] 26dB Bandwidth = Measured Frequency[MHz] – 5 725 MHz

[ANT.2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5709.24	15.76
802.11n(HT20)				5708.80	16.20
802.11ac(VHT20)				5708.84	16.16
802.11a	UNII 3	5720	144	5730.88	5.88
802.11n(HT20)				5731.00	6.00
802.11ac(VHT20)				5730.84	5.84

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5689.68	35.32
802.11ac(VHT40)				5689.84	35.16
802.11n(HT40)	UNII 3	5710	142	5729.84	4.84
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	5648.96	76.04
	UNII 3	5690	138	5730.68	5.68

Note:

[UNII 2C] 26dB Bandwidth = 5 725 MHz **-** Measured Frequency[MHz]

[UNII 3C] 26dB Bandwidth = Measured Frequency[MHz] – 5 725 MHz

[ANT.1]

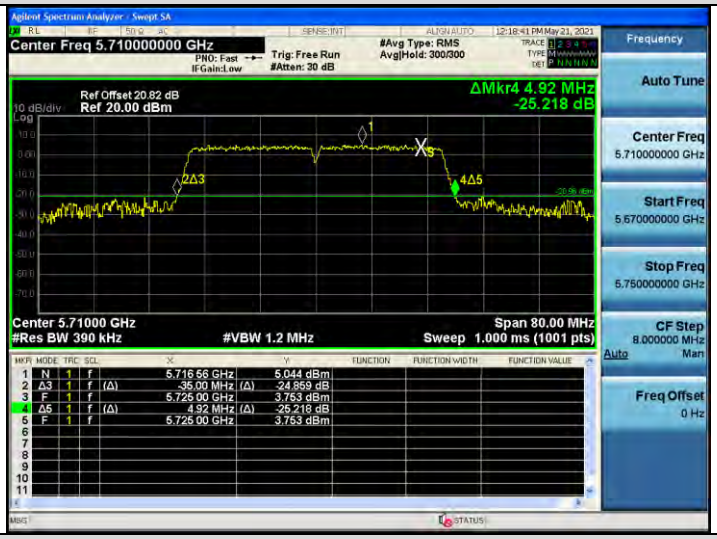
▣ Test Plots (26dB Bandwidth)

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


[ANT.2]

▣ 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

[ANT.1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5728.16	3.16	> 0.5
802.11n(HT20)				5728.80	3.80	> 0.5
802.11ac(VHT20)				5728.80	3.80	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5728.16	3.16	> 0.5
802.11ac(VHT40)				5728.16	3.16	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5727.92	2.92	> 0.5

Note:

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

[ANT.2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5728.16	3.16	> 0.5
802.11n(HT20)				5728.76	3.76	> 0.5
802.11ac(VHT20)				5728.80	3.80	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5728.16	3.16	> 0.5
802.11ac(VHT40)				5728.16	3.16	> 0.5

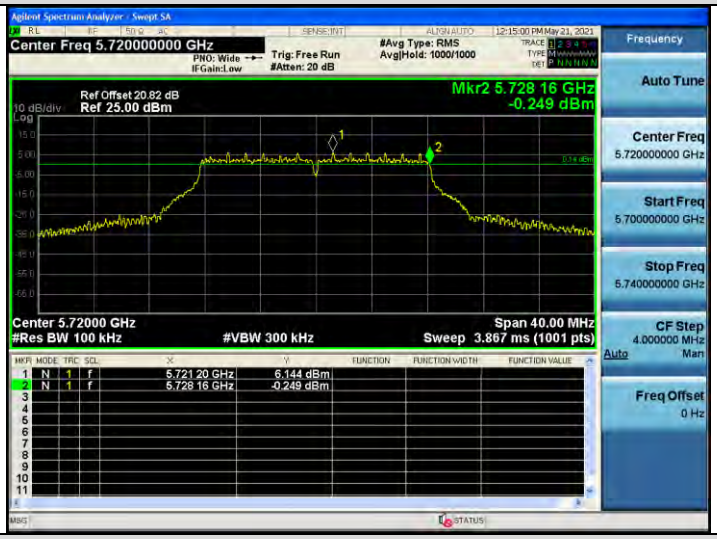
Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5727.68	2.68	> 0.5

Note:

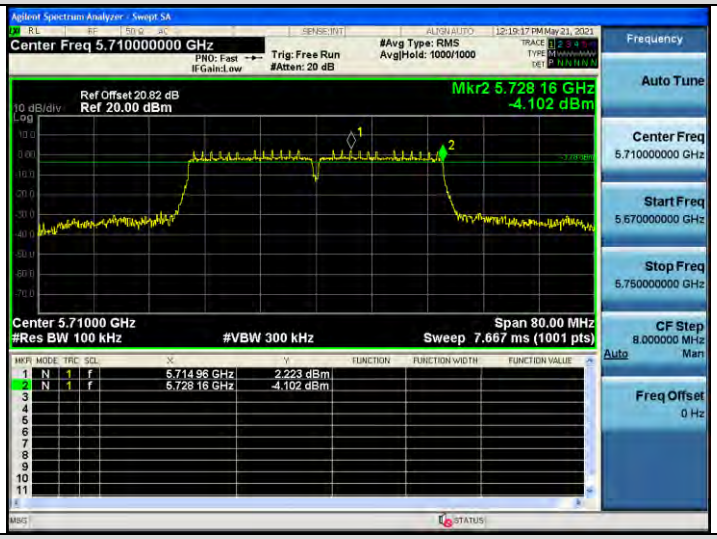
6dB Bandwidth = Measured Frequency[MHz] – 5725MHz

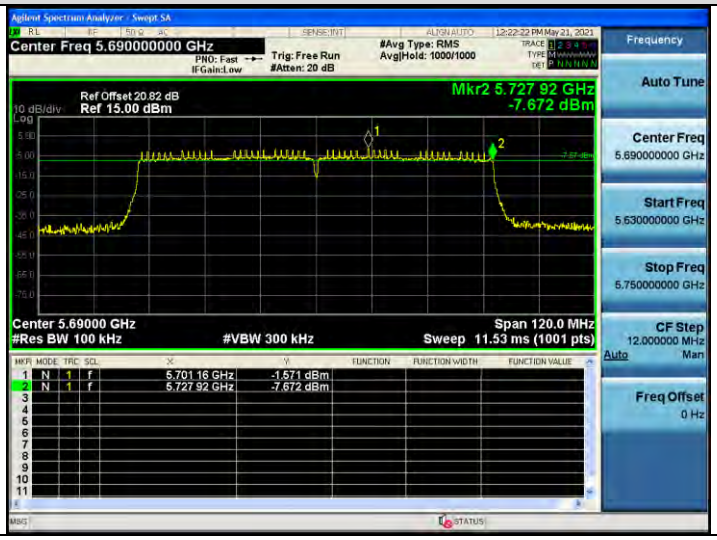
[ANT.1]

▣ Test Plots(UNII 3 Band 6dB Bandwidth)

802.11a CH.144	802.11n_HT20 CH.144
	

802.11ac_VHT20 CH.144

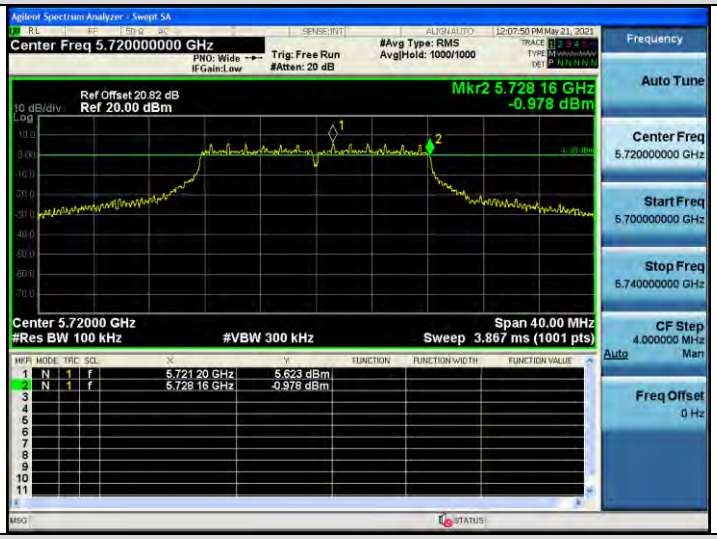

802.11n_HT40 CH.142	802.11ac_VHT40 CH.142
	

802.11ac_VHT80 CH.138


[ANT.2]

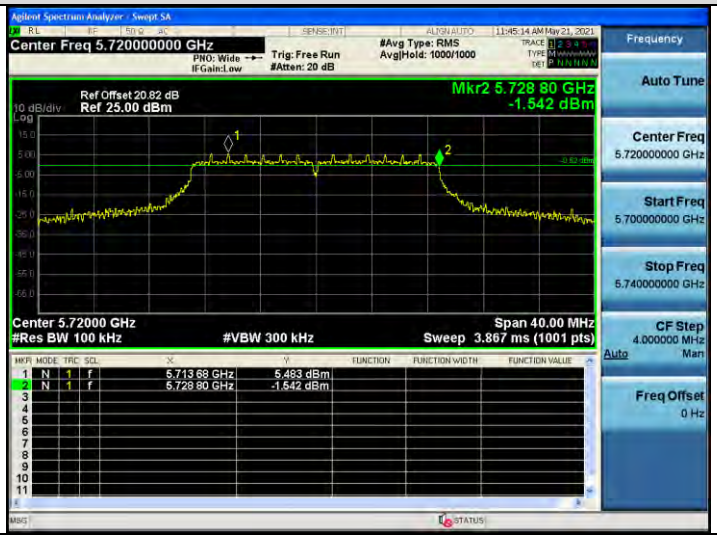
▣ Test Plots(UNII 3 Band 6dB Bandwidth)

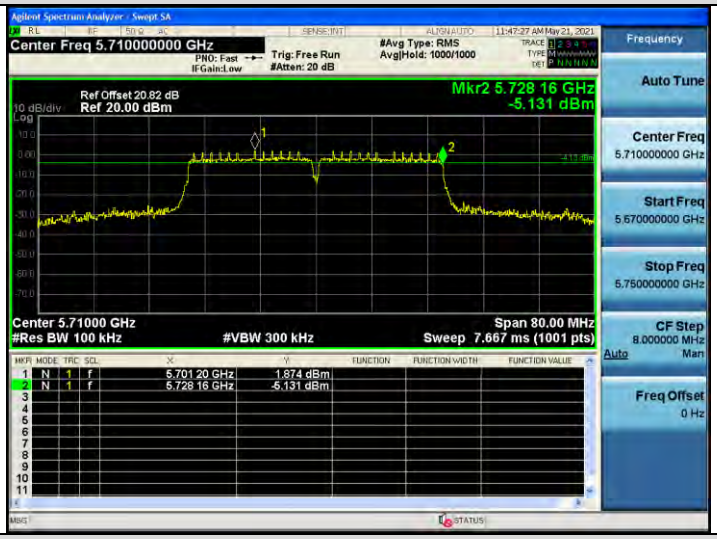
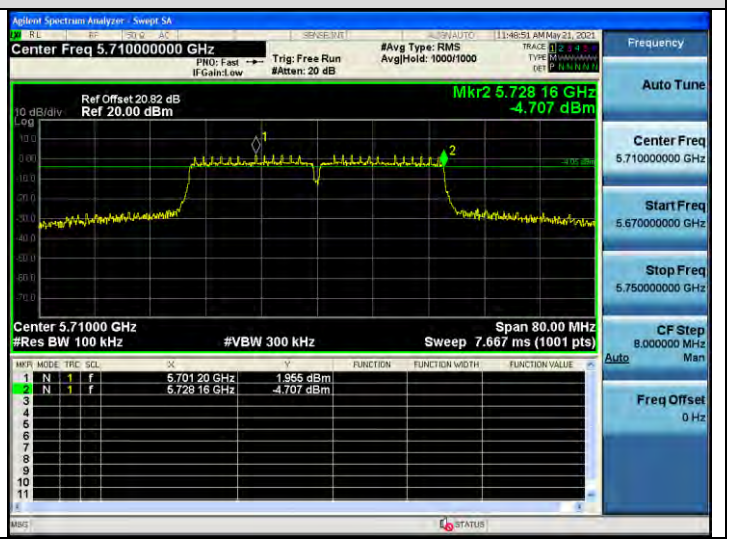
802.11a CH.144

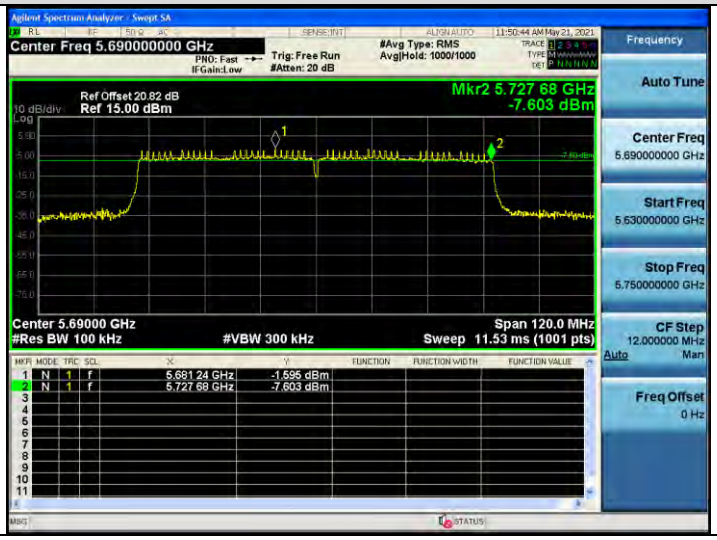


802.11n_HT20 CH.144

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

[ANT.1]

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	16.62	0.289	16.91	22.95	6 Mbps
802.11n(HT20)			16.50	0.315	16.82	23.00	MCS0
802.11ac(VHT20)			16.53	0.313	16.84	22.99	MCS0
802.11a	5720 (UNII 3 Band)	144	10.45	0.289	10.74	30.00	6 Mbps
802.11n(HT20)			10.94	0.315	11.26	30.00	MCS0
802.11ac(VHT20)			10.90	0.313	11.21	30.00	MCS0

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	16.09	0.607	16.69	23.98	MCS0
802.11ac(VHT40)			15.90	0.601	16.50	23.98	MCS0
802.11n(HT40)	5710 (UNII 3 Band)	142	5.70	0.607	6.31	30.00	MCS0
802.11ac(VHT40)			5.55	0.601	6.15	30.00	MCS0

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	14.20	1.132	15.33	23.98	MCS0
	5690 (UNII 3 Band)	138	0.06	1.132	1.19	30.00	MCS0

[Ant.2]

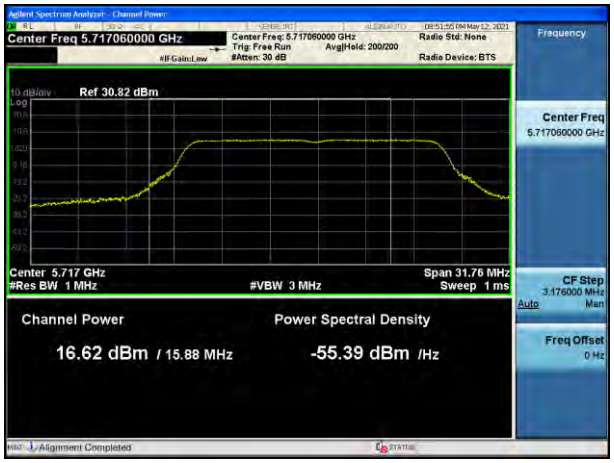
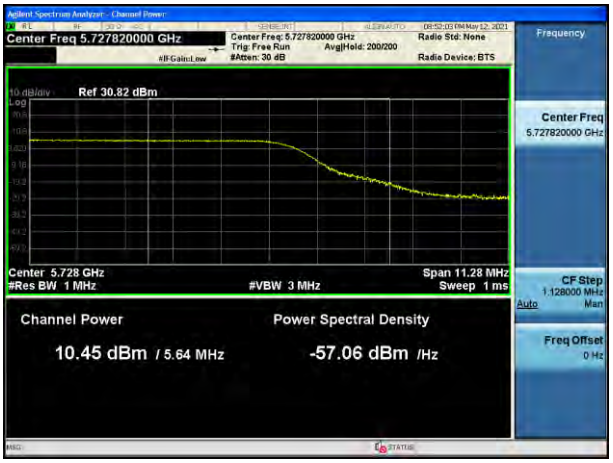
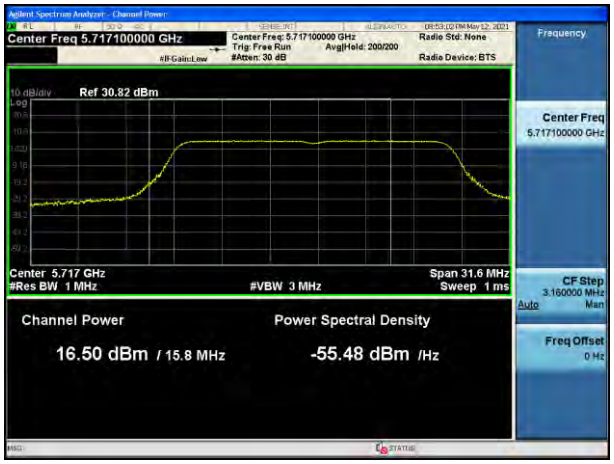
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	16.11	0.289	16.40	22.98	6 Mbps
802.11n(HT20)			16.01	0.315	16.33	23.10	MCS0
802.11ac(VHT20)			16.01	0.313	16.32	23.08	MCS0
802.11a	5720 (UNII 3 Band)	144	9.73	0.289	10.02	30.00	6 Mbps
802.11n(HT20)			10.23	0.315	10.55	30.00	MCS0
802.11ac(VHT20)			10.34	0.313	10.66	30.00	MCS0

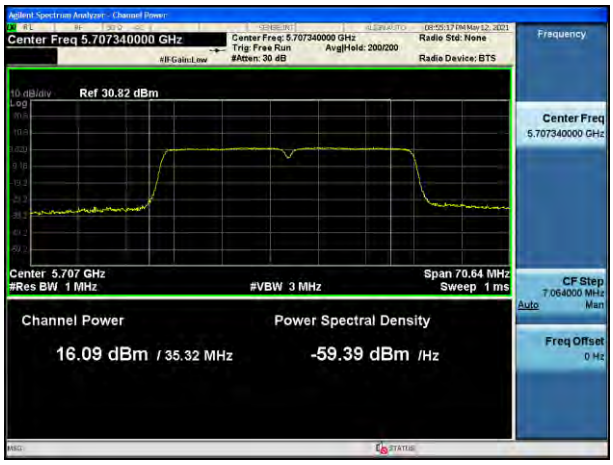
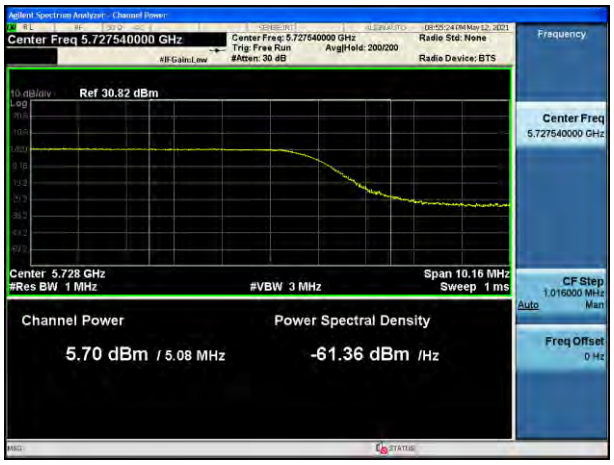
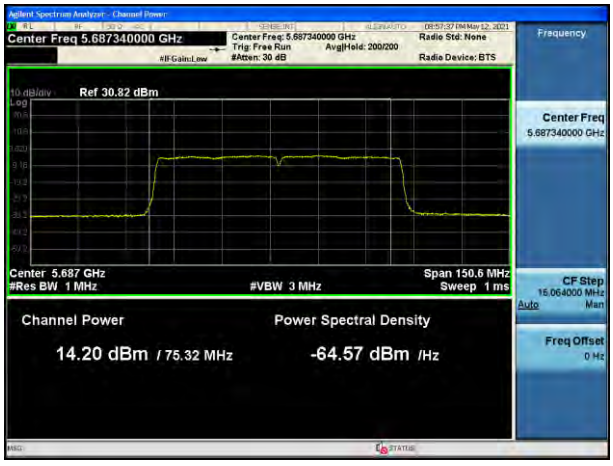
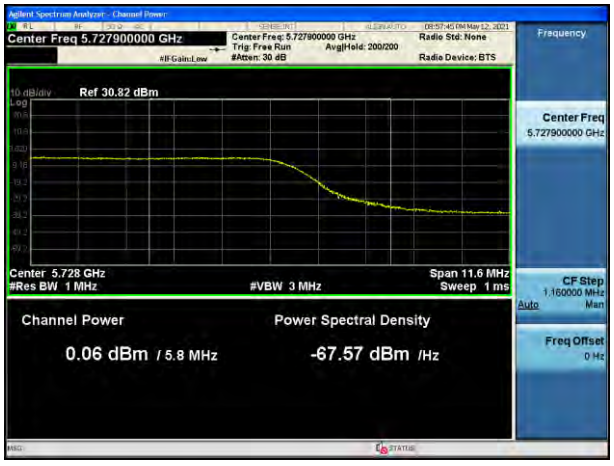
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	15.49	0.607	16.09	23.98	MCS0
802.11ac(VHT40)			15.51	0.601	16.12	23.98	MCS0
802.11n(HT40)	5710 (UNII 3 Band)	142	5.05	0.607	5.66	30.00	MCS0
802.11ac(VHT40)			4.98	0.601	5.58	30.00	MCS0

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	14.24	1.132	15.38	23.98	MCS0
	5690 (UNII 3 Band)	138	-0.51	1.132	0.62	30.00	MCS0

[ANT.1]

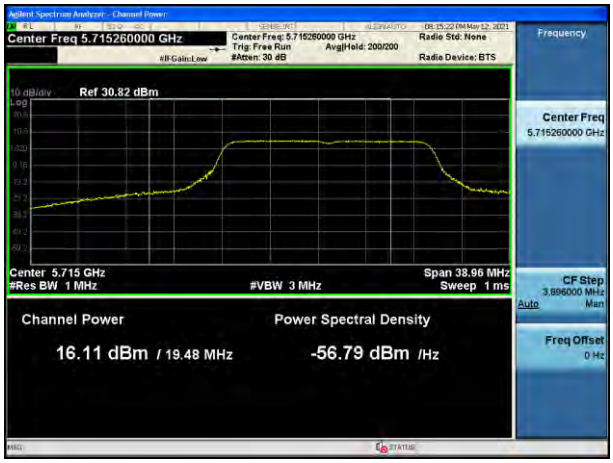
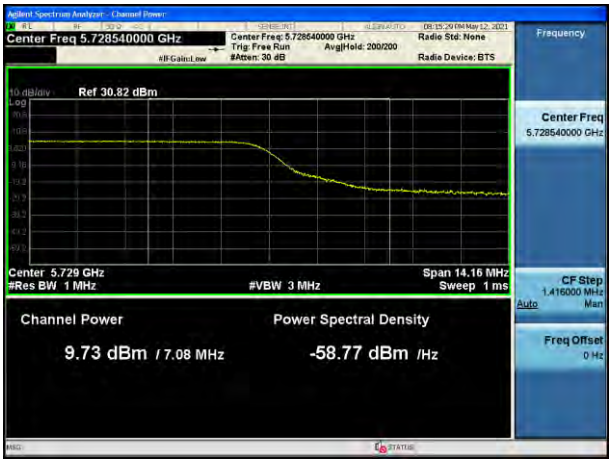
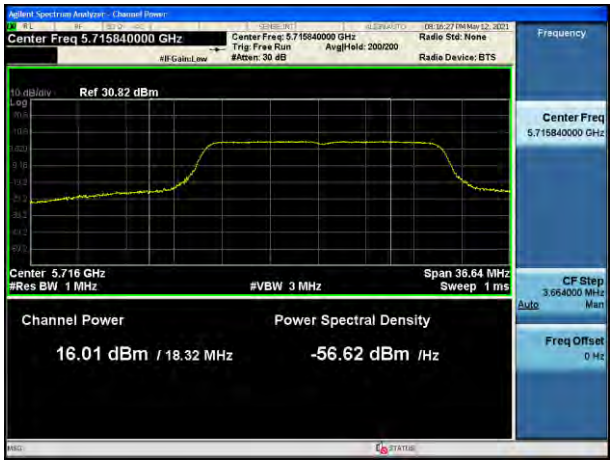
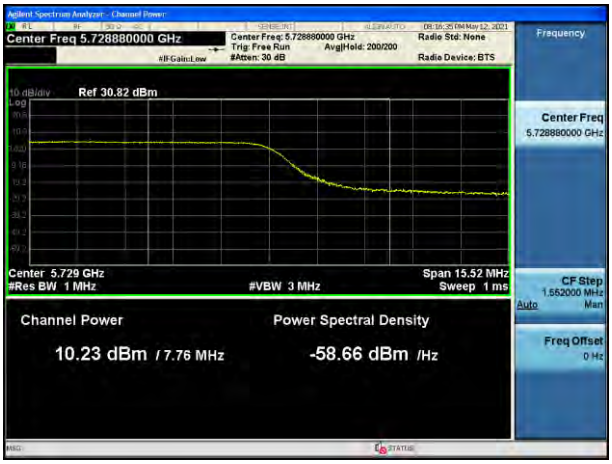
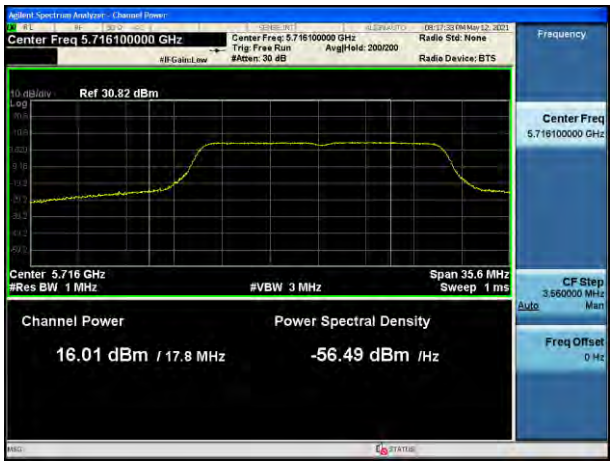
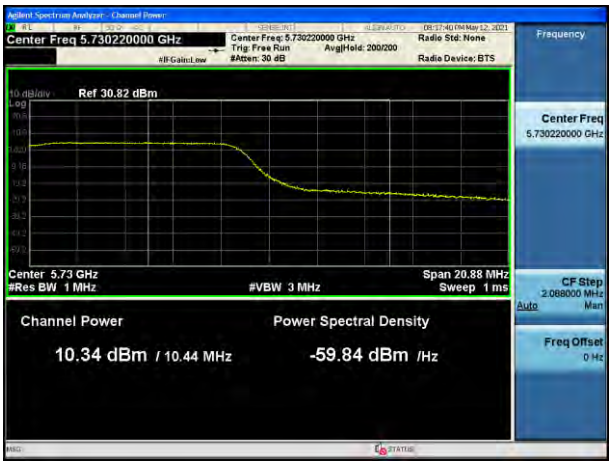
▣ Test Plots_

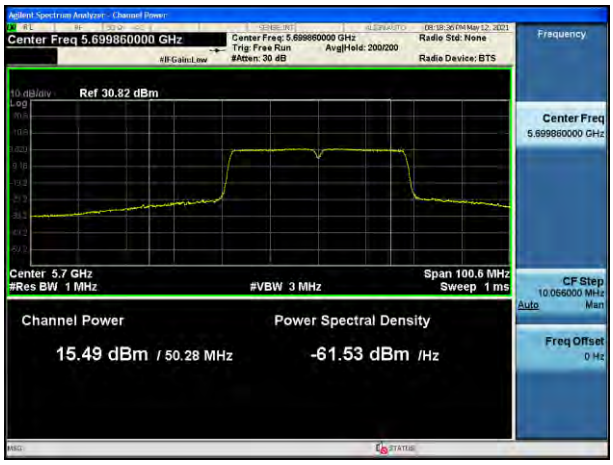
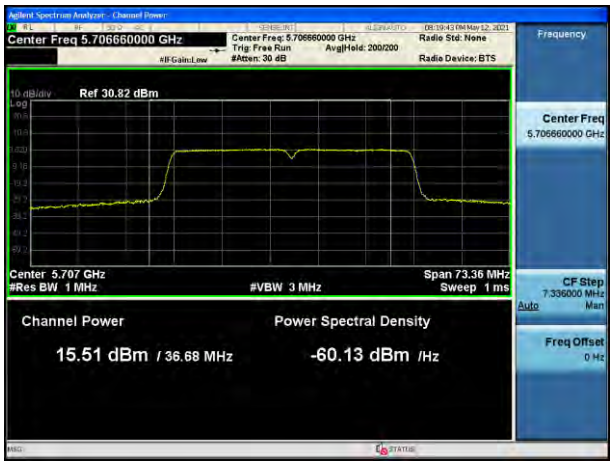
802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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**
	

[ANT.2]

▣ 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

[ANT.1]

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	6.681	0.289	6.969	11dBm/ MHz	6 Mbps
802.11n(HT20)			6.213	0.315	6.527		MCS0
802.11ac(VHT20)			6.164	0.313	6.477		MCS0
802.11a	5720 (UNII 3 Band)	144	3.454	0.289	3.743	30 dB/ 500kHz	6 Mbps
802.11n(HT20)			2.867	0.315	3.181		MCS0
802.11ac(VHT20)			3.020	0.313	3.334		MCS0

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	2.261	0.607	2.869	11dBm/ MHz	MCS0
802.11ac(VHT40)			2.033	0.601	2.634		MCS0
802.11n(HT40)	5710 (UNII 3 Band)	142	-1.489	0.607	-0.882	30 dB/ 500kHz	MCS0
802.11ac(VHT40)			-1.759	0.601	-1.159		MCS0

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	-2.841	1.132	-1.710	11dBm/ MHz	MCS0
	5690 (UNII 3 Band)	138	-7.438	1.132	-6.306	30 dBm/ 500kHz	MCS0

[Ant.2]

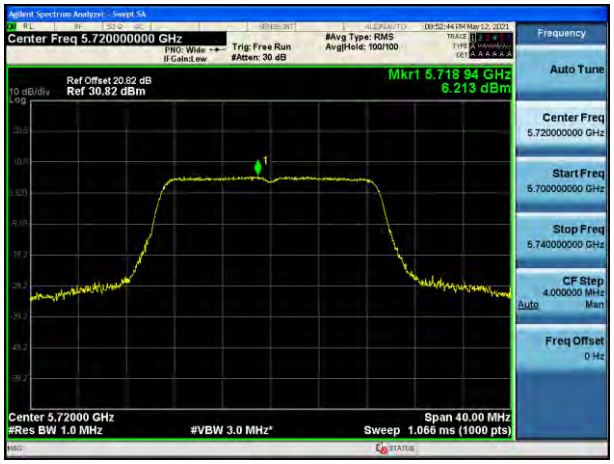
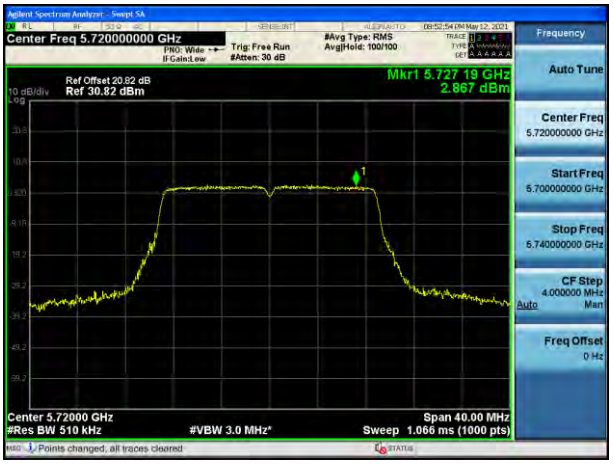
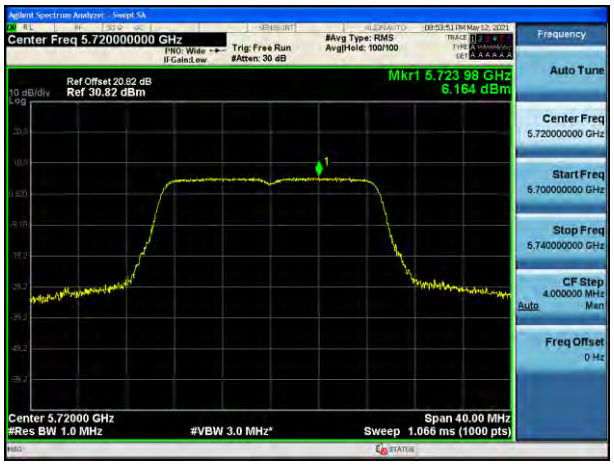
Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	5.862	0.289	6.151	11dBm/ MHz	6 Mbps
802.11n(HT20)			5.610	0.315	5.925		MCS0
802.11ac(VHT20)			5.507	0.313	5.820		MCS0
802.11a	5720 (UNII 3 Band)	144	2.755	0.289	3.044	30 dB/ 500kHz	6 Mbps
802.11n(HT20)			2.622	0.315	2.936		MCS0
802.11ac(VHT20)			2.574	0.313	2.887		MCS0

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	1.856	0.607	2.463	11dBm/ MHz	MCS0
802.11ac(VHT40)			1.702	0.601	2.303		MCS0
802.11n(HT40)	5710 (UNII 3 Band)	142	-1.849	0.607	-1.242	30 dB/ 500kHz	MCS0
802.11ac(VHT40)			-1.902	0.601	-1.301		MCS0

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	-2.992	1.132	-1.861	11dBm/ MHz	MCS0
	5690 (UNII 3 Band)	138	-7.835	1.132	-6.703	30 dBm/ 500kHz	MCS0

[ANT.1]

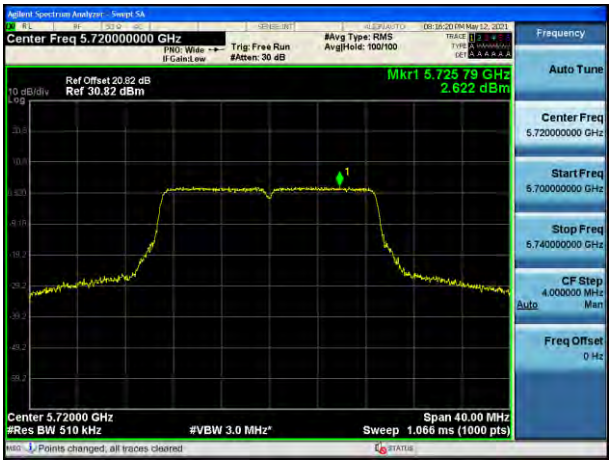
▣ Test Plots

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**
	

[ANT.2]

▣ 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

[Ant.1&Ant.2_MIMO(CDD)]

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	45.96	8.90	V	54.86	68.20	13.34	PK
15540	44.33	13.15	V	57.48	73.98	16.50	PK
15540	28.91	13.15	V	42.06	53.98	11.92	AV
10360	44.85	8.90	H	53.75	68.20	14.45	PK
15540	45.04	13.15	H	58.19	73.98	15.79	PK
15540	29.06	13.15	H	42.21	53.98	11.77	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	43.63	9.11	V	52.74	68.20	15.46	PK
15600	44.91	13.41	V	58.32	73.98	15.66	PK
15600	28.54	13.41	V	41.95	53.98	12.03	AV
10400	43.74	9.11	H	52.85	68.20	15.35	PK
15600	45.09	13.41	H	58.50	73.98	15.48	PK
15600	29.09	13.41	H	42.50	53.98	11.48	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	43.89	9.54	V	53.43	68.20	14.77	PK
15720	43.87	13.05	V	56.92	73.98	17.06	PK
15720	28.87	13.05	V	41.92	53.98	12.06	AV
10480	43.12	9.54	H	52.66	68.20	15.54	PK
15720	44.49	13.05	H	57.54	73.98	16.44	PK
15720	29.21	13.05	H	42.26	53.98	11.72	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	44.31	9.80	V	54.11	68.20	14.09	PK
15780	44.47	13.51	V	57.98	73.98	16.00	PK
15780	28.97	13.51	V	42.48	53.98	11.50	AV
10520	43.99	9.80	H	53.79	68.20	14.41	PK
15780	45.05	13.51	H	58.56	73.98	15.42	PK
15780	29.07	13.51	H	42.58	53.98	11.40	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	43.52	10.27	V	53.79	73.98	20.19	PK
10600	29.78	10.27	V	40.05	53.98	13.93	AV
15900	45.45	13.01	V	58.46	73.98	15.52	PK
15900	29.98	13.01	V	42.99	53.98	10.99	AV
10600	42.63	10.27	H	52.90	73.98	21.08	PK
10600	28.15	10.27	H	38.42	53.98	15.56	AV
15900	46.49	13.01	H	59.50	73.98	14.48	PK
15900	30.99	13.01	H	44.00	53.98	9.98	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	41.23	10.41	V	51.64	73.98	22.34	PK
10640	27.13	10.41	V	37.54	53.98	16.44	AV
15960	45.28	13.53	V	58.81	73.98	15.17	PK
15960	30.48	13.53	V	44.01	53.98	9.97	AV
10640	40.59	10.41	H	51.00	73.98	22.98	PK
10640	26.78	10.41	H	37.19	53.98	16.79	AV
15960	46.41	13.53	H	59.94	73.98	14.04	PK
15960	30.55	13.53	H	44.08	53.98	9.90	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	42.37	10.99	V	53.36	73.98	20.62	PK
11000	28.39	10.99	V	39.38	53.98	14.60	AV
16500	43.87	12.68	V	56.55	68.20	11.65	PK
11000	40.97	10.99	H	51.96	73.98	22.02	PK
11000	28.05	10.99	H	39.04	53.98	14.94	AV
16500	44.32	12.68	H	57.00	68.20	11.20	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]	A.F.+C.L. -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	44.19	10.82	V	55.01	73.98	18.97	PK
11160	29.58	10.82	V	40.40	53.98	13.58	AV
16740	46.72	13.47	V	60.19	68.20	8.01	PK
11160	46.45	10.82	H	57.27	73.98	16.71	PK
11160	31.07	10.82	H	41.89	53.98	12.09	AV
16740	48.17	13.47	H	61.64	68.20	6.56	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	43.62	10.77	V	54.39	73.98	19.59	PK
11200	29.27	10.77	V	40.04	53.98	13.94	AV
16800	45.68	14.18	V	59.86	68.20	8.34	PK
11200	42.10	10.77	H	52.87	73.98	21.11	PK
11200	29.09	10.77	H	39.86	53.98	14.12	AV
16800	46.61	14.18	H	60.79	68.20	7.41	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	44.63	11.37	V	56.00	73.98	17.98	PK
11440	30.67	11.37	V	42.04	53.98	11.94	AV
17160	41.78	15.11	V	56.89	68.20	11.31	PK
11440	46.03	11.37	H	57.40	73.98	16.58	PK
11440	31.01	11.37	H	42.38	53.98	11.60	AV
17160	43.02	15.11	H	58.13	68.20	10.07	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	44.21	11.29	V	55.50	73.98	18.48	PK
11490	30.55	11.29	V	41.84	53.98	12.14	AV
17235	42.07	15.41	V	57.48	68.20	10.72	PK
11490	45.09	11.29	H	56.38	73.98	17.60	PK
11490	31.29	11.29	H	42.58	53.98	11.40	AV
17235	43.01	15.41	H	58.42	68.20	9.78	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	41.53	10.65	V	52.18	73.98	21.80	PK
11570	30.05	10.65	V	40.70	53.98	13.28	AV
17355	41.45	16.11	V	57.56	68.20	10.64	PK
11570	43.53	10.65	H	54.18	73.98	19.80	PK
11570	30.38	10.65	H	41.03	53.98	12.95	AV
17355	40.31	16.11	H	56.42	68.20	11.78	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	43.56	10.20	V	53.76	73.98	20.22	PK
11650	30.70	10.20	V	40.90	53.98	13.08	AV
17475	41.59	17.45	V	59.04	68.20	9.16	PK
11650	44.89	10.20	H	55.09	73.98	18.89	PK
11650	31.19	10.20	H	41.39	53.98	12.59	AV
17475	39.70	17.45	H	57.15	68.20	11.05	PK

Note:

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

[Worst case]

UNII 1, 2A, 2C, 3 : 802.11a

[DBS Mode] – Tese case 1
802.11a_Ch.116 5 580 GHz U-NII-2C Ant ALL & 802.11b Ch.9 2 452 GHz Ant 2

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
11160	41.79	10.82	V	52.61	73.98	21.37	PK
11160	28.78	10.82	V	39.60	53.98	14.38	AV
16740	41.68	13.47	V	55.15	68.20	13.05	PK
11160	42.60	10.82	H	53.42	73.98	20.56	PK
11160	28.90	10.82	H	39.72	53.98	14.26	AV
16740	42.36	13.47	H	55.83	68.20	12.37	PK

[DBS Mode] – Tese case 2
802.11g Ch.11 2 462 GHz Ant ALL & 802.11a_Ch.116 5 580 GHz UNII-2C Ant ALL

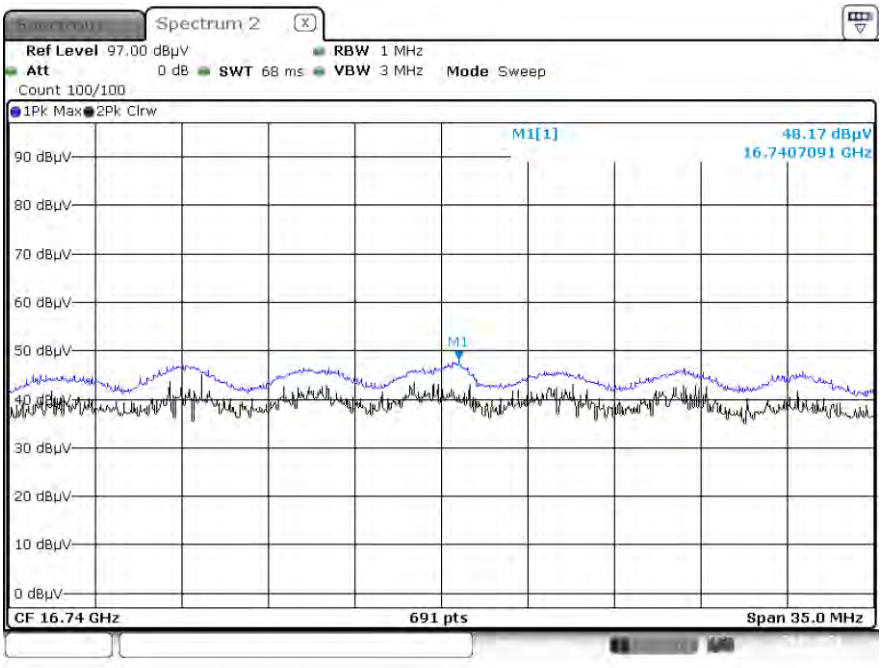
Frequency [MHz]	Reading [dBuV]	A.F.+C.L. -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	42.50	10.82	V	53.32	73.98	20.66	PK
11160	28.78	10.82	V	39.60	53.98	14.38	AV
16740	41.66	13.47	V	55.13	68.20	13.07	PK
11160	42.42	10.82	H	53.24	73.98	20.74	PK
11160	28.75	10.82	H	39.57	53.98	14.41	AV
16740	41.63	13.47	H	55.10	68.20	13.10	PK

[Non-DBS Mode] – Tese case 3
BT π/4DQPSK ch.78 & 802.11a_Ch.116 5 580 GHz UNII-2C Ant ALL

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
11160	42.81	10.82	V	53.63	73.98	20.35	PK
11160	30.25	10.82	V	41.07	53.98	12.91	AV
16740	45.75	13.47	V	59.22	68.20	8.98	PK
11160	43.07	10.82	H	53.89	73.98	20.09	PK
11160	30.76	10.82	H	41.58	53.98	12.40	AV
16740	47.03	13.47	H	60.50	68.20	7.70	PK

▣ Test Plots [Ant.1&Ant.2_MIMO(CDD)]

Peak Reading (802.11a, Ch.116 3rd Harmonic, Z-H)

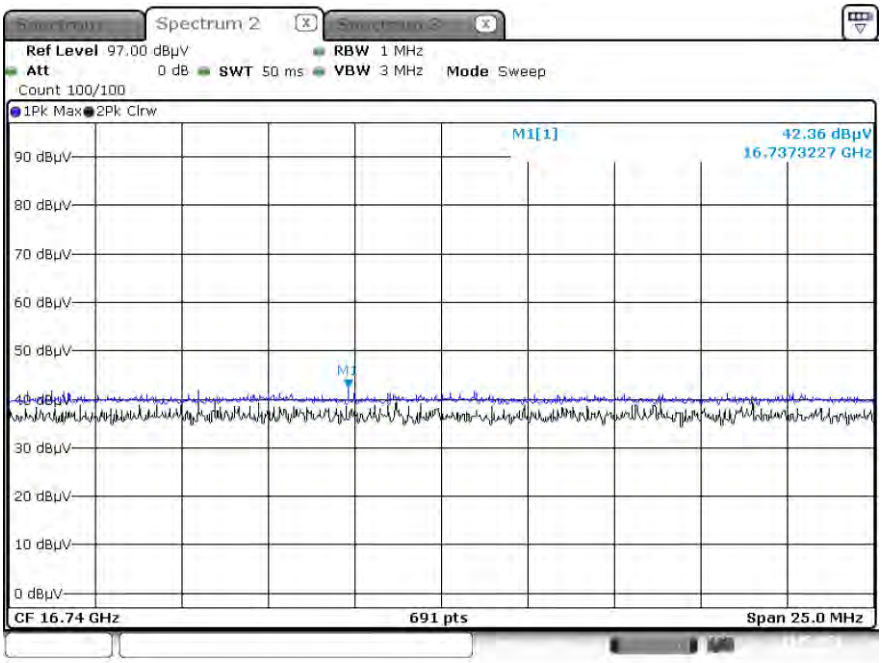


Note:

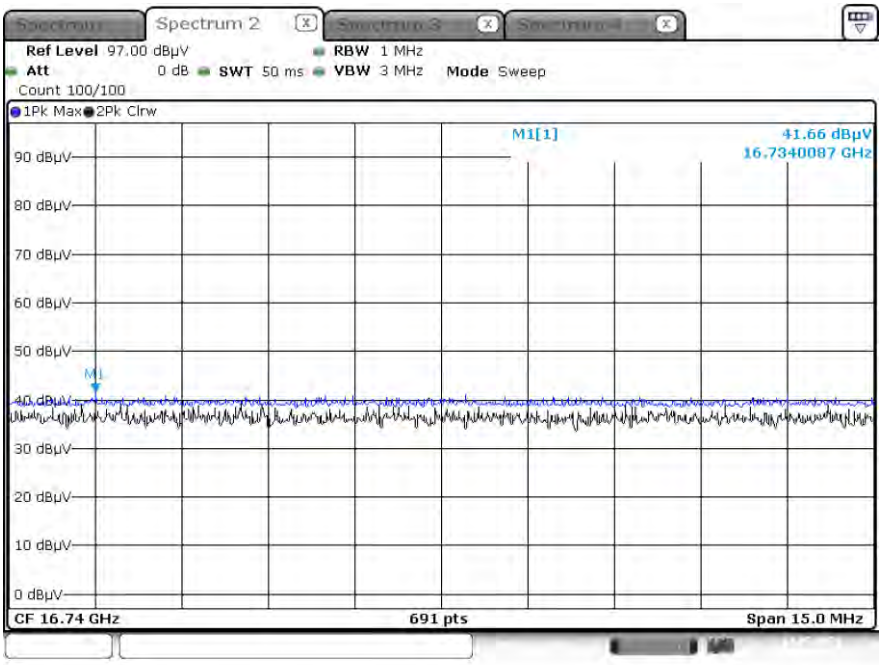
Only the worst case plots for Radiated Spurious Emissions.

▣ Test Plots (DBS)

Radiated Spurious Emissions plot – Peak Reading (Test case 1_ 3rd Harmonic, X-H)

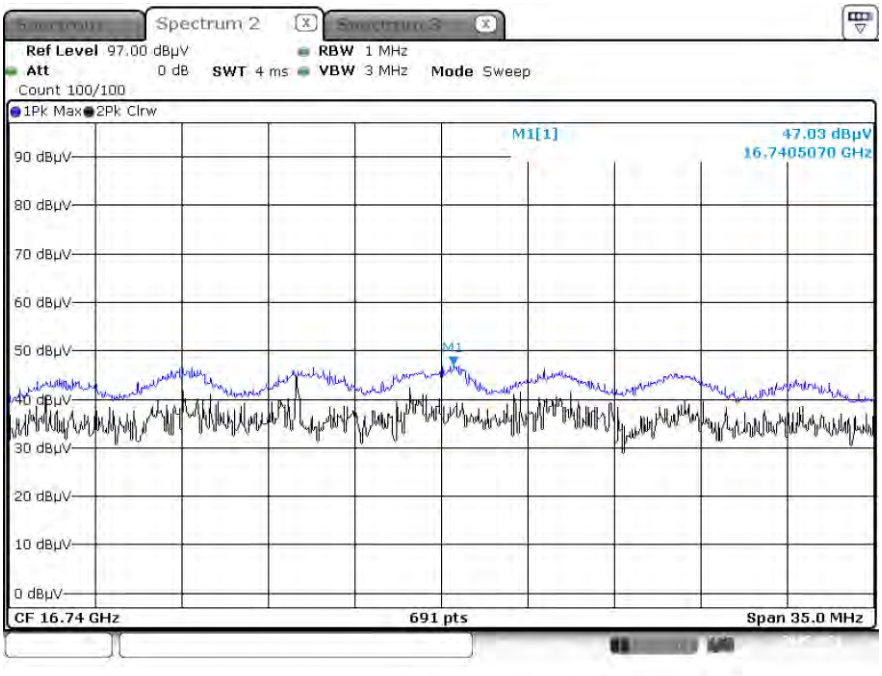


Radiated Spurious Emissions plot – Peak Reading (Test case 2_ 3rd Harmonic, X-V)



▣ Test Plots (Non-DBS)

Radiated Spurious Emissions plot – Peak Reading (Test case 3_ 3rd Harmonic, Y-V)



Note:

Only the worst case plots for Radiated Spurious Emissions.

10.9 RADIATED RESTRICTED BAND EDGE

[Ant.1&Ant.2_MIMO(CDD)]

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

Frequency [MHz]	Reading dBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	56.54	7.81	H	64.35	73.98	9.63	PK
5150	40.61	7.81	H	48.42	53.98	5.56	AV
5150	55.01	7.81	V	62.82	73.98	11.16	PK
5150	40.05	7.81	V	47.86	53.98	6.12	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.40	7.51	H	70.91	73.98	3.07	PK
5350	43.41	7.51	H	50.92	53.98	3.06	AV
5350	63.15	7.51	V	70.66	73.98	3.32	PK
5350	42.11	7.51	V	49.62	53.98	4.36	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.58	8.15	H	58.73	73.98	15.25	PK
5460	34.48	8.15	H	42.63	53.98	11.35	AV
5470	56.55	8.21	H	64.76	68.20	3.44	PK
5460	49.28	8.15	V	57.43	73.98	16.55	PK
5460	34.25	8.15	V	42.40	53.98	11.58	AV
5470	55.71	8.21	V	63.92	68.20	4.28	PK

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5520 MHz
Channel No.	104 Ch

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	48.80	8.15	H	56.95	73.98	17.03	PK
5460	34.68	8.15	H	42.83	53.98	11.15	AV
5470	53.65	8.21	H	61.86	68.20	6.34	PK
5460	47.28	8.15	V	55.43	73.98	18.55	PK
5460	34.37	8.15	V	42.52	53.98	11.46	AV
5470	52.20	8.21	V	60.41	68.20	7.79	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	59.00	7.81	H	66.81	73.98	7.17	PK
5150	41.19	7.81	H	49.00	53.98	4.98	AV
5150	57.18	7.81	V	64.99	73.98	8.99	PK
5150	40.53	7.81	V	48.34	53.98	5.64	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.21	7.51	H	70.72	73.98	3.26	PK
5350	44.38	7.51	H	51.89	53.98	2.09	AV
5350	61.34	7.51	V	68.85	73.98	5.13	PK
5350	43.34	7.51	V	50.85	53.98	3.13	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	51.24	8.15	H	59.39	73.98	14.59	PK
5460	35.38	8.15	H	43.53	53.98	10.45	AV
5470	56.99	8.21	H	65.20	68.20	3.00	PK
5460	50.95	8.15	V	59.10	73.98	14.88	PK
5460	34.48	8.15	V	42.63	53.98	11.35	AV
5470	56.57	8.21	V	64.78	68.20	3.42	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5520 MHz
Channel No.	104 Ch

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	48.50	8.15	H	56.65	73.98	17.33	PK
5460	34.93	8.15	H	43.08	53.98	10.90	AV
5470	55.61	8.21	H	63.82	68.20	4.38	PK
5460	48.13	8.15	V	56.28	73.98	17.70	PK
5460	33.78	8.15	V	41.93	53.98	12.05	AV
5470	54.02	8.21	V	62.23	68.20	5.97	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	58.77	7.81	H	66.58	73.98	7.40	PK
5150	41.04	7.81	H	48.85	53.98	5.13	AV
5150	56.35	7.81	V	64.16	73.98	9.82	PK
5150	40.67	7.81	V	48.48	53.98	5.50	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.45	7.51	H	70.96	73.98	3.02	PK
5350	42.26	7.51	H	49.77	53.98	4.21	AV
5350	62.35	7.51	V	69.86	73.98	4.12	PK
5350	41.84	7.51	V	49.35	53.98	4.63	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	49.37	8.15	H	57.52	73.98	16.46	PK
5460	34.93	8.15	H	43.08	53.98	10.90	AV
5470	55.54	8.21	H	63.75	68.20	4.45	PK
5460	48.26	8.15	V	56.41	73.98	17.57	PK
5460	34.69	8.15	V	42.84	53.98	11.14	AV
5470	54.77	8.21	V	62.98	68.20	5.22	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5520 MHz
Channel No.	104 Ch

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	47.98	8.15	H	56.13	73.98	17.85	PK
5460	34.65	8.15	H	42.80	53.98	11.18	AV
5470	50.76	8.21	H	58.97	68.20	9.23	PK
5460	46.35	8.15	V	54.50	73.98	19.48	PK
5460	34.22	8.15	V	42.37	53.98	11.61	AV
5470	50.19	8.21	V	58.40	68.20	9.80	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	62.06	7.81	H	69.87	73.98	4.11	PK
5150	42.64	7.81	H	50.45	53.98	3.53	AV
5150	61.56	7.81	V	69.37	73.98	4.61	PK
5150	41.74	7.81	V	49.55	53.98	4.43	AV

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

Frequency [MHz]	Reading dBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	52.09	7.81	H	59.90	73.98	14.08	PK
5150	34.14	7.81	H	41.95	53.98	12.03	AV
5150	49.35	7.81	V	57.16	73.98	16.82	PK
5150	33.93	7.81	V	41.74	53.98	12.24	AV

Band :	UNII 1
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	52.76	7.51	H	60.27	73.98	13.71	PK
5350	36.17	7.51	H	43.68	53.98	10.30	AV
5350	52.07	7.51	V	59.58	73.98	14.40	PK
5350	35.72	7.51	V	43.23	53.98	10.75	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	63.76	7.51	H	71.27	73.98	2.71	PK
5350	41.88	7.51	H	49.39	53.98	4.59	AV
5350	63.21	7.51	V	70.72	73.98	3.26	PK
5350	41.68	7.51	V	49.19	53.98	4.79	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.40	8.15	H	58.55	73.98	15.43	PK
5460	34.56	8.15	H	42.71	53.98	11.27	AV
5470	55.34	8.21	H	63.55	68.20	4.65	PK
5460	49.22	8.15	V	57.37	73.98	16.61	PK
5460	33.88	8.15	V	42.03	53.98	11.95	AV
5470	54.59	8.21	V	62.80	68.20	5.40	PK

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

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	49.40	8.15	H	57.55	73.98	16.43	PK
5460	34.71	8.15	H	42.86	53.98	11.12	AV
5470	54.33	8.21	H	62.54	68.20	5.66	PK
5460	48.39	8.15	V	56.54	73.98	17.44	PK
5460	34.29	8.15	V	42.44	53.98	11.54	AV
5470	53.21	8.21	V	61.42	68.20	6.78	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	59.90	7.81	H	67.71	73.98	6.27	PK
5150	41.89	7.81	H	49.70	53.98	4.28	AV
5150	59.25	7.81	V	67.06	73.98	6.92	PK
5150	40.81	7.81	V	48.62	53.98	5.36	AV

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

Frequency [MHz]	Reading dBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	46.77	7.81	H	54.58	73.98	19.40	PK
5150	33.91	7.81	H	41.72	53.98	12.26	AV
5150	46.32	7.81	V	54.13	73.98	19.85	PK
5150	33.77	7.81	V	41.58	53.98	12.40	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	50.78	7.51	H	58.29	73.98	15.69	PK
5350	36.41	7.51	H	43.92	53.98	10.06	AV
5350	50.39	7.51	V	57.90	73.98	16.08	PK
5350	35.86	7.51	V	43.37	53.98	10.61	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	61.98	7.51	H	69.49	73.98	4.49	PK
5350	41.46	7.51	H	48.97	53.98	5.01	AV
5350	61.19	7.51	V	68.70	73.98	5.28	PK
5350	40.94	7.51	V	48.45	53.98	5.53	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	51.29	8.15	H	59.44	73.98	14.54	PK
5460	34.75	8.15	H	42.90	53.98	11.08	AV
5470	56.71	8.21	H	64.92	68.20	3.28	PK
5460	51.06	8.15	V	59.21	73.98	14.77	PK
5460	34.21	8.15	V	42.36	53.98	11.62	AV
5470	55.97	8.21	V	64.18	68.20	4.02	PK

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

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	48.92	8.15	H	57.07	73.98	16.91	PK
5460	34.80	8.15	H	42.95	53.98	11.03	AV
5470	49.14	8.21	H	57.35	68.20	10.85	PK
5460	47.66	8.15	V	55.81	73.98	18.17	PK
5460	34.07	8.15	V	42.22	53.98	11.76	AV
5470	48.74	8.21	V	56.95	68.20	11.25	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	59.48	7.81	H	67.29	73.98	6.69	PK
5150	42.44	7.81	H	50.25	53.98	3.73	AV
5150	58.92	7.81	V	66.73	73.98	7.25	PK
5150	41.42	7.81	V	49.23	53.98	4.75	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	57.38	7.51	H	64.89	73.98	9.09	PK
5350	41.83	7.51	H	49.34	53.98	4.64	AV
5350	55.16	7.51	V	62.67	73.98	11.31	PK
5350	40.97	7.51	V	48.48	53.98	5.50	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	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	51.32	8.15	H	59.47	73.98	14.51	PK
5460	38.80	8.15	H	46.95	53.98	7.03	AV
5470	54.07	8.21	H	62.28	68.20	5.92	PK
5460	50.50	8.15	V	58.65	73.98	15.33	PK
5460	37.79	8.15	V	45.94	53.98	8.04	AV
5470	53.57	8.21	V	61.78	68.20	6.42	PK

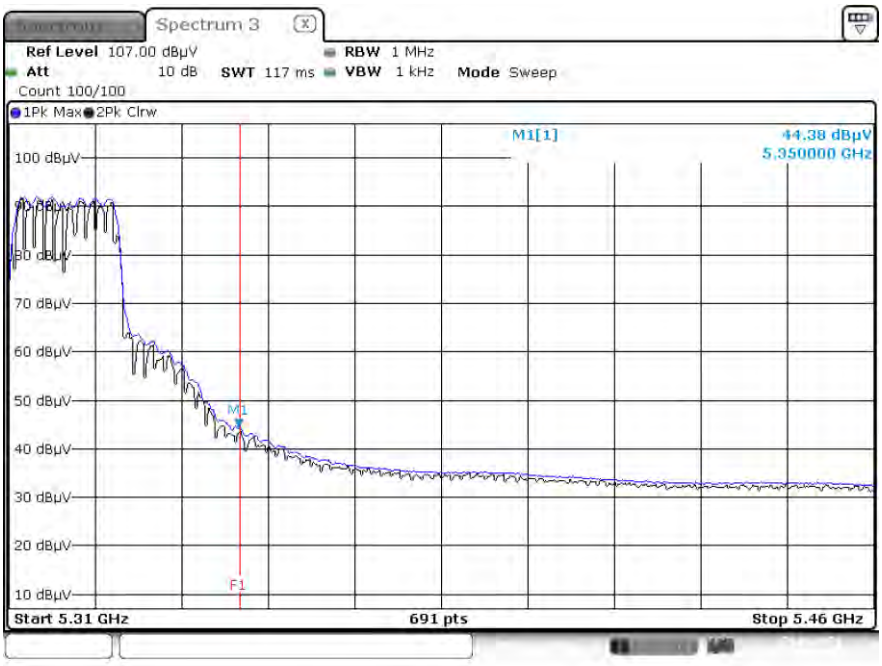
Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5610 MHz
Channel No.	122 Ch

Frequency [MHz]	Reading DBuV	C.L+A.F+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.29	8.15	H	53.44	73.98	20.54	PK
5460	34.00	8.15	H	42.15	53.98	11.83	AV
5470	44.19	8.21	H	52.40	68.20	15.80	PK
5460	44.59	8.15	V	52.74	73.98	21.24	PK
5460	33.96	8.15	V	42.11	53.98	11.87	AV
5470	43.73	8.21	V	51.94	68.20	16.26	PK

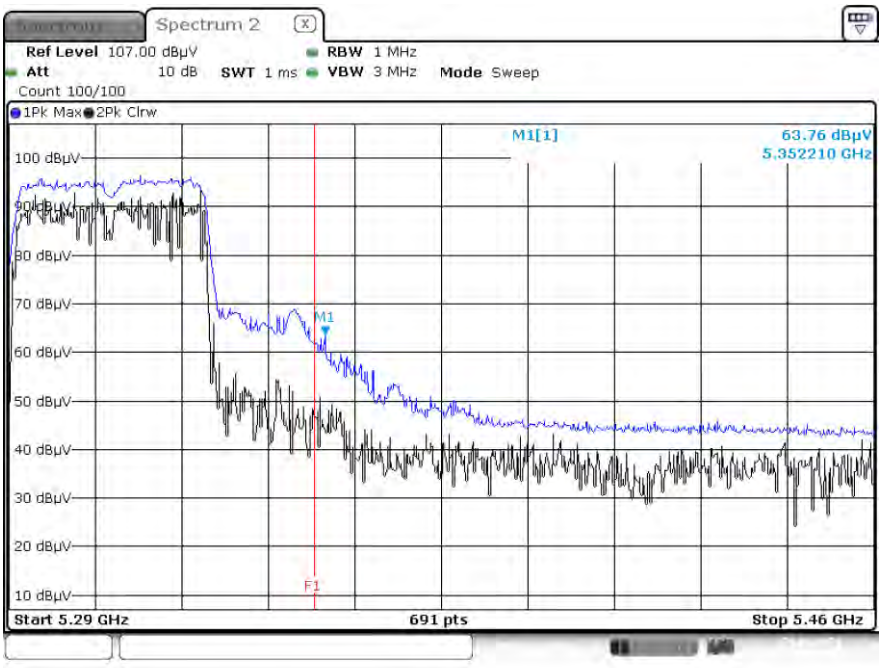
[Ant.1&Ant.2_MIMO(CDD)]

▣ Test Plots(UNII 1, 2A, 2C)

Average Reading (802.11 n(HT20)_MCS0, Ch.64, X-H)



Peak Reading (802.11 n(HT40)_MCS0, Ch.62, X-H)

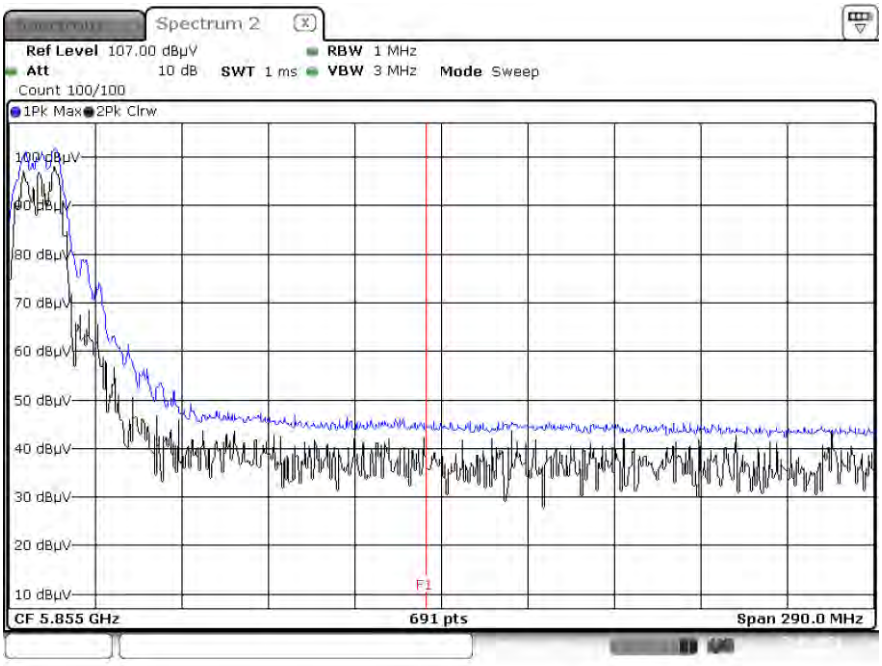


Note:

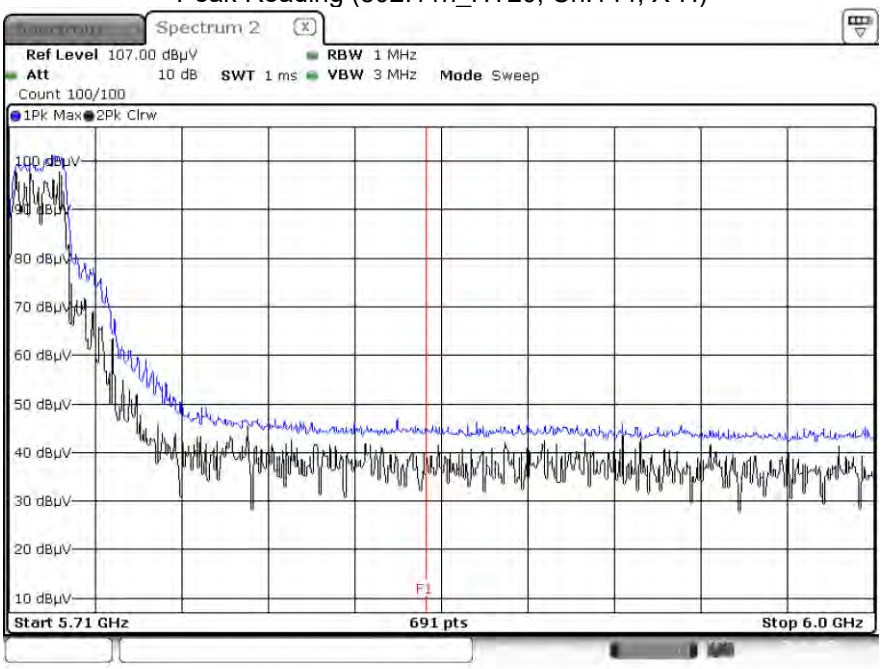
Only the worst case plots for Radiated Restricted Band Edge.

▣ Test Plots(Straddle Channel)

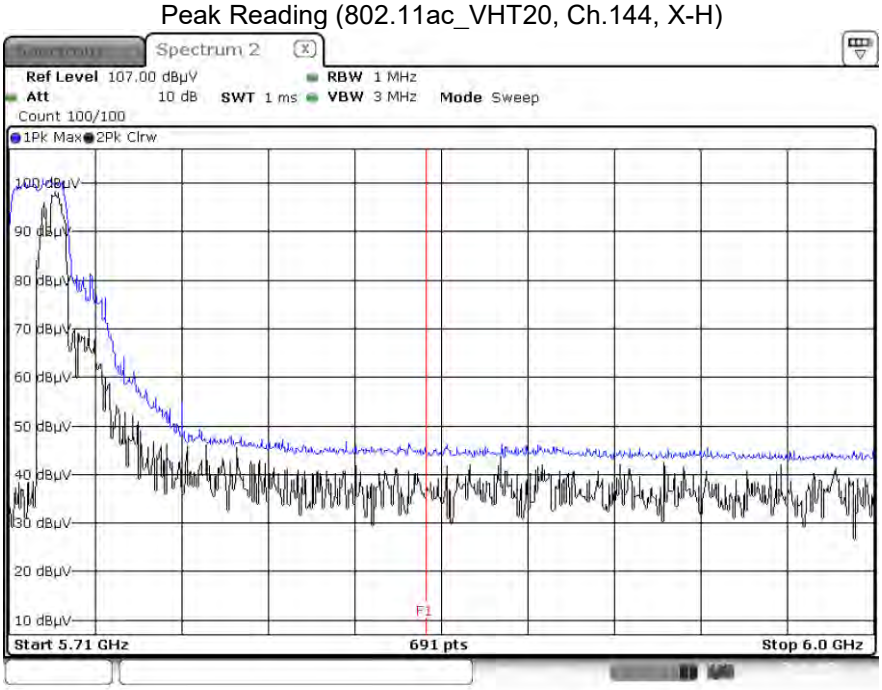
Peak Reading (802.11a, Ch.144, X-H)



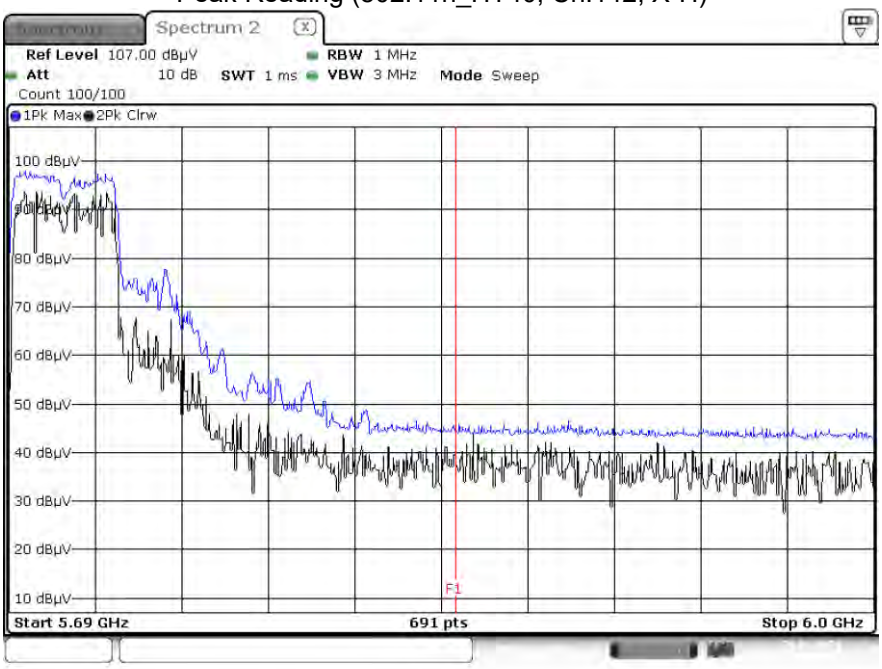
Peak Reading (802.11n_HT20, Ch.144, X-H)



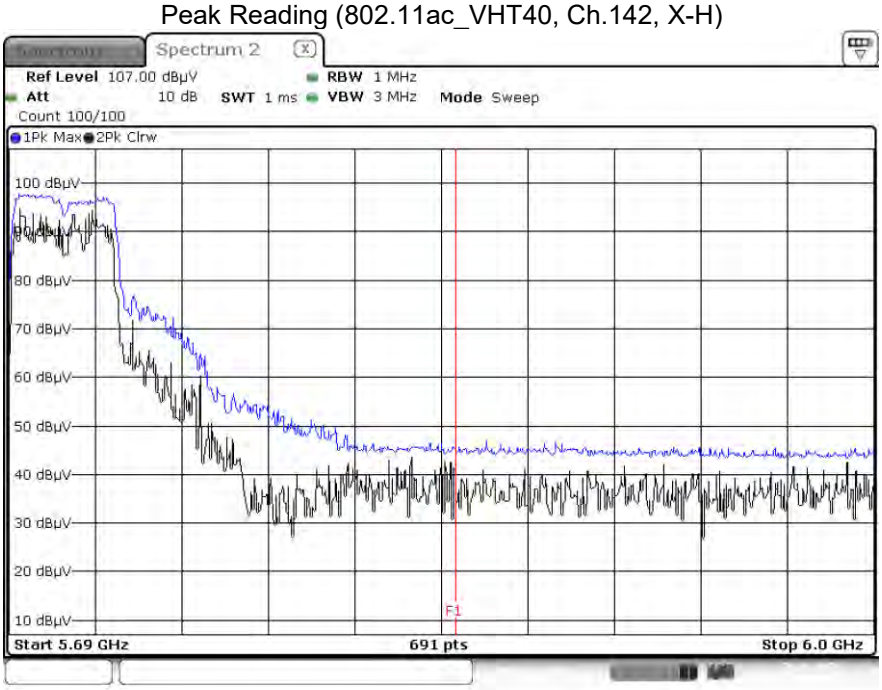
Peak Reading (802.11ac_VHT20, Ch.144, X-H)



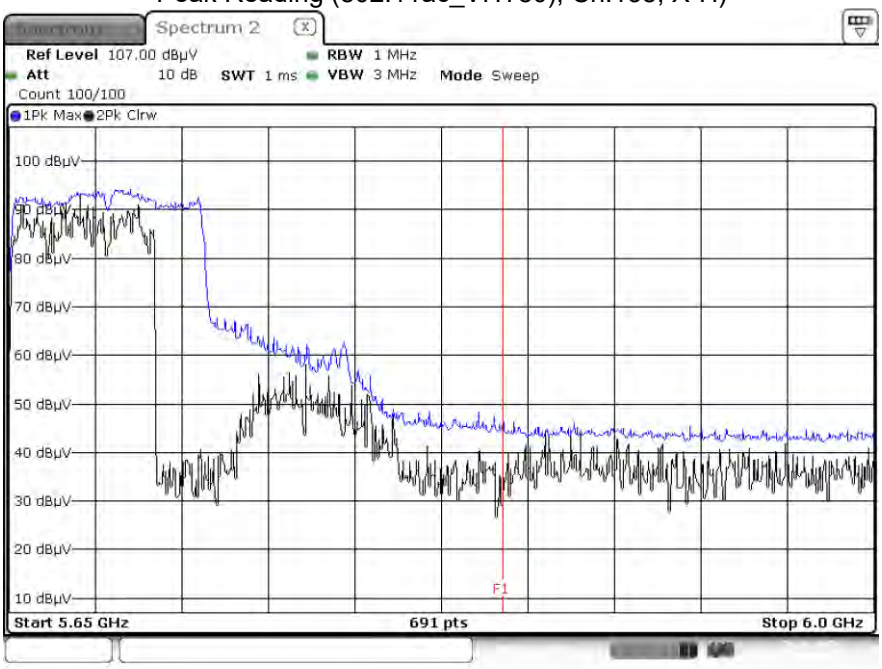
Peak Reading (802.11n_HT40, Ch.142, X-H)



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



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

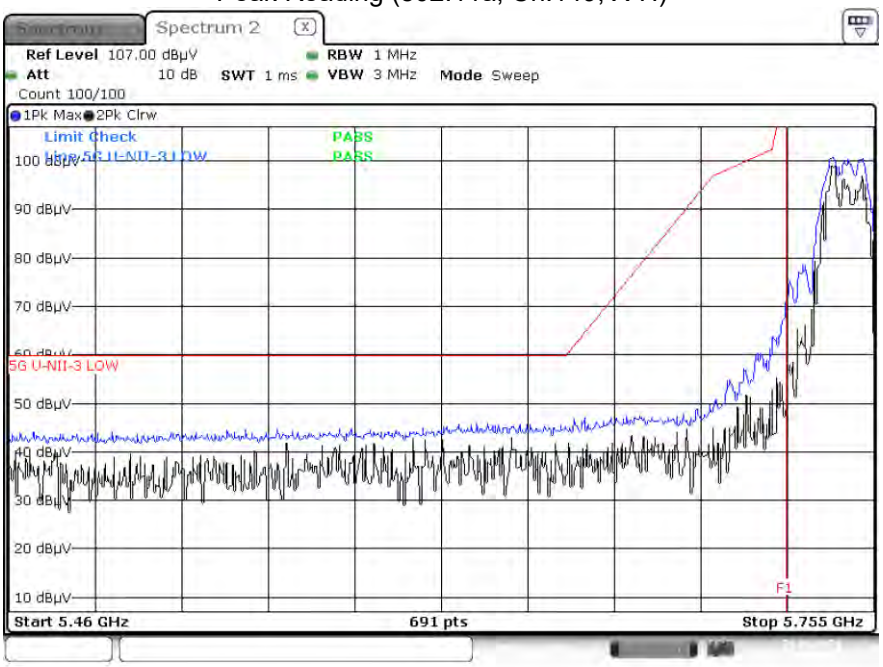


Note :

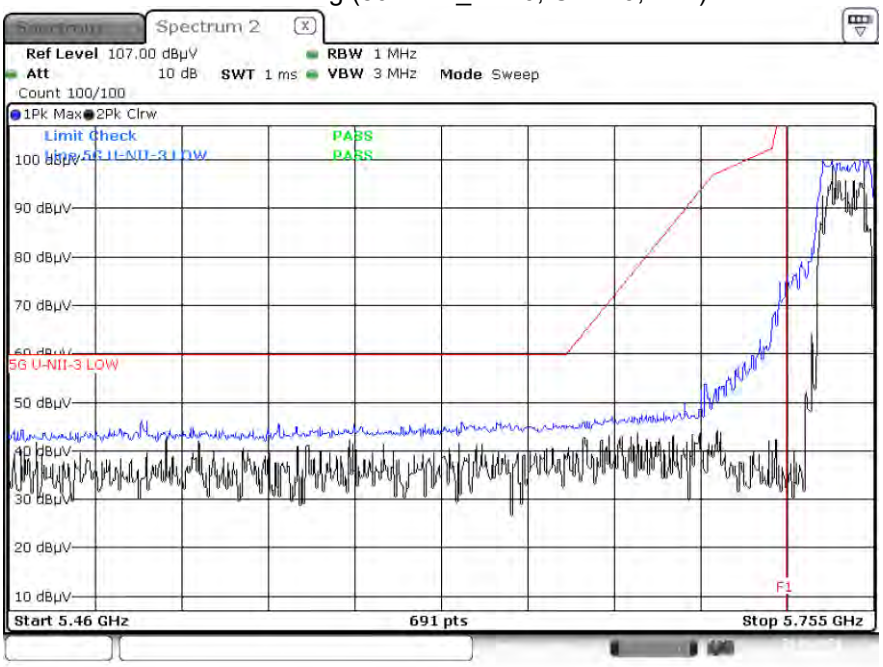
1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

▣ Test Plots(UNII 3)

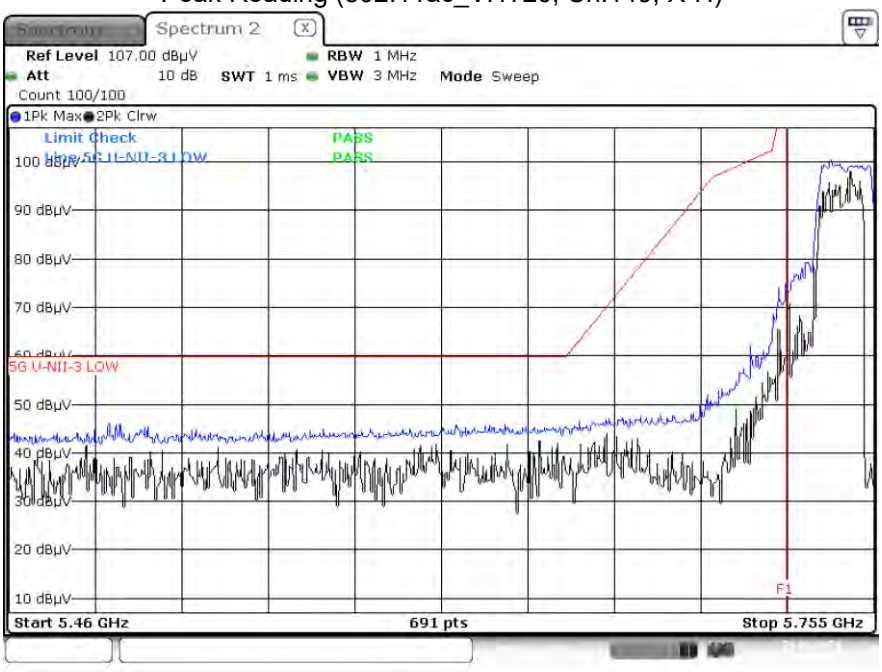
Peak Reading (802.11a, Ch.149, X-H)



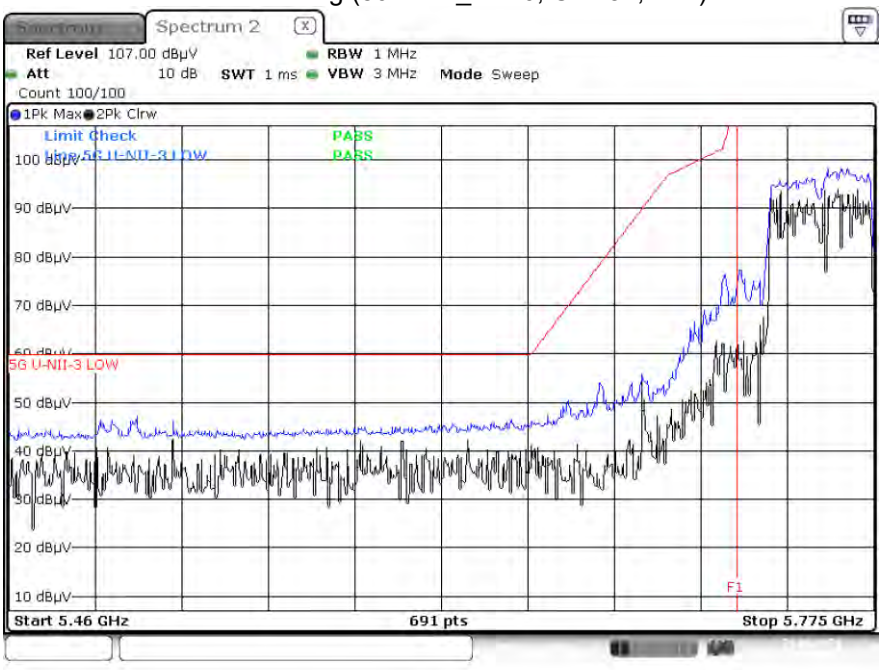
Peak Reading (802.11n_HT20, Ch.149, X-H)



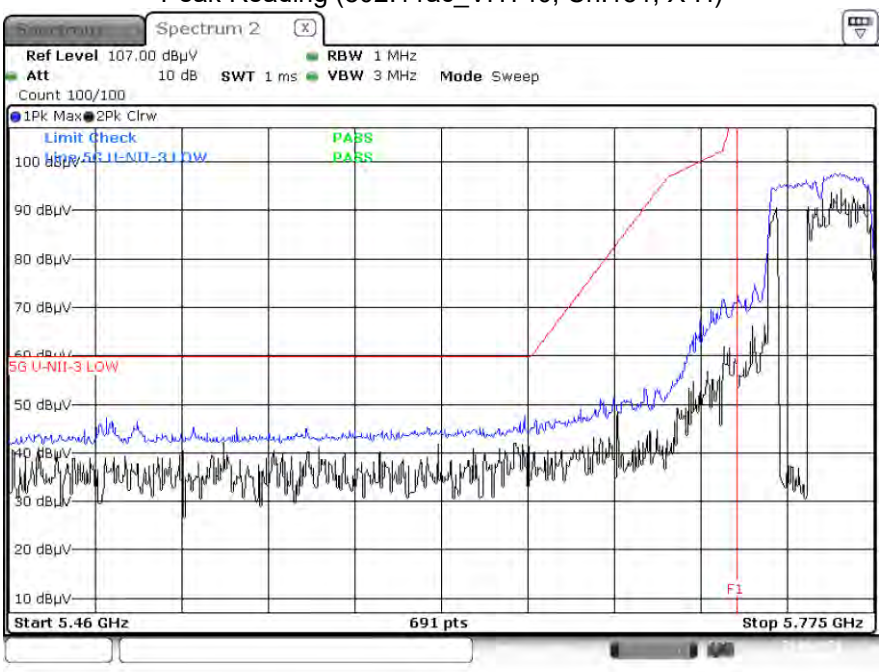
Peak Reading (802.11ac_VHT20, Ch.149, X-H)



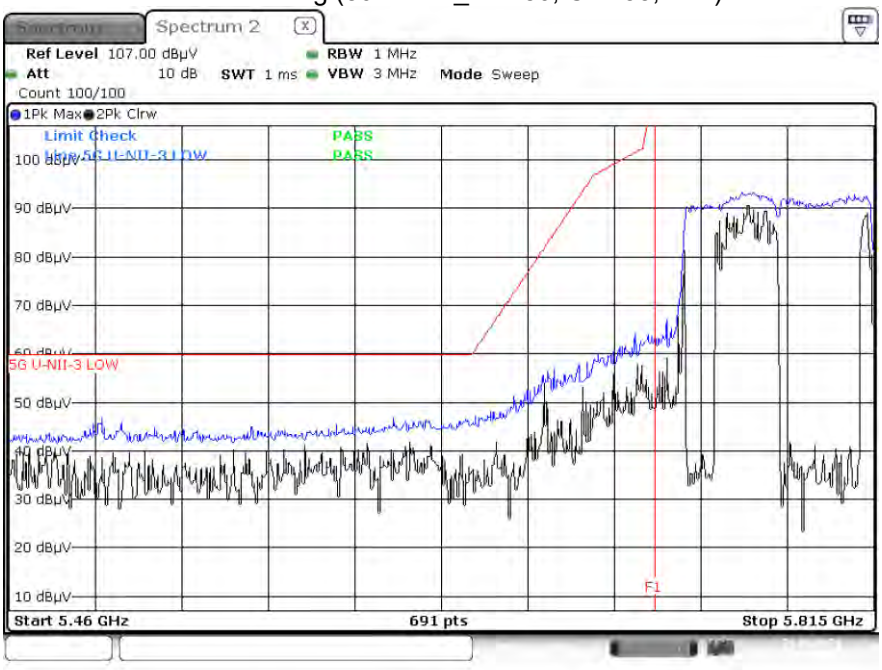
Peak Reading (802.11n_HT40, Ch.151, X-H)



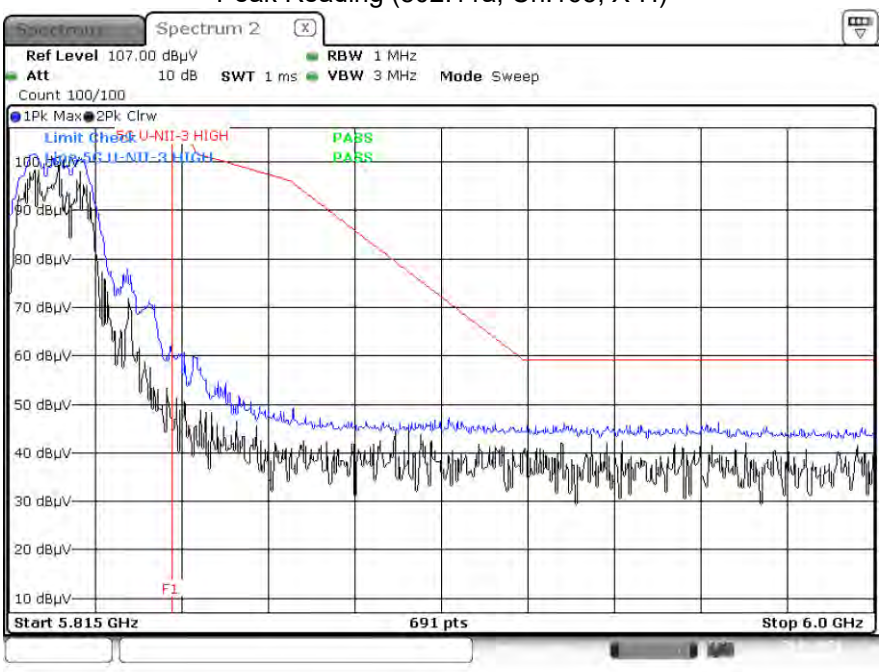
Peak Reading (802.11ac_VHT40, Ch.151, X-H)



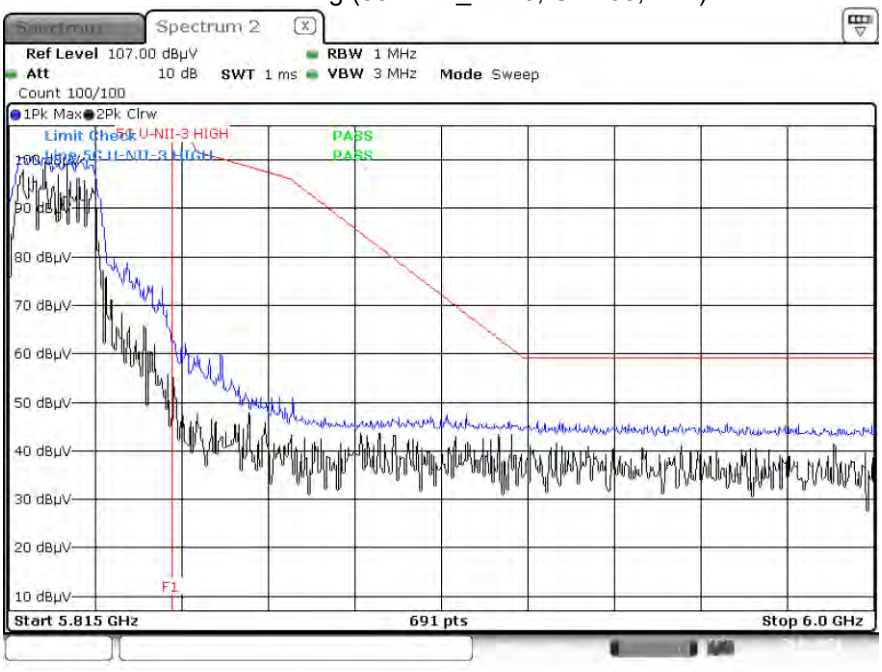
Peak Reading (802.11ac_VHT80, Ch.155, X-H)



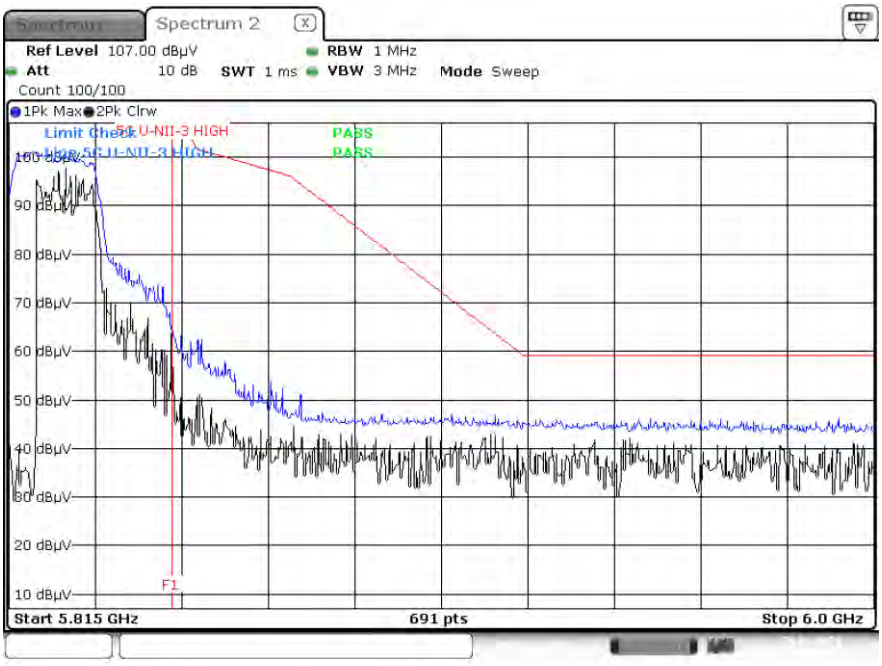
Peak Reading (802.11a, Ch.165, X-H)



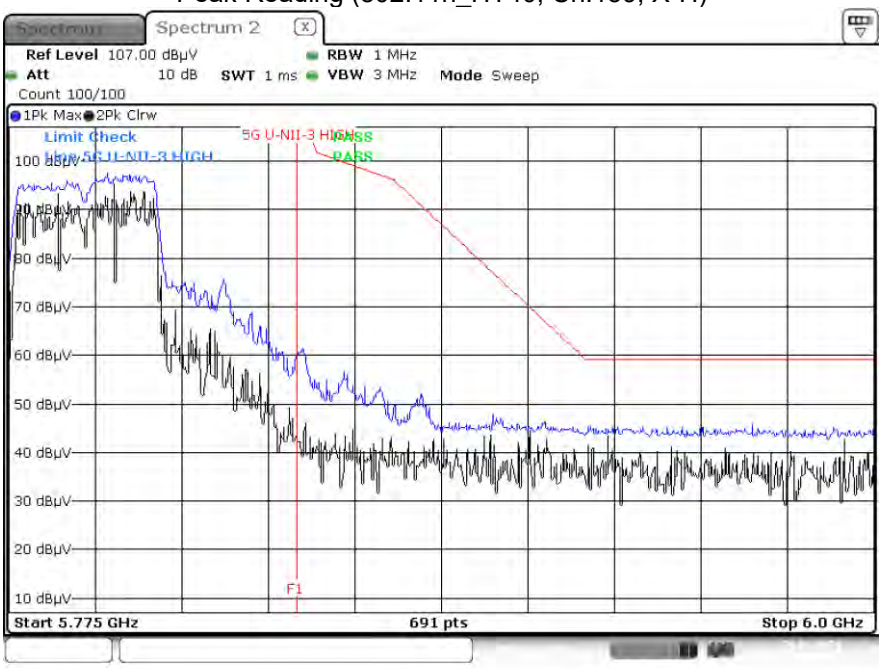
Peak Reading (802.11n_HT20, Ch.165, X-H)



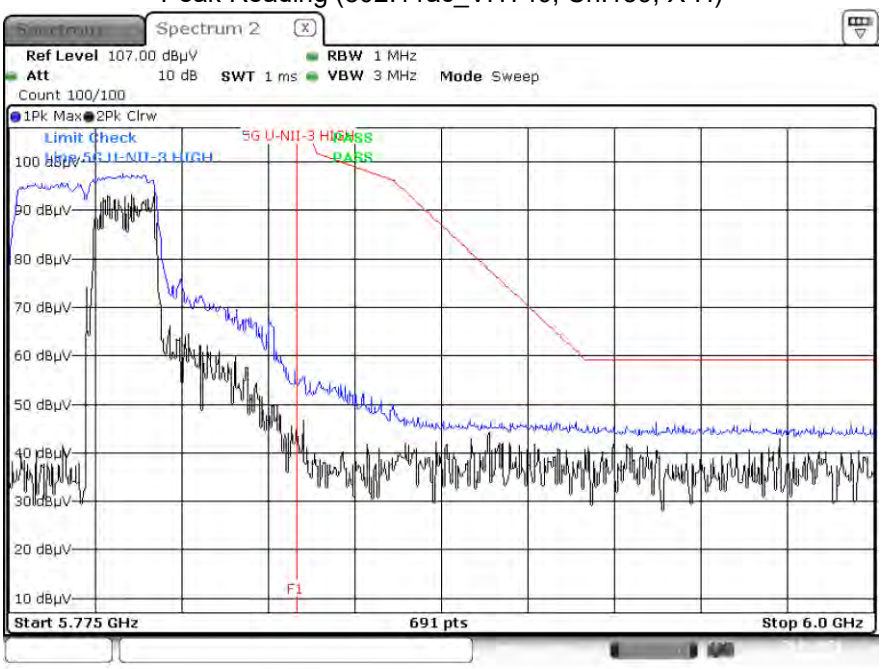
Peak Reading (802.11ac_VHT20, Ch.165, X-H)



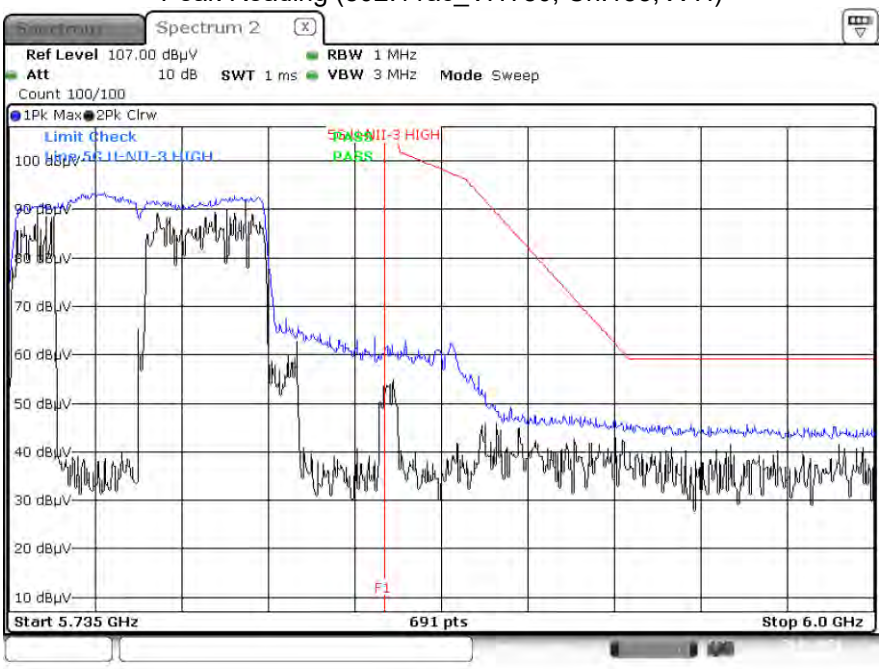
Peak Reading (802.11n_HT40, Ch.159, X-H)



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



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



10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions (Line 1)

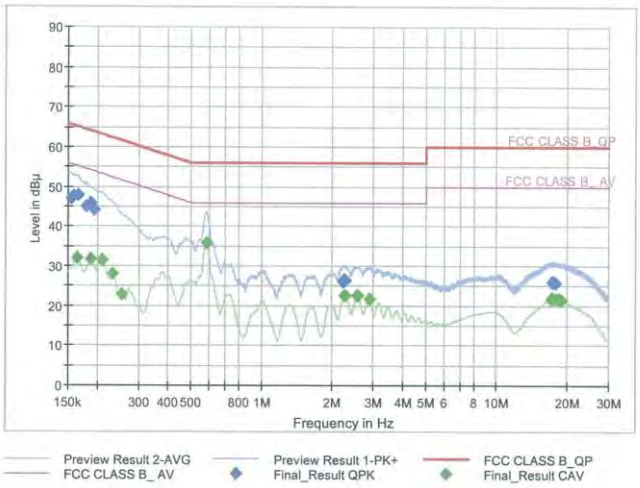
WLAN 5G MODE_L1 1 / 2

Test Report

Common Information

EUT :	SM-G990U
Manufacturer :	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions :	WLAN 5G MODE_L1

Full Spectrum



Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1545	46.98	65.75	18.77	9.000	L1	OFF	9.6
0.1590	47.53	65.52	17.99	9.000	L1	OFF	9.6
0.1658	47.88	65.17	17.29	9.000	L1	OFF	9.6
0.1793	45.01	64.52	19.51	9.000	L1	OFF	9.6
0.1883	45.99	64.11	18.12	9.000	L1	OFF	9.6
0.1950	44.02	63.82	19.80	9.000	L1	OFF	9.6
2.2190	25.94	56.00	30.06	9.000	L1	OFF	9.7
2.2258	26.05	56.00	29.95	9.000	L1	OFF	9.7
2.2325	26.21	56.00	29.79	9.000	L1	OFF	9.7
2.2460	26.34	56.00	29.66	9.000	L1	OFF	9.7
2.2505	26.42	56.00	29.58	9.000	L1	OFF	9.7
2.2865	26.36	56.00	29.64	9.000	L1	OFF	9.7
17.2693	25.93	60.00	34.07	9.000	L1	OFF	10.3
17.2760	25.87	60.00	34.13	9.000	L1	OFF	10.3
17.3120	25.91	60.00	34.09	9.000	L1	OFF	10.3
17.4853	25.93	60.00	34.07	9.000	L1	OFF	10.3
17.8115	25.79	60.00	34.21	9.000	L1	OFF	10.3
17.8610	25.81	60.00	34.19	9.000	L1	OFF	10.3

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WLAN 5G MODE_L1

2 / 2

Final_Result_CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1635	32.03	55.28	23.26	9.000	L1	OFF	9.6
0.1883	31.81	54.11	22.30	9.000	L1	OFF	9.6
0.2108	31.31	53.18	21.86	9.000	L1	OFF	9.6
0.2333	27.88	52.33	24.45	9.000	L1	OFF	9.6
0.2558	22.68	51.57	28.88	9.000	L1	OFF	9.6
0.5855	35.69	46.00	10.31	9.000	L1	OFF	9.6
2.2505	22.51	46.00	23.49	9.000	L1	OFF	9.7
2.2708	22.62	46.00	23.38	9.000	L1	OFF	9.7
2.2843	22.47	46.00	23.53	9.000	L1	OFF	9.7
2.5633	22.37	46.00	23.63	9.000	L1	OFF	9.8
2.5745	22.44	46.00	23.56	9.000	L1	OFF	9.8
2.8828	21.62	46.00	24.38	9.000	L1	OFF	9.8
17.1365	21.68	50.00	28.32	9.000	L1	OFF	10.3
17.2243	21.78	50.00	28.22	9.000	L1	OFF	10.3
17.2760	21.76	50.00	28.24	9.000	L1	OFF	10.3
17.8115	21.67	50.00	28.33	9.000	L1	OFF	10.3
18.3943	21.69	50.00	28.31	9.000	L1	OFF	10.3
18.8825	21.47	50.00	28.53	9.000	L1	OFF	10.4

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Conducted Emissions (Line 2)

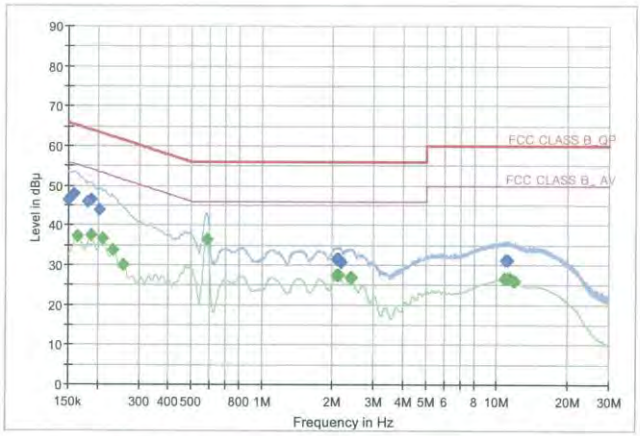
WLAN 5G MODE_N 1 / 2

Test Report

Common Information

EUT :	SM-G990U
Manufacturer :	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions :	WLAN 5G MODE_N

Full Spectrum



Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1500	46.41	66.00	19.59	9.000	N	OFF	9.6
0.1545	47.32	65.75	18.44	9.000	N	OFF	9.6
0.1590	47.89	65.52	17.63	9.000	N	OFF	9.6
0.1815	45.96	64.42	18.45	9.000	N	OFF	9.6
0.1883	46.56	64.11	17.55	9.000	N	OFF	9.6
0.2040	43.98	63.45	19.46	9.000	N	OFF	9.6
2.0908	31.48	56.00	24.52	9.000	N	OFF	9.7
2.1133	31.36	56.00	24.64	9.000	N	OFF	9.7
2.1290	31.30	56.00	24.70	9.000	N	OFF	9.7
2.1425	31.19	56.00	24.81	9.000	N	OFF	9.7
2.1493	31.12	56.00	24.88	9.000	N	OFF	9.7
2.1740	30.62	56.00	25.38	9.000	N	OFF	9.7
10.8568	31.10	60.00	28.90	9.000	N	OFF	10.1
10.9355	31.28	60.00	28.72	9.000	N	OFF	10.2
10.9580	31.21	60.00	28.79	9.000	N	OFF	10.2
11.0975	31.17	60.00	28.83	9.000	N	OFF	10.2
11.1110	31.18	60.00	28.82	9.000	N	OFF	10.2
11.1358	31.16	60.00	28.84	9.000	N	OFF	10.2

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WLAN 5G MODE_N 2 / 2

Final_Result_CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1635	37.32	55.28	17.97	9.000	N	OFF	9.6
0.1883	37.39	54.11	16.73	9.000	N	OFF	9.6
0.2108	36.58	53.18	16.60	9.000	N	OFF	9.6
0.2333	33.84	52.33	18.50	9.000	N	OFF	9.6
0.2580	29.92	51.50	21.58	9.000	N	OFF	9.6
0.5833	36.35	46.00	9.65	9.000	N	OFF	9.6
2.0953	27.40	46.00	18.60	9.000	N	OFF	9.7
2.1065	27.47	46.00	18.53	9.000	N	OFF	9.7
2.1155	27.50	46.00	18.50	9.000	N	OFF	9.7
2.1313	27.29	46.00	18.71	9.000	N	OFF	9.7
2.3945	26.93	46.00	19.07	9.000	N	OFF	9.8
2.4125	26.83	46.00	19.17	9.000	N	OFF	9.8
10.7735	26.53	50.00	23.47	9.000	N	OFF	10.1
11.1110	26.54	50.00	23.46	9.000	N	OFF	10.2
11.1560	26.53	50.00	23.47	9.000	N	OFF	10.2
11.4238	26.45	50.00	23.55	9.000	N	OFF	10.2
11.7478	26.09	50.00	23.91	9.000	N	OFF	10.2
11.9413	25.89	50.00	24.11	9.000	N	OFF	10.2

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11. LIST OF TEST EQUIPMENT

Conducted Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	09/04/2020	Annual	102245
Rohde & Schwarz	ESR / EMI Test Receiver	09/16/2020	Annual	101910
ESPEC	SU-642 /Temperature Chamber	07/30/2020	Annual	0093000718
Agilent	N9020A / Signal Analyzer	05/03/2021	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	03/09/2021	Annual	MY49432108
Agilent	N1911A / Power Meter	04/08/2021	Annual	MY45100523
Agilent	N1921A / Power Sensor	04/08/2021	Annual	MY57820067
Agilent	87300B / Directional Coupler	11/10/2020	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	02/09/2021	Annual	10545
HP	E3632A / DC Power Supply	09/16/2020	Annual	MY40004427
HP	8493C / Attenuator(10 dB)(DC-26.5 GHz)	06/26/2020	Annual	07560
HP	8493C / Attenuator(10 dB)(DC-26.5 GHz)	07/03/2020	Annual	08285
Rohde & Schwarz	18N-20dB / Attenuator(20 dB)	03/08/2021	Annual	8
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
TNM system	FBSM-01B / Amp & Filter Bank Switch Controller	N/A	N/A	N/A
Schwarzbeck	Loop Antenna	03/19/2020	Biennial	1513-333
Schwarzbeck	VULB 9168 / Hybrid Antenna	08/02/2019	Biennial	01039
Schwarzbeck	BBHA 9120D / Horn Antenna	08/01/2019	Biennial	9120D-1151
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	02/11/2020	Biennial	BBHA9170124
Rohde & Schwarz	FSV(10 Hz ~ 40 GHz) / Spectrum Analyzer	05/14/2021	Annual	101055
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	01/06/2021	Annual	2
Wainwright Instruments	WRCJV12-4900-5100-5900-6100-50SS	06/24/2021	Annual	5
Wainwright Instruments	WRCJV12-4900-5100-5900-6100-50SS	06/24/2021	Annual	6
CERNEX	CBL18265035 / Power Amplifier	12/04/2020	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	03/23/2021	Annual	25956
TNM system	FBSM-05B / HPF(3~18GHz) + LNA1(1~18GHz)	01/20/2021	Annual	F6
TNM system	FBSM-05B / ATT(10dB) + LNA1(1~18GHz)	01/20/2021	Annual	None
TNM system	FBSM-05B / ATT(3dB) + LNA1(1~18GHz)	01/20/2021	Annual	None
TNM system	FBSM-05B / LNA1(1~18GHz)	01/20/2021	Annual	25540
TNM system	FBSM-05B / HPF(7~18GHz) + LNA2(6~18GHz)	01/20/2021	Annual	28550
TNM system	FBSM-05B / Thru(30MHz ~ 18GHz)	01/20/2021	Annual	None
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	02/08/2021	Annual	1
Weinschel	2-3 / Attenuator (3 dB)	10/07/2020	Annual	BR0617
H+S	5910-N-50-010 / Attenuator(10 dB)	10/28/2020	Annual	None
Rohde & Schwarz	ESCI / Test Receiver	06/10/2020	Annual	100584

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-2105-FC038-P