OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290030.39	30.39
100%		-30	5290007.69	7.69
100%		-20	5290014.72	14.72
100%		-10	5290020.51	20.51
100%		0	5290024.99	24.99
100%		+10	5290025.45	25.45
100%		+30	5290038.52	38.52
100%		+40	5290046.55	46.55
100%		+50	5290050.86	50.86
Batt. Endpoint	3.65	+20	5290033.13	33.13

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530031.34	31.34
100%		-30	5530005.30	5.30
100%		-20	5530015.49	15.49
100%		-10	5530020.60	20.6
100%		0	5530024.20	24.2
100%		+10	5530026.34	26.34
100%		+30	5530035.85	35.85
100%		+40	5530040.27	40.27
100%		+50	5530052.98	52.98
Batt. Endpoint	3.65	+20	5530032.90	32.9

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775032.52	32.52
100%		-30	5775008.17	8.17
100%		-20	5775014.11	14.11
100%		-10	5775016.67	16.67
100%		0	5775025.77	25.77
100%		+10	5775029.17	29.17
100%		+30	5775040.69	40.69
100%		+40	5775043.45	43.45
100%		+50	5775058.92	58.92
Batt. Endpoint	3.65	+20	5775035.89	35.89

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210033.80	33.80
100%		-30	5210009.44	9.44
100%		-20	5210014.22	14.22
100%		-10	5210020.17	20.17
100%		0	5210021.40	21.40
100%		+10	5210025.55	25.55
100%		+30	5210037.76	37.76
100%		+40	5210040.80	40.80
100%		+50	5210056.64	56.64
Batt. Endpoint	3.65	+20	5210032.40	32.40

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290034.42	34.42
100%		-30	5290010.56	10.56
100%		-20	5290011.95	11.95
100%		-10	5290020.73	20.73
100%		0	5290025.14	25.14
100%		+10	5290029.83	29.83
100%		+30	5290040.82	40.82
100%		+40	5290046.97	46.97
100%		+50	5290055.50	55.50
Batt. Endpoint	3.65	+20	5290030.26	30.26

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530030.54	30.54
100%		-30	5530009.21	9.21
100%		-20	5530014.21	14.21
100%		-10	5530015.90	15.9
100%		0	5530021.19	21.19
100%		+10	5530028.47	28.47
100%		+30	5530038.28	38.28
100%		+40	5530046.05	46.05
100%		+50	5530056.11	56.11
Batt. Endpoint	3.65	+20	5530031.21	31.21

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 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775035.05	35.05
100%		-30	5775010.48	10.48
100%		-20	5775011.99	11.99
100%		-10	5775020.61	20.61
100%		0	5775020.12	20.12
100%		+10	5775027.10	27.1
100%		+30	5775039.48	39.48
100%		+40	5775042.95	42.95
100%		+50	5775057.53	57.53
Batt. Endpoint	3.65	+20	5775030.68	30.68

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.

10 minutes after the EUT is energized

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210030.77	30.77
100%		-30	5210006.18	6.18
100%		-20	5210013.42	13.42
100%		-10	5210016.60	16.60
100%		0	5210022.94	22.94
100%		+10	5210026.11	26.11
100%		+30	5210038.63	38.63
100%		+40	5210046.34	46.34
100%		+50	5210056.95	56.95
Batt. Endpoint	3.65	+20	5210030.84	30.84

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 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290035.45	35.45
100%		-30	5290009.38	9.38
100%		-20	5290010.86	10.86
100%		-10	5290015.42	15.42
100%		0	5290021.65	21.65
100%		+10	5290028.14	28.14
100%		+30	5290038.18	38.18
100%		+40	5290046.85	46.85
100%		+50	5290052.71	52.71
Batt. Endpoint	3.65	+20	5290032.31	32.31

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530031.46	31.46
100%		-30	5530005.69	5.69
100%		-20	5530012.25	12.25
100%		-10	5530018.68	18.68
100%		0	5530021.20	21.2
100%		+10	5530030.66	30.66
100%		+30	5530036.78	36.78
100%		+40	5530042.49	42.49
100%		+50	5530057.29	57.29
Batt. Endpoint	3.65	+20	5530033.96	33.96

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.

OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775031.45	31.45
100%		-30	5775007.75	7.75
100%		-20	5775013.62	13.62
100%		-10	5775015.73	15.73
100%		0	5775020.97	20.97
100%		+10	5775030.87	30.87
100%		+30	5775039.64	39.64
100%		+40	5775040.30	40.3
100%		+50	5775053.23	53.23
Batt. Endpoint	3.65	+20	5775032.39	32.39

Note:

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

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OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210034.43	34.43
100%		-30	5210007.82	7.82
100%		-20	5210014.37	14.37
100%		-10	5210015.89	15.89
100%		0	5210025.82	25.82
100%		+10	5210029.64	29.64
100%		+30	5210035.30	35.30
100%		+40	5210041.81	41.81
100%		+50	5210060.90	60.90
Batt. Endpoint	3.65	+20	5210033.43	33.43

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290034.96	34.96
100%		-30	5290008.70	8.70
100%		-20	5290015.71	15.71
100%		-10	5290018.67	18.67
100%		0	5290023.43	23.43
100%		+10	5290028.60	28.6
100%		+30	5290038.89	38.89
100%		+40	5290050.04	50.04
100%		+50	5290060.79	60.79
Batt. Endpoint	3.65	+20	5290035.68	35.68

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 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530034.43	34.43
100%		-30	5530007.67	7.67
100%		-20	5530012.18	12.18
100%		-10	5530019.64	19.64
100%		0	5530021.35	21.35
100%		+10	5530028.38	28.38
100%		+30	5530036.29	36.29
100%		+40	5530041.75	41.75
100%		+50	5530058.93	58.93
Batt. Endpoint	3.65	+20	5530033.59	33.59

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775033.28	33.28
100%		-30	5775007.31	7.31
100%		-20	5775013.14	13.14
100%		-10	5775016.04	16.04
100%		0	5775021.65	21.65
100%		+10	5775028.89	28.89
100%		+30	5775038.33	38.33
100%		+40	5775044.30	44.3
100%		+50	5775055.08	55.08
Batt. Endpoint	3.65	+20	5775033.61	33.61

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210035.35	35.35
100%		-30	5210010.52	10.52
100%		-20	5210010.60	10.60
100%		-10	5210019.31	19.31
100%		0	5210023.02	23.02
100%		+10	5210027.23	27.23
100%		+30	5210037.13	37.13
100%		+40	5210048.77	48.77
100%		+50	5210057.02	57.02
Batt. Endpoint	3.65	+20	5210034.36	34.36

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.

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290035.89	35.89
100%		-30	5290009.65	9.65
100%		-20	5290010.85	10.85
100%		-10	5290018.59	18.59
100%		0	5290021.44	21.44
100%		+10	5290028.44	28.44
100%		+30	5290036.78	36.78
100%		+40	5290040.33	40.33
100%		+50	5290053.24	53.24
Batt. Endpoint	3.65	+20	5290032.34	32.34

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 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530035.88	35.88
100%		-30	5530006.62	6.62
100%		-20	5530014.39	14.39
100%		-10	5530019.62	19.62
100%		0	5530022.43	22.43
100%		+10	5530027.80	27.8
100%		+30	5530037.20	37.2
100%		+40	5530044.52	44.52
100%		+50	5530053.20	53.20
Batt. Endpoint	3.65	+20	5530033.86	33.86

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775034.53	34.53
100%		-30	5775005.59	5.59
100%		-20	5775013.15	13.15
100%		-10	5775020.31	20.31
100%		0	5775021.30	21.3
100%		+10	5775026.06	26.06
100%		+30	5775038.66	38.66
100%		+40	5775045.10	45.1
100%		+50	5775059.36	59.36
Batt. Endpoint	3.65	+20	5775035.44	35.44

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210034.57	34.57
100%		-30	5210006.60	6.60
100%		-20	5210013.07	13.07
100%		-10	5210018.29	18.29
100%		0	5210020.97	20.97
100%		+10	5210030.58	30.58
100%		+30	5210037.86	37.86
100%		+40	5210046.27	46.27
100%		+50	5210051.51	51.51
Batt. Endpoint	3.65	+20	5210032.54	32.54

Note:

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

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290032.57	32.57
100%		-30	5290006.90	6.90
100%		-20	5290014.23	14.23
100%		-10	5290020.34	20.34
100%		0	5290024.38	24.38
100%		+10	5290027.16	27.16
100%		+30	5290039.98	39.98
100%		+40	5290049.86	49.86
100%		+50	5290054.29	54.29
Batt. Endpoint	3.65	+20	5290030.26	30.26

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530035.18	35.18
100%		-30	5530009.24	9.24
100%		-20	5530013.19	13.19
100%		-10	5530018.95	18.95
100%		0	5530025.90	25.9
100%		+10	5530027.83	27.83
100%		+30	5530038.48	38.48
100%		+40	5530049.41	49.41
100%		+50	5530050.14	50.14
Batt. Endpoint	3.65	+20	5530031.61	31.61

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775033.59	33.59
100%		-30	5775010.68	10.68
100%		-20	5775015.15	15.15
100%		-10	5775019.75	19.75
100%		0	5775023.64	23.64
100%		+10	5775026.03	26.03
100%		+30	5775039.22	39.22
100%		+40	5775050.43	50.43
100%		+50	5775056.83	56.83
Batt. Endpoint	3.65	+20	5775034.90	34.9

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5210031.07	31.07
100%		-30	5210005.37	5.37
100%		-20	5210013.34	13.34
100%		-10	5210016.73	16.73
100%		0	5210023.98	23.98
100%		+10	5210028.30	28.30
100%		+30	5210039.81	39.81
100%		+40	5210047.35	47.35
100%		+50	5210054.86	54.86
Batt. Endpoint	3.65	+20	5210035.57	35.57

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5290034.37	34.37
100%		-30	5290010.52	10.52
100%		-20	5290013.23	13.23
100%		-10	5290018.56	18.56
100%		0	5290025.59	25.59
100%		+10	5290030.25	30.25
100%		+30	5290035.66	35.66
100%		+40	5290048.72	48.72
100%		+50	5290051.98	51.98
Batt. Endpoint	3.65	+20	5290035.57	35.57

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:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5530032.63	32.63
100%		-30	5530010.72	10.72
100%		-20	5530013.43	13.43
100%		-10	5530019.15	19.15
100%		0	5530021.89	21.89
100%		+10	5530030.88	30.88
100%		+30	5530035.62	35.62
100%		+40	5530046.24	46.24
100%		+50	5530051.06	51.06
Batt. Endpoint	3.65	+20	5530032.95	32.95

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 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	4.20 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.20	+20(Ref)	5775031.49	31.49
100%		-30	5775007.77	7.77
100%		-20	5775013.46	13.46
100%		-10	5775018.03	18.03
100%		0	5775023.25	23.25
100%		+10	5775026.78	26.78
100%		+30	5775040.05	40.05
100%		+40	5775046.35	46.35
100%		+50	5775050.03	50.03
Batt. Endpoint	3.65	+20	5775030.04	30.04

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	5709.56	15.44
802.11n(HT20)				5709.32	15.68
802.11ac(VHT20)				5709.28	15.72
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	5690.24	34.76
802.11ac(VHT40)				5689.68	35.32
802.11n(HT40)	UNII 3	5710	142	5729.84	4.84
802.11ac(VHT40)				5729.92	4.92

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5649.20	75.80
	UNII 3	5690	138	5730.64	5.64

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	5709.36	15.64
802.11n(HT20)				5709.32	15.68
802.11ac(VHT20)				5709.24	15.76
802.11a	UNII 3	5720	144	5730.60	5.60
802.11n(HT20)				5730.56	5.56
802.11ac(VHT20)				5730.64	5.64

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5689.92	35.08
802.11ac(VHT40)				5689.60	35.40
802.11n(HT40)	UNII 3	5710	142	5729.76	4.76
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	5649.52	75.48
	UNII 3	5690	138	5730.48	5.48

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	5728.20	3.20	> 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	5728.08	3.08	> 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	5727.76	2.76	> 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	5728.24	3.24	> 0.5
802.11n(HT20)				5728.84	3.84	> 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	5727.68	2.68	> 0.5
802.11ac(VHT40)				5727.84	2.84	> 0.5

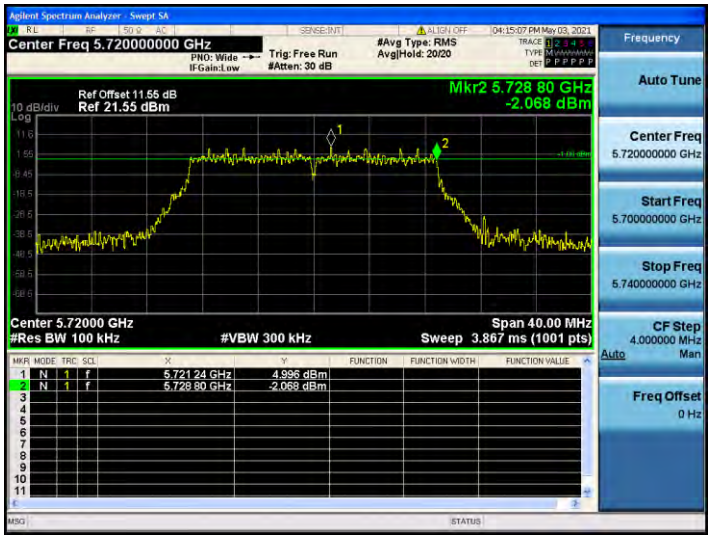
Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5727.92	2.92	> 0.5

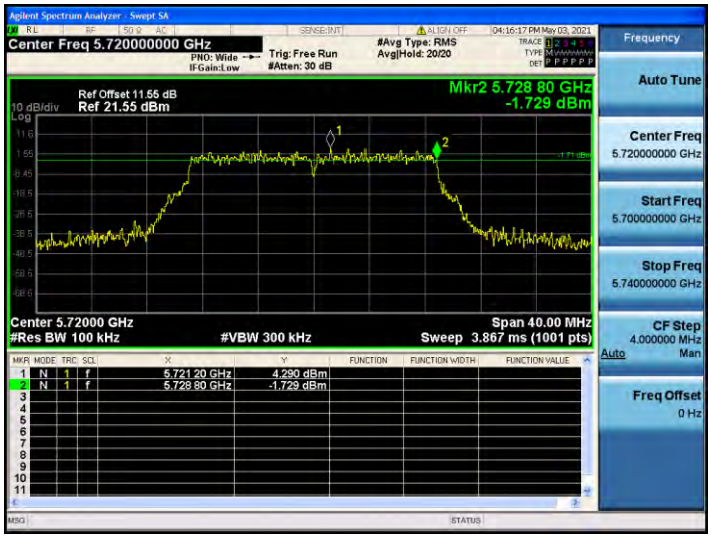
Note:

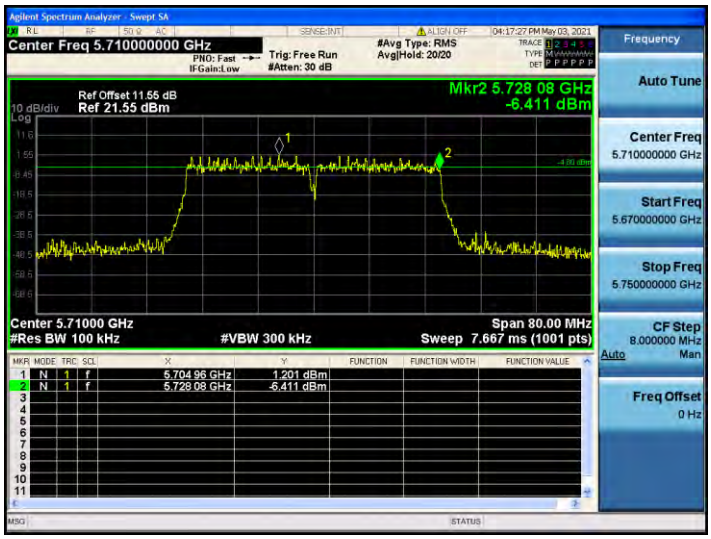
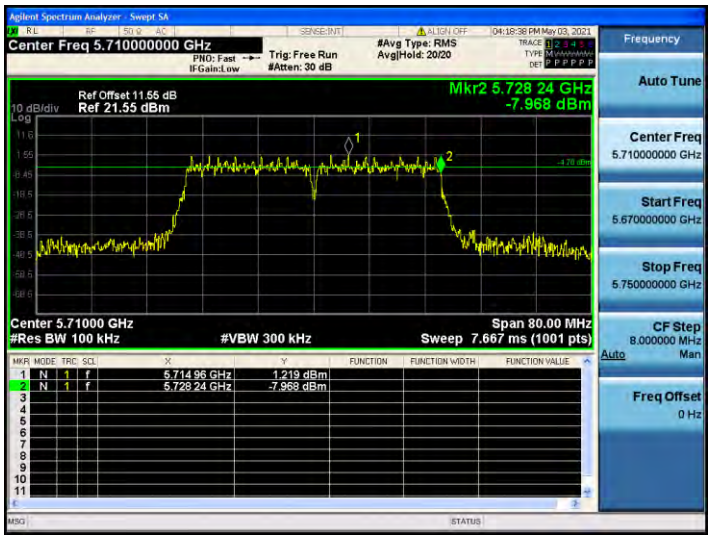
6dB Bandwidth = Measured Frequency[MHz] – 5725MHz

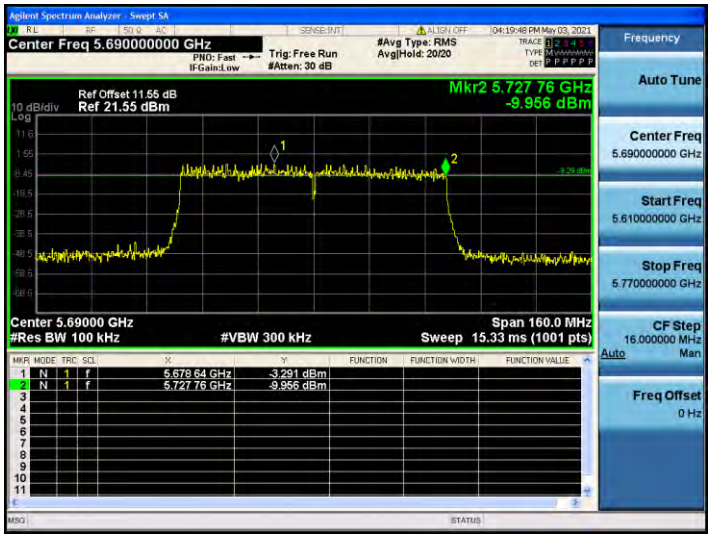
[Ant.1]

▣ Test Plots(UNII 3 Band 6dB Bandwidth)

802.11a CH.144	802.11n_HT20 CH.144
	

802.11ac_VHT20 CH.144


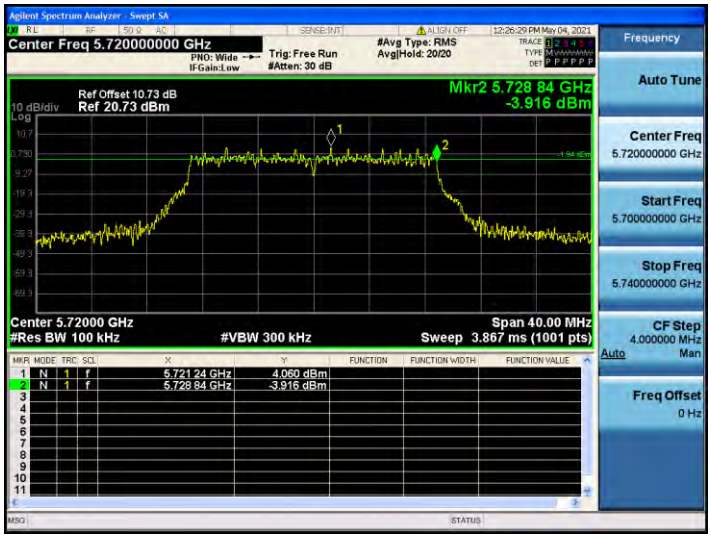
802.11n_HT40 CH.142	802.11ac_VHT40 CH.142
	

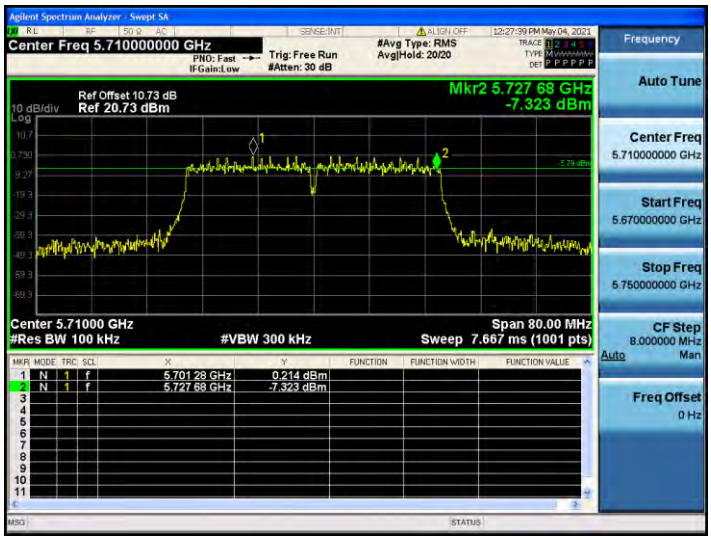
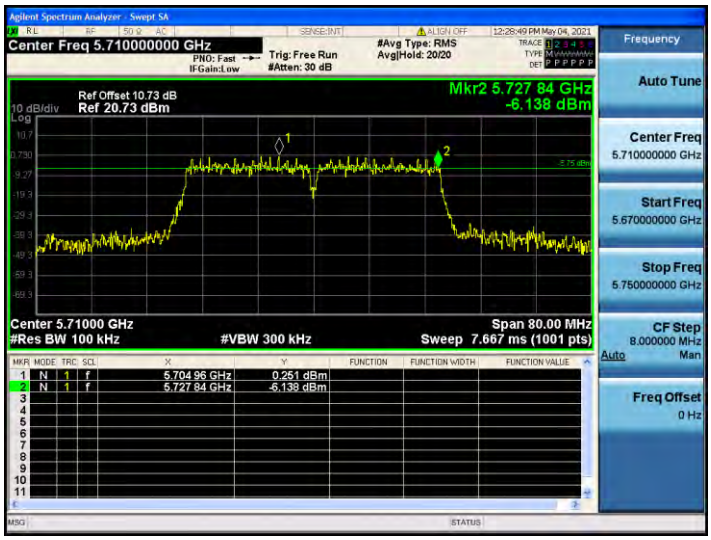
802.11ac_VHT80 CH.138


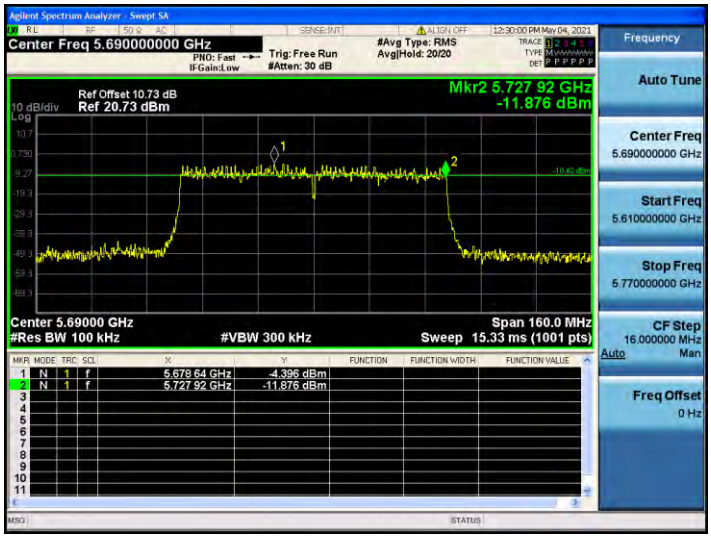
[Ant.2]

▣ 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	13.40	1.963	15.37	22.89	54 Mbps
802.11n(HT20)			13.38	1.919	15.30	22.95	MCS6
802.11ac(VHT20)			13.32	2.009	15.33	22.96	MCS7
802.11a	5720 (UNII 3 Band)	144	7.17	1.963	9.14	30.00	54 Mbps
802.11n(HT20)			7.55	1.919	9.47	30.00	MCS6
802.11ac(VHT20)			7.52	2.009	9.53	30.00	MCS7

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	12.26	3.123	15.38	23.98	MCS7
802.11ac(VHT40)			12.03	3.245	15.28	23.98	MCS9
802.11n(HT40)	5710 (UNII 3 Band)	142	1.69	3.123	4.82	30.00	MCS7
802.11ac(VHT40)			1.45	3.245	4.69	30.00	MCS9

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	10.87	3.680	14.55	23.98	MCS5
	5690 (UNII 3 Band)	138	-3.96	3.680	-0.28	30.00	MCS5

[Ant.2]

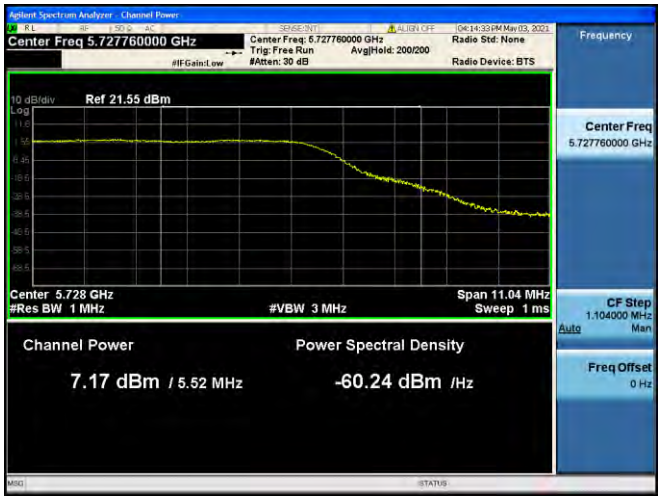
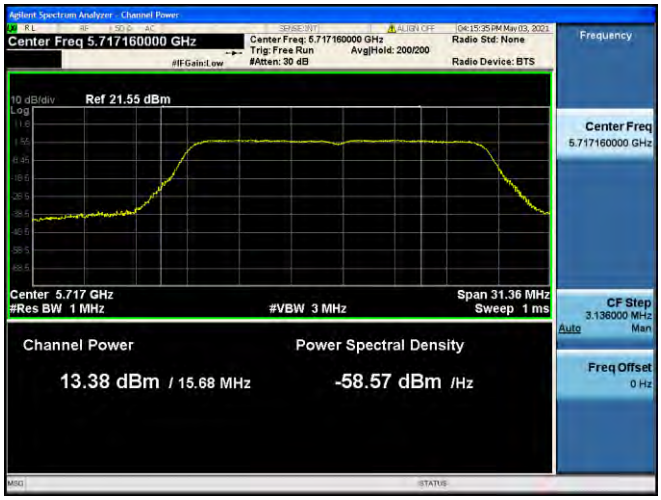
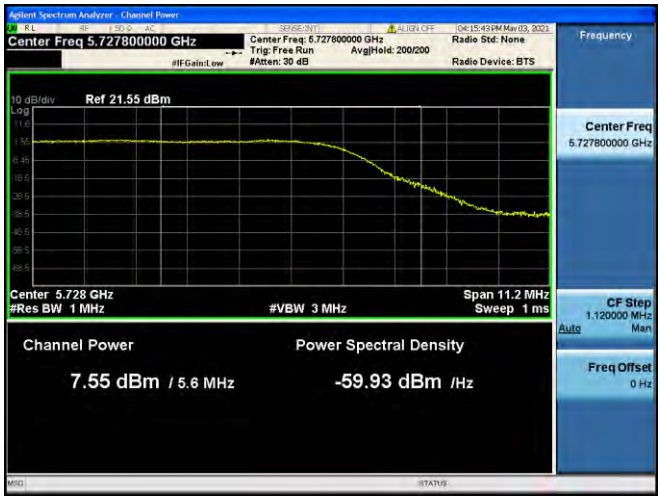
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	12.47	1.963	14.44	22.94	54 Mbps
802.11n(HT20)			12.32	1.919	14.24	22.95	MCS6
802.11ac(VHT20)			12.25	2.009	14.26	22.98	MCS7
802.11a	5720 (UNII 3 Band)	144	6.24	1.963	8.21	30.00	54 Mbps
802.11n(HT20)			6.57	1.919	8.49	30.00	MCS6
802.11ac(VHT20)			6.51	2.009	8.52	30.00	MCS7

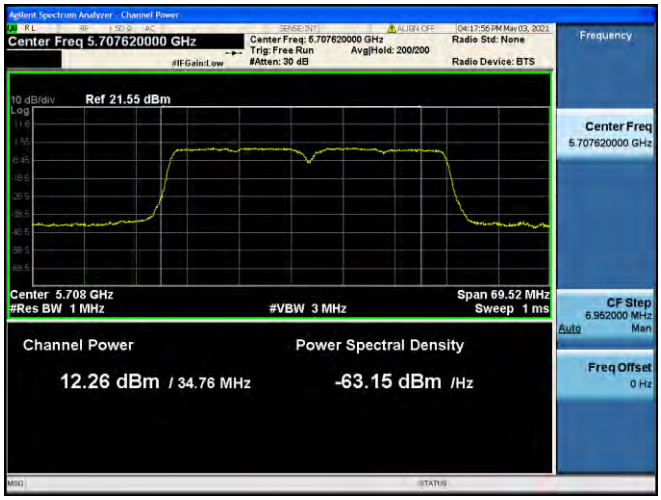
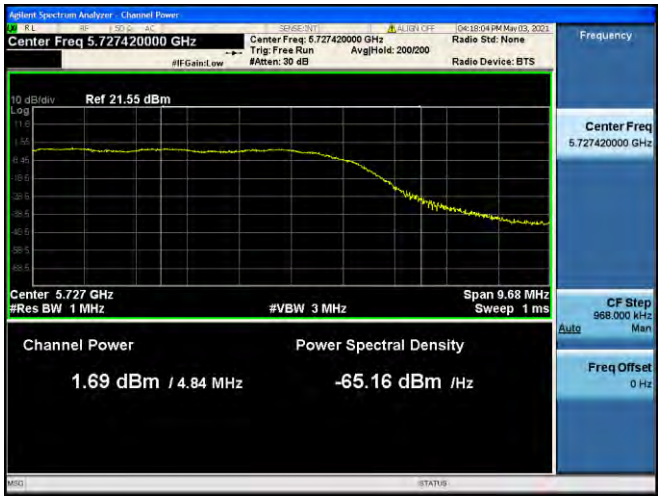
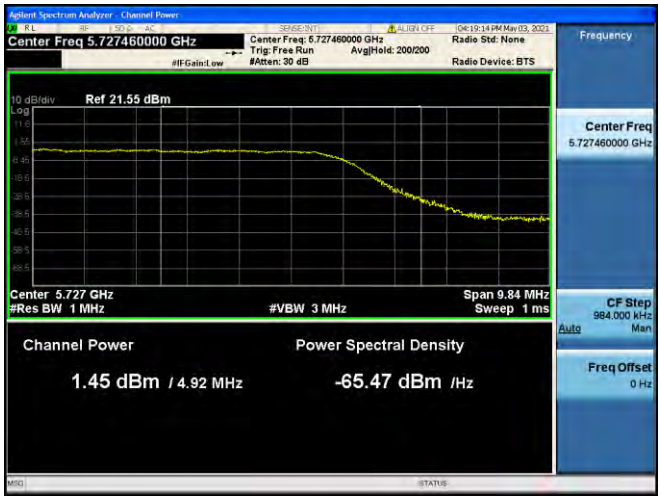
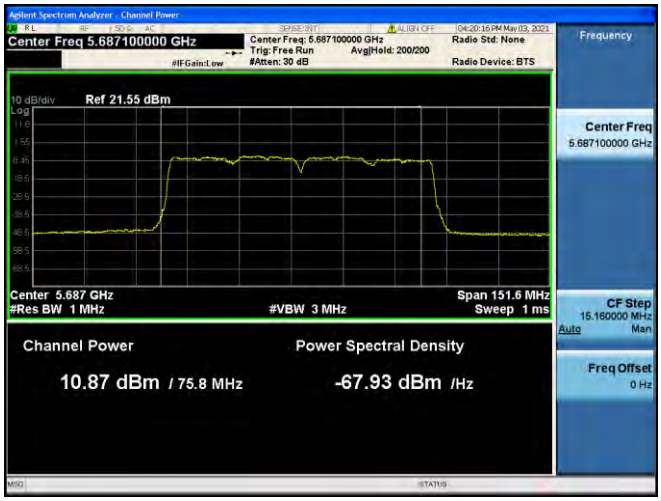
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)	Worstcase Datarate
802.11n(HT40)	5710 (UNII 2C Band)	142	11.06	3.123	14.19	23.98	MCS7
802.11ac(VHT40)			10.94	3.245	14.18	23.98	MCS9
802.11n(HT40)	5710 (UNII 3 Band)	142	0.53	3.123	3.65	30.00	MCS7
802.11ac(VHT40)			0.45	3.245	3.69	30.00	MCS9

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	9.72	3.680	13.40	23.98	MCS5
	5690 (UNII 3 Band)	138	-5.24	3.680	-1.56	30.00	MCS5

[Ant.1]

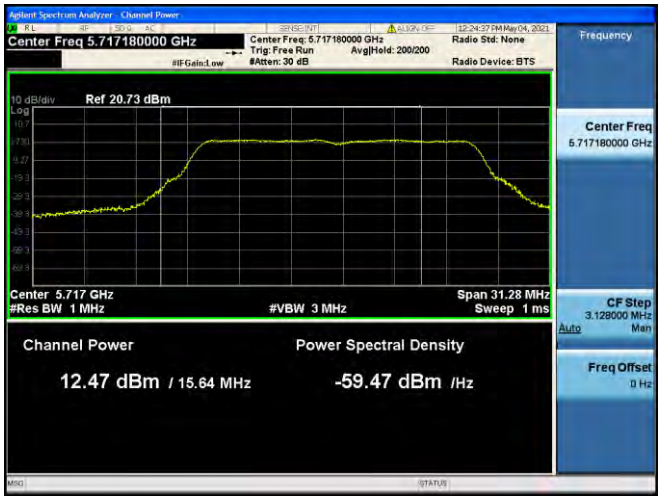
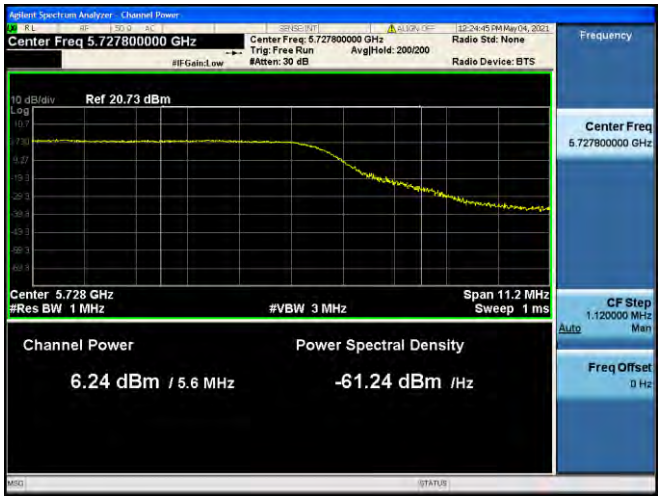
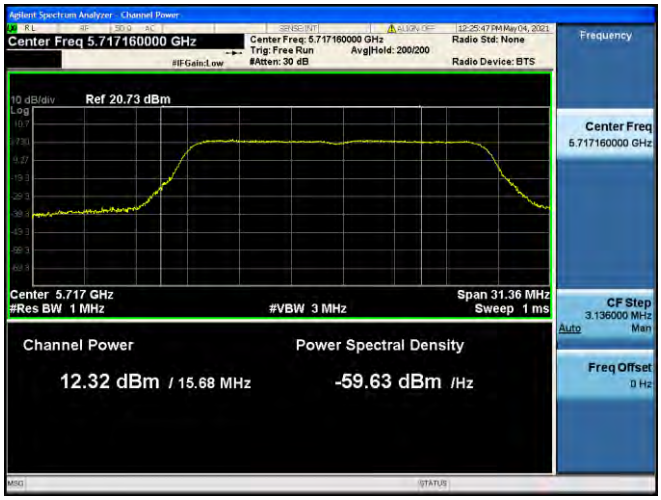
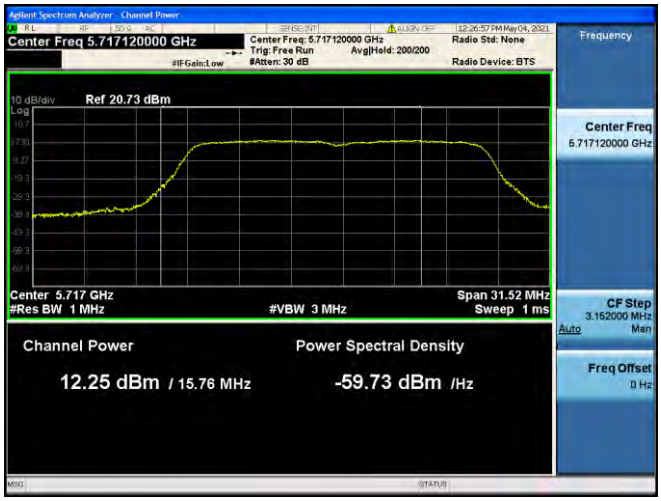
▣ Test Plots_

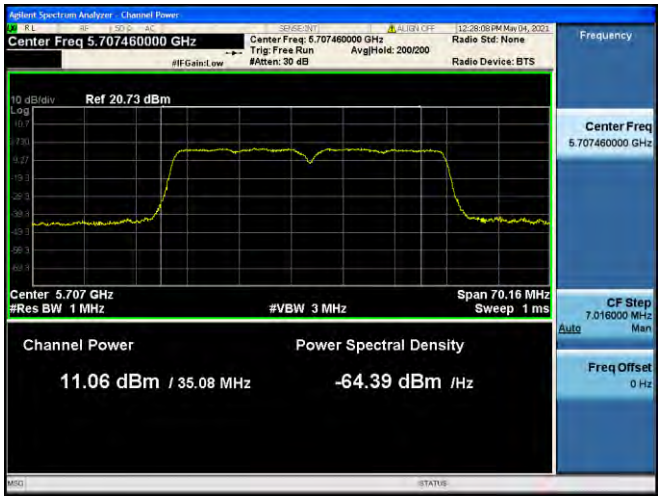
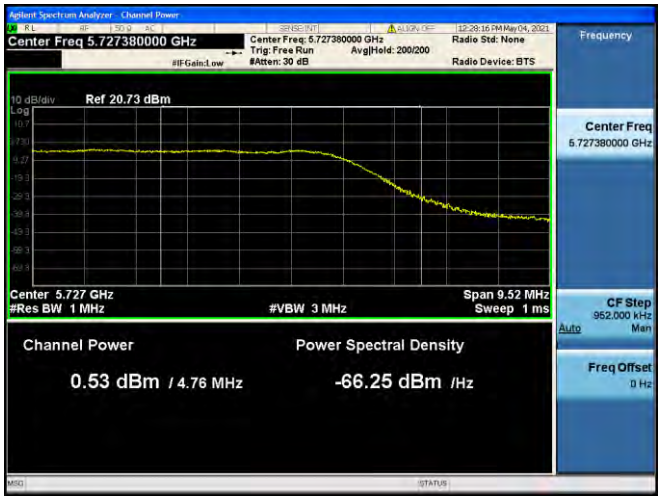
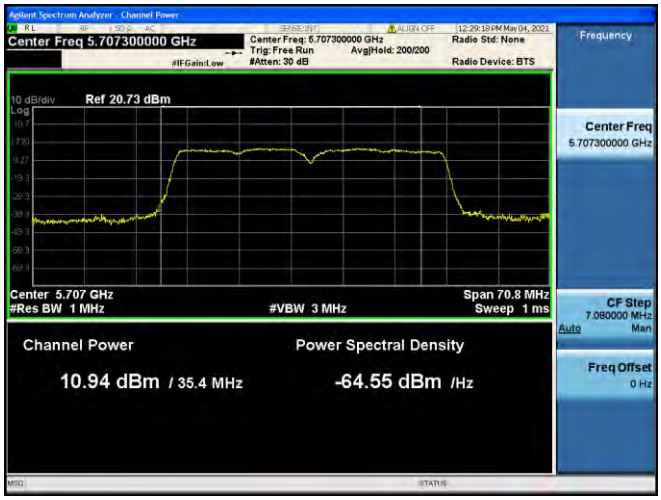
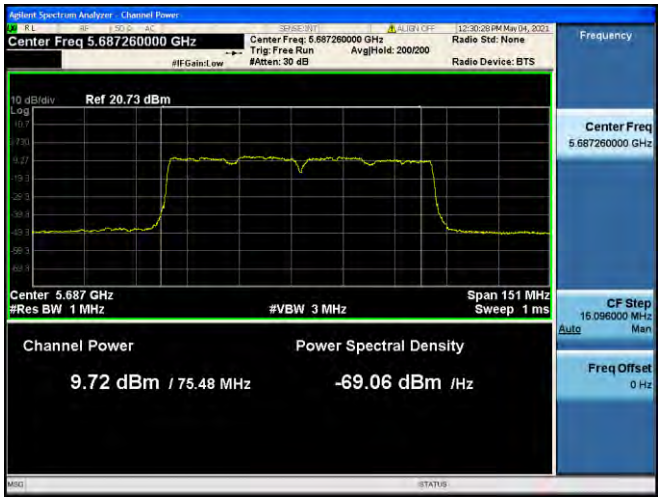
802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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	3.735	1.963	5.698	11dBm/ MHz	54 Mbps
802.11n(HT20)			3.355	1.919	5.273		MCS6
802.11ac(VHT20)			3.944	2.009	5.953		MCS7
802.11a	5720 (UNII 3 Band)	144	-0.305	1.963	1.658	30 dB/ 500kHz	54 Mbps
802.11n(HT20)			0.546	1.919	2.464		MCS6
802.11ac(VHT20)			0.312	2.009	2.321		MCS7

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	-1.006	3.123	2.117	11dBm/ MHz	MCS7
802.11ac(VHT40)			-0.989	3.245	2.256		MCS9
802.11n(HT40)	5710 (UNII 3 Band)	142	-5.159	3.123	-2.036	30 dB/ 500kHz	MCS7
802.11ac(VHT40)			-4.383	3.245	-1.138		MCS9

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	-5.276	3.680	-1.596	11dBm/ MHz	MCS5
	5690 (UNII 3 Band)	138	-10.012	3.680	-6.333	30 dBm/ 500kHz	MCS5

[Ant.2]

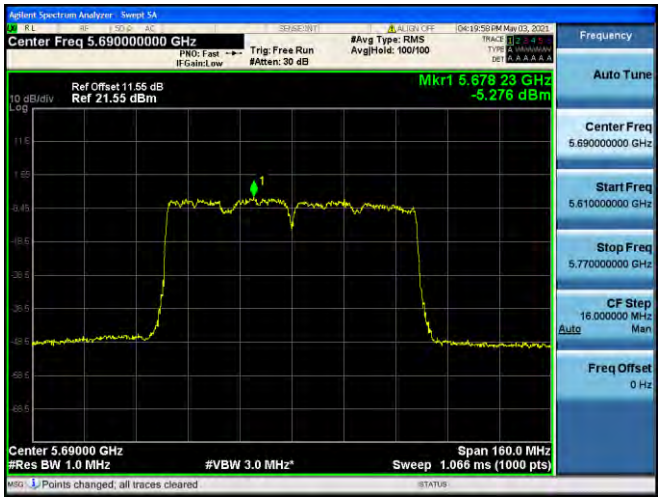
Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Worstcase Datarate
802.11a	5720 (UNII 2C Band)	144	2.464	1.963	4.427	11dBm/ MHz	54 Mbps
802.11n(HT20)			2.216	1.919	4.135		MCS6
802.11ac(VHT20)			2.081	2.009	4.090		MCS7
802.11a	5720 (UNII 3 Band)	144	-0.688	1.963	1.275	30 dB/ 500kHz	54 Mbps
802.11n(HT20)			-0.758	1.919	1.160		MCS6
802.11ac(VHT20)			-0.362	2.009	1.648		MCS7

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	-2.290	3.123	0.833	11dBm/ MHz	MCS7
802.11ac(VHT40)			-2.103	3.245	1.142		MCS9
802.11n(HT40)	5710 (UNII 3 Band)	142	-6.199	3.123	-3.076	30 dB/ 500kHz	MCS7
802.11ac(VHT40)			-6.615	3.245	-3.370		MCS9

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	-6.407	3.680	-2.728	11dBm/ MHz	MCS5
	5690 (UNII 3 Band)	138	-11.681	3.680	-8.001	30 dBm/ 500kHz	MCS5

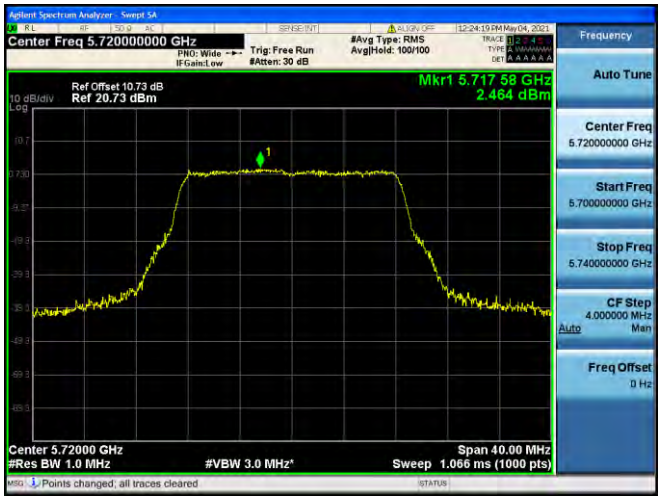
[Ant.1]
▣ Test Plots

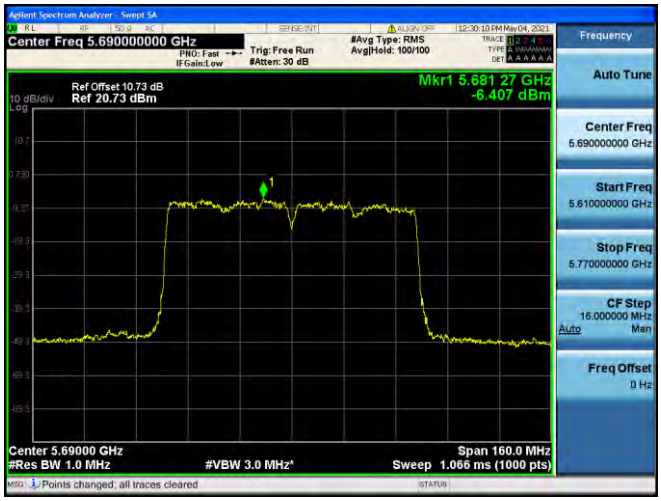
802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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	64.76	0.24	V	65.00	68.20	3.20	PK
15540	55.82	2.16	V	57.98	73.98	16.00	PK
15540	41.16	2.16	V	43.32	53.98	10.66	AV
10360	64.12	0.24	H	64.36	68.20	3.84	PK
15540	55.62	2.16	H	57.78	73.98	16.20	PK
15540	41.02	2.16	H	43.18	53.98	10.80	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	63.84	0.74	V	64.58	68.20	3.62	PK
15600	55.54	1.81	V	57.35	73.98	16.63	PK
15600	41.26	1.81	V	43.07	53.98	10.91	AV
10400	61.67	0.74	H	62.41	68.20	5.79	PK
15600	54.96	1.81	H	56.77	73.98	17.21	PK
15600	41.12	1.81	H	42.93	53.98	11.05	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	64.40	-0.25	V	64.15	68.20	4.05	PK
15720	55.73	1.16	V	56.89	73.98	17.09	PK
15720	41.22	1.16	V	42.38	53.98	11.60	AV
10480	63.52	-0.25	H	63.27	68.20	4.93	PK
15720	54.62	1.16	H	55.78	73.98	18.20	PK
15720	41.01	1.16	H	42.17	53.98	11.81	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	63.92	-0.20	V	63.72	68.20	4.48	PK
15780	56.25	1.20	V	57.45	73.98	16.53	PK
15780	41.48	1.20	V	42.68	53.98	11.30	AV
10520	62.52	-0.20	H	62.32	68.20	5.88	PK
15780	55.85	1.20	H	57.05	73.98	16.93	PK
15780	41.02	1.20	H	42.22	53.98	11.76	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	62.34	0.10	V	62.44	73.98	11.54	PK
10600	49.19	0.10	V	49.29	53.98	4.69	AV
15900	56.69	1.04	V	57.73	73.98	16.25	PK
15900	42.69	1.04	V	43.73	53.98	10.25	AV
10600	61.12	0.10	H	61.22	73.98	12.76	PK
10600	48.85	0.10	H	48.95	53.98	5.03	AV
15900	56.32	1.04	H	57.36	73.98	16.62	PK
15900	42.24	1.04	H	43.28	53.98	10.70	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	61.82	0.35	V	62.17	73.98	11.81	PK
10640	49.11	0.35	V	49.46	53.98	4.52	AV
15960	56.55	1.12	V	57.67	73.98	16.31	PK
15960	41.38	1.12	V	42.50	53.98	11.48	AV
10640	61.45	0.35	H	61.80	73.98	12.18	PK
10640	48.85	0.35	H	49.20	53.98	4.78	AV
15960	56.32	1.12	H	57.44	73.98	16.54	PK
15960	41.02	1.12	H	42.14	53.98	11.84	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	57.54	0.40	V	57.94	73.98	16.04	PK
11000	44.28	0.40	V	44.68	53.98	9.30	AV
16500	52.16	1.16	V	53.32	68.20	14.88	PK
11000	56.21	0.40	H	56.61	73.98	17.37	PK
11000	42.98	0.40	H	43.38	53.98	10.60	AV
16500	52.03	1.16	H	53.19	68.20	15.01	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	56.59	-0.40	V	56.19	73.98	17.79	PK
11200	41.01	-0.40	V	40.61	53.98	13.37	AV
16800	54.76	0.65	V	55.41	68.20	12.79	PK
11200	55.42	-0.40	H	55.02	73.98	18.96	PK
11200	40.85	-0.40	H	40.45	53.98	13.53	AV
16800	54.25	0.65	H	54.90	68.20	13.30	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	57.81	0.14	V	57.95	73.98	16.03	PK
11440	42.55	0.14	V	42.69	53.98	11.29	AV
17160	54.32	1.35	V	55.67	68.20	12.53	PK
11440	56.52	0.14	H	56.66	73.98	17.32	PK
11440	41.55	0.14	H	41.69	53.98	12.29	AV
17160	54.01	1.35	H	55.36	68.20	12.84	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	57.51	-0.14	V	57.37	73.98	16.61	PK
11490	44.68	-0.14	V	44.54	53.98	9.44	AV
17235	54.62	1.61	V	56.23	68.20	11.97	PK
11490	56.52	-0.14	H	56.38	73.98	17.60	PK
11490	43.58	-0.14	H	43.44	53.98	10.54	AV
17235	54.33	1.61	H	55.94	68.20	12.26	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	58.85	0.07	V	58.92	73.98	15.06	PK
11570	44.72	0.07	V	44.79	53.98	9.19	AV
17355	54.95	1.69	V	56.64	68.20	11.56	PK
11570	57.52	0.07	H	57.59	73.98	16.39	PK
11570	43.62	0.07	H	43.69	53.98	10.29	AV
17355	54.74	1.69	H	56.43	68.20	11.77	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	60.34	-0.70	V	59.64	73.98	14.34	PK
11650	46.61	-0.70	V	45.91	53.98	8.07	AV
17475	55.31	2.65	V	57.96	68.20	10.24	PK
11650	59.42	-0.70	H	58.72	73.98	15.26	PK
11650	45.51	-0.70	H	44.81	53.98	9.17	AV
17475	55.02	2.65	H	57.67	68.20	10.53	PK

Note:

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

[Worst case]

UNII 1, UNII 2A, UNII 2C, UNII 3 : 802.11a_6Mbps

[DBS Mode] – Tese case 1

802.11b Ch.1 2 412 GHz Ant 1 & 802.11a Ch.36 5 180 GHz UNII-1 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
10360	57.40	0.24	V	57.64	68.20	10.56	PK
15540	51.18	2.16	V	53.34	73.98	20.64	PK
15540	37.16	2.16	V	39.32	53.98	14.66	AV
10360	56.54	0.24	H	56.78	68.20	11.42	PK
15540	51.02	2.16	H	53.18	73.98	20.80	PK
15540	36.99	2.16	H	39.15	53.98	14.83	AV

[DBS Mode] – Tese case 2

802.11n(HT20) Ch.1 2 412 GHz Ant ALL & 802.11a Ch.36 5 180 GHz UNII-1 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
10360	57.72	0.24	V	57.96	68.20	10.24	PK
15540	51.57	2.16	V	53.73	73.98	20.25	PK
15540	37.51	2.16	V	39.67	53.98	14.31	AV
10360	57.25	0.24	H	57.49	68.20	10.71	PK
15540	51.48	2.16	H	53.64	73.98	20.34	PK
15540	37.32	2.16	H	39.48	53.98	14.50	AV

[Non-DBS Mode] – Tese case 3

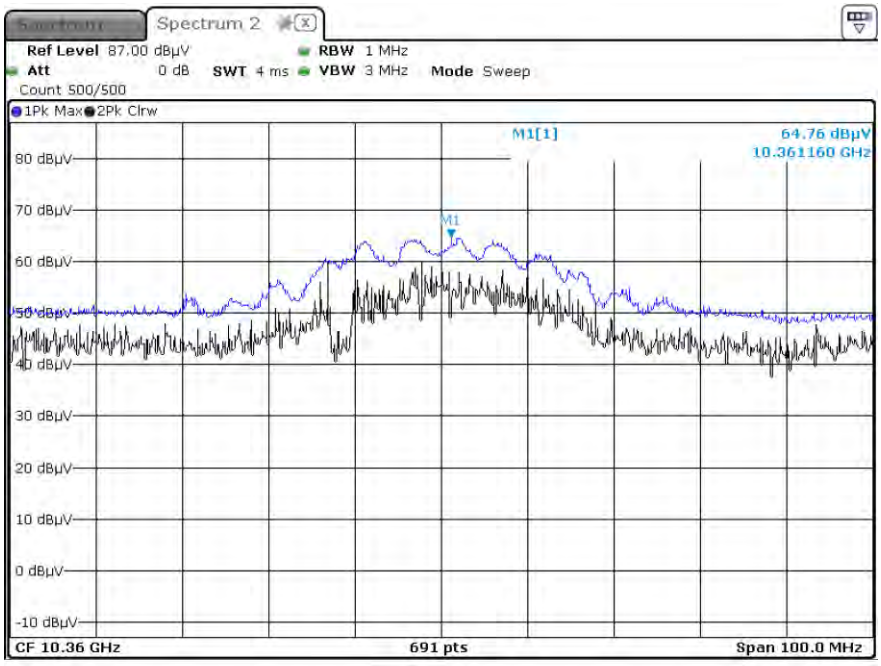
WLAN/BT Ant : Bluetooth 8DPSK Ch.0 2 402 GHz & 802.11a Ch.36 5 180 GHz UNII-1 Ant ALL

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
10360	63.05	0.24	V	63.29	68.20	4.91	PK
15540	54.85	2.16	V	57.01	73.98	16.97	PK
15540	40.67	2.16	V	42.83	53.98	11.15	AV
10360	62.86	0.24	H	63.10	68.20	5.10	PK
15540	54.36	2.16	H	56.52	73.98	17.46	PK
15540	40.12	2.16	H	42.28	53.98	11.70	AV

Note : Bluetooth Non-DBS Data refer to [BT] Test Report.

▣ Test Plots [Ant.1&Ant.2_MIMO(CDD)]

Peak Reading (802.11a, Ch.36 2nd Harmonic, Z-V)

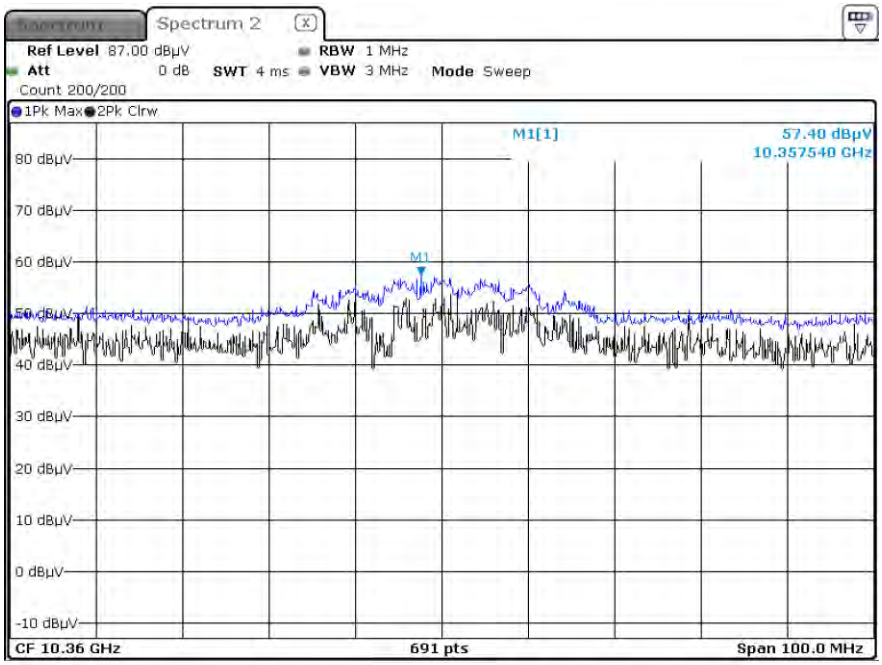


Note:

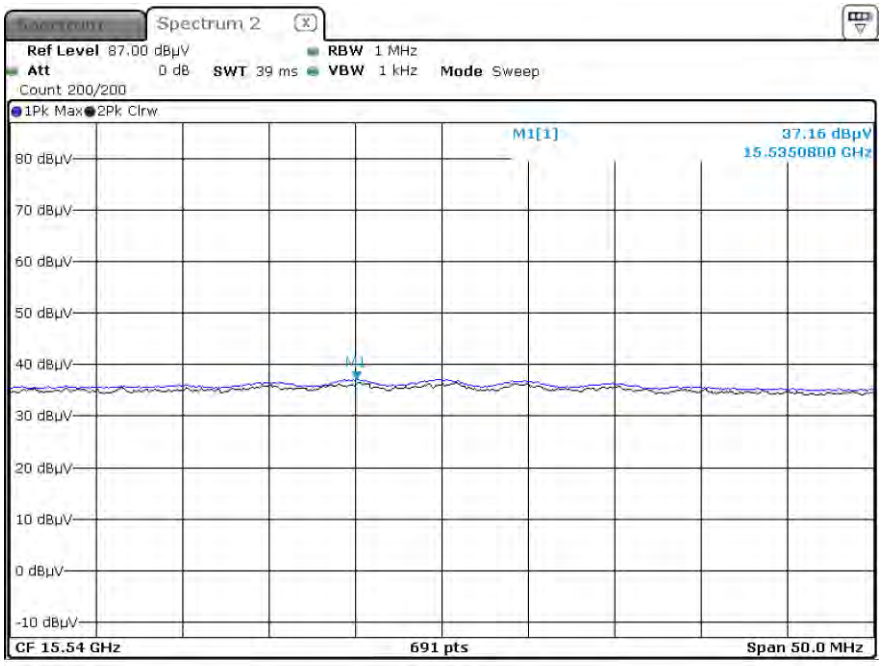
Only the worst case plots for Radiated Spurious Emissions.

▣ Test Plots (DBS, Z-V)

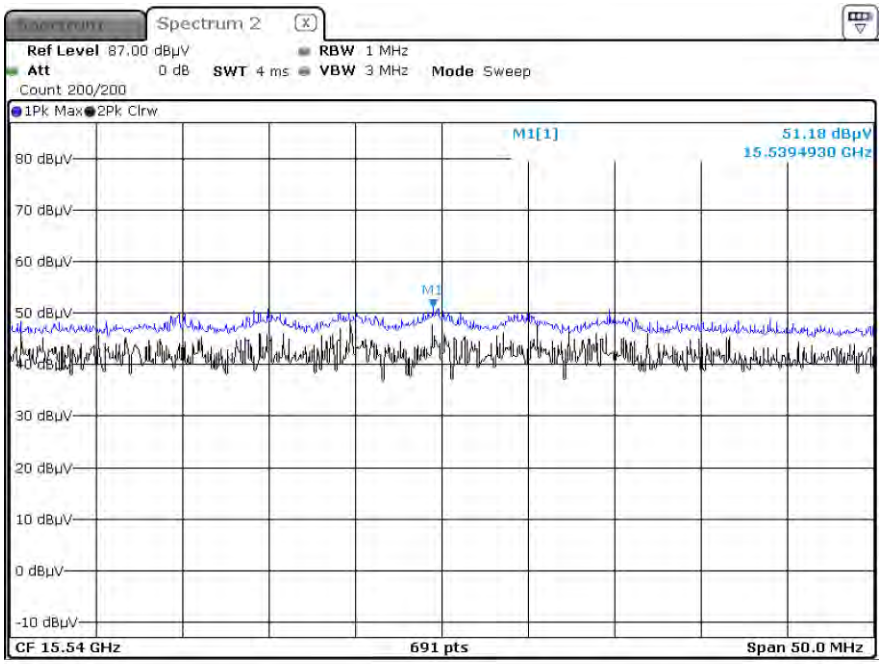
Radiated Spurious Emissions plot – Peak Reading (Test case 1_ 2nd Harmonic)



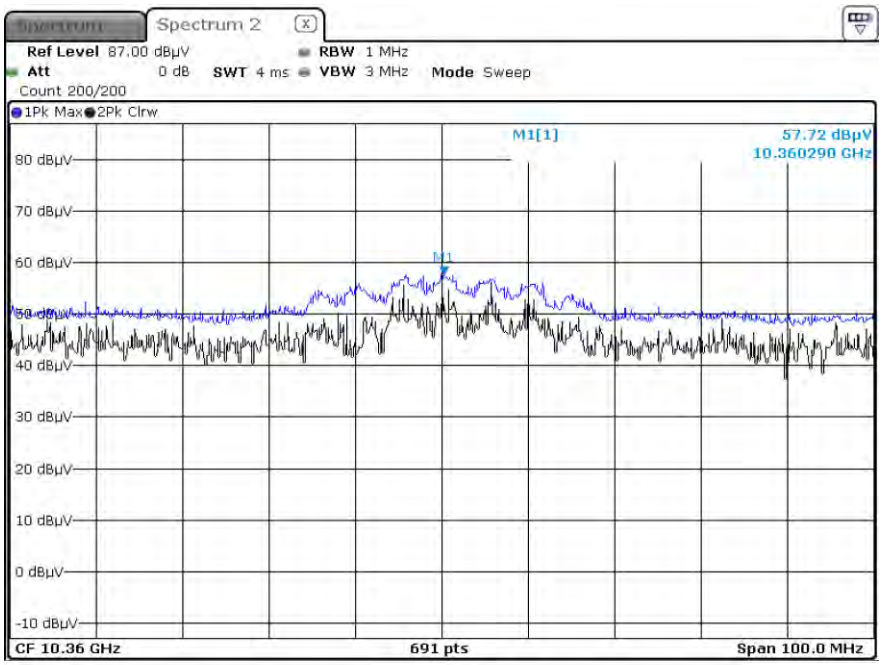
Radiated Spurious Emissions plot – Average Reading (Test case 1_ 3rd Harmonic)



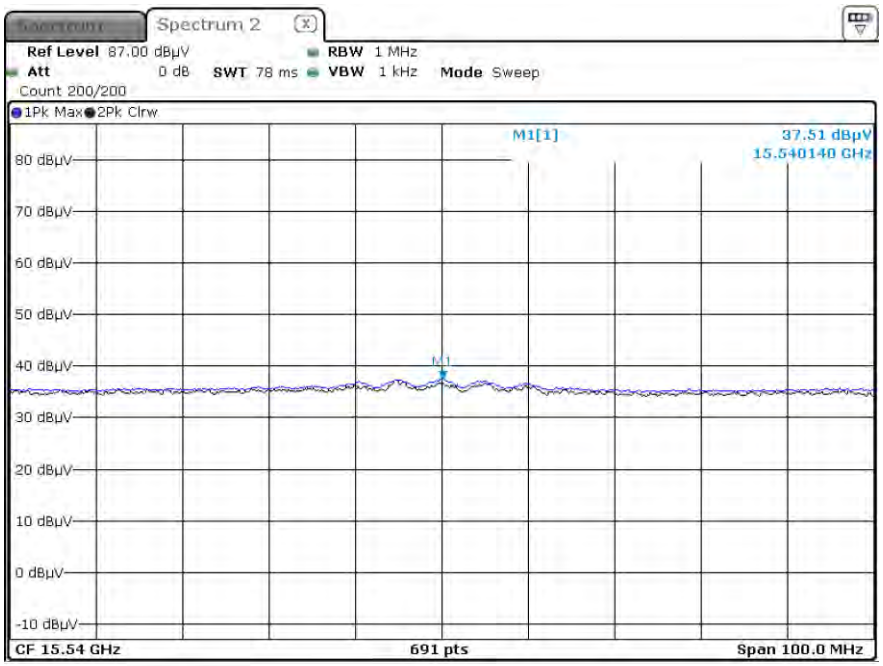
Radiated Spurious Emissions plot – Peak Reading (Test case 1_ 3rd Harmonic)



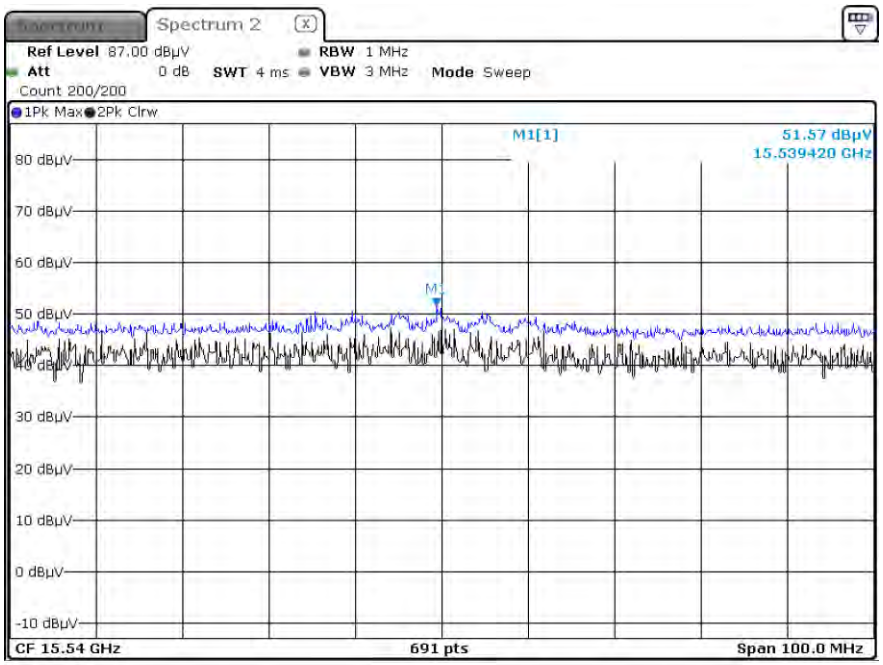
Radiated Spurious Emissions plot – Peak Reading (Test case 2_ 2nd Harmonic)



Radiated Spurious Emissions plot – Average Reading (Test case 2_ 3rd Harmonic)

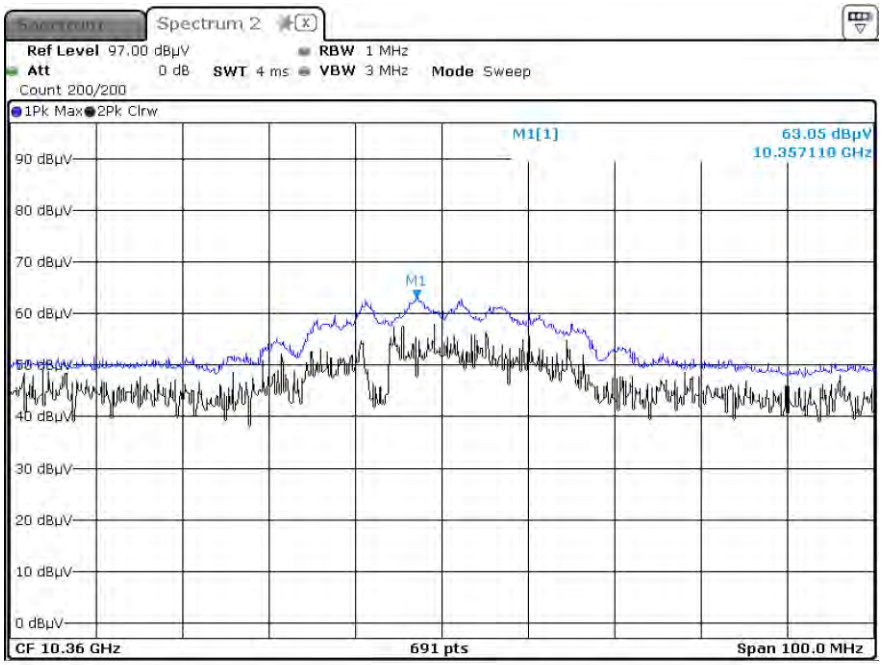


Radiated Spurious Emissions plot – Peak Reading (Test case 2_ 3rd Harmonic)

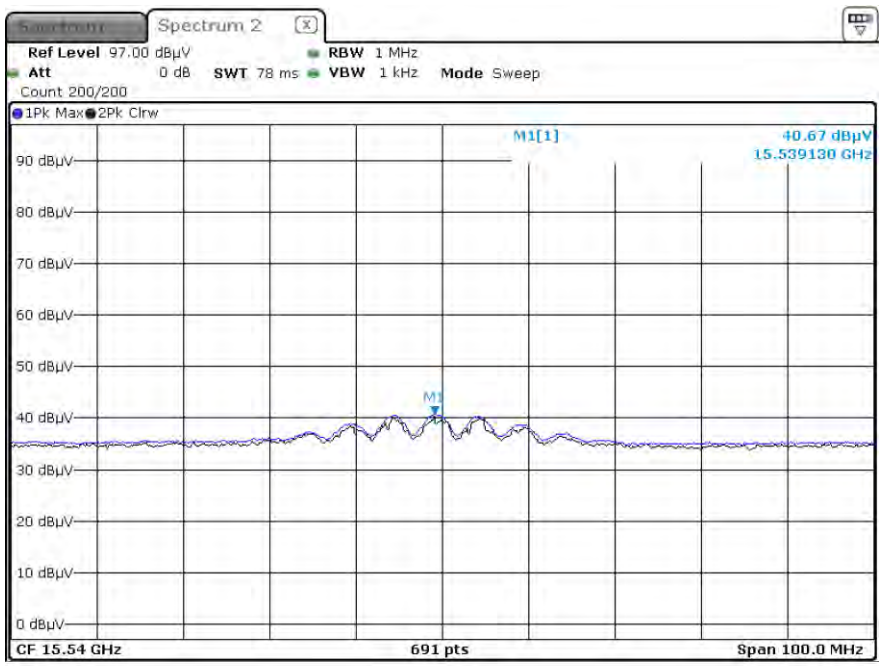


▣ Test Plots (Non-DBS, Z-V)

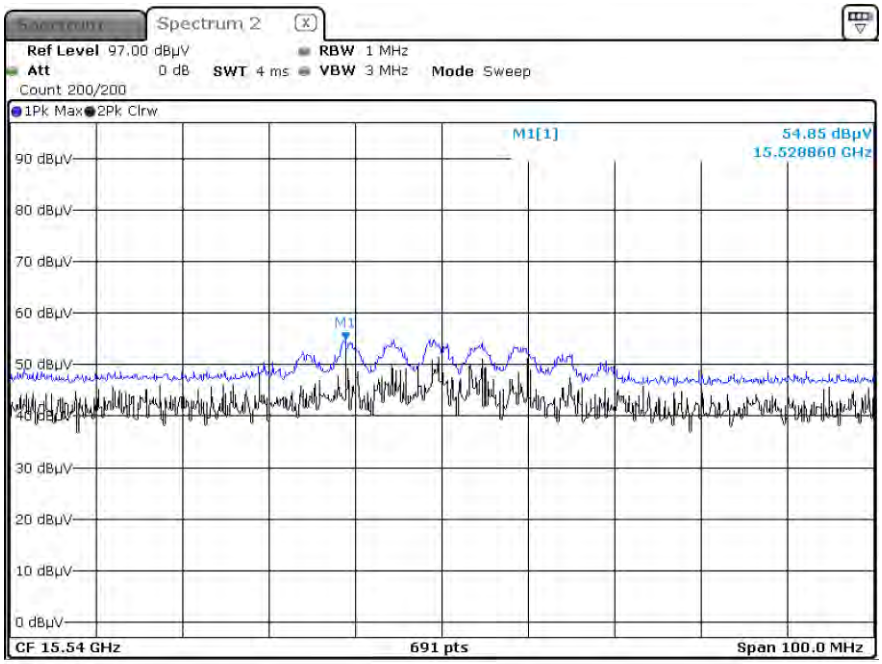
Radiated Spurious Emissions plot – Peak Reading (Test case 3_ 2nd Harmonic)



Radiated Spurious Emissions plot – Average Reading (Test case 3_ 3rd Harmonic)



Radiated Spurious Emissions plot – Peak Reading (Test case 3_ 3rd Harmonic)



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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.91	6.72	H	60.63	73.98	13.35	PK
5150	39.52	6.72	H	46.24	53.98	7.74	AV
5150	52.85	6.72	V	59.57	73.98	14.41	PK
5150	38.95	6.72	V	45.67	53.98	8.31	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+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	58.77	7.24	H	66.01	73.98	7.97	PK
5350	39.45	7.24	H	46.69	53.98	7.29	AV
5350	58.42	7.24	V	65.66	73.98	8.32	PK
5350	38.02	7.24	V	45.26	53.98	8.72	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+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.74	14.77	H	60.51	73.98	13.47	PK
5460	32.54	14.77	H	47.31	53.98	6.67	AV
5470	48.48	15.12	H	63.60	68.20	4.60	PK
5460	45.42	14.77	V	60.19	73.98	13.79	PK
5460	32.12	14.77	V	46.89	53.98	7.09	AV
5470	48.02	15.12	V	63.14	68.20	5.06	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	54.59	6.72	H	61.31	73.98	12.67	PK
5150	40.01	6.72	H	46.73	53.98	7.25	AV
5150	54.03	6.72	V	60.75	73.98	13.23	PK
5150	39.75	6.72	V	46.47	53.98	7.51	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	60.45	7.24	H	67.69	73.98	6.29	PK
5350	39.59	7.24	H	46.83	53.98	7.15	AV
5350	59.98	7.24	V	67.22	73.98	6.76	PK
5350	39.12	7.24	V	46.36	53.98	7.62	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.68	14.77	H	60.45	73.98	13.53	PK
5460	32.59	14.77	H	47.36	53.98	6.62	AV
5470	50.09	15.12	H	65.21	68.20	2.99	PK
5460	45.12	14.77	V	59.89	73.98	14.09	PK
5460	32.01	14.77	V	46.78	53.98	7.20	AV
5470	49.78	15.12	V	64.90	68.20	3.30	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	57.49	6.72	H	64.21	73.98	9.77	PK
5150	39.86	6.72	H	46.58	53.98	7.40	AV
5150	57.12	6.72	V	63.84	73.98	10.14	PK
5150	39.55	6.72	V	46.27	53.98	7.71	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	64.28	7.24	H	71.52	73.98	2.46	PK
5350	39.32	7.24	H	46.56	53.98	7.42	AV
5350	63.98	7.24	V	71.22	73.98	2.76	PK
5350	38.98	7.24	V	46.22	53.98	7.76	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.77	14.77	H	60.54	73.98	13.44	PK
5460	32.34	14.77	H	47.11	53.98	6.87	AV
5470	48.46	15.12	H	63.58	68.20	4.62	PK
5460	45.25	14.77	V	60.02	73.98	13.96	PK
5460	32.02	14.77	V	46.79	53.98	7.19	AV
5470	48.03	15.12	V	63.15	68.20	5.05	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.77	13.63	H	67.40	73.98	6.58	PK
5150	37.27	13.63	H	50.90	53.98	3.08	AV
5150	53.42	13.63	V	67.05	73.98	6.93	PK
5150	36.98	13.63	V	50.61	53.98	3.37	AV

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

Frequency [MHz]	Reading dBuV	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	52.78	14.13	H	66.91	73.98	7.07	PK
5350	34.22	14.13	H	48.35	53.98	5.63	AV
5350	52.12	14.13	V	66.25	73.98	7.73	PK
5350	33.98	14.13	V	48.11	53.98	5.87	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.02	14.77	H	59.79	73.98	14.19	PK
5460	32.70	14.77	H	47.47	53.98	6.51	AV
5470	49.31	15.12	H	64.43	68.20	3.77	PK
5460	44.98	14.77	V	59.75	73.98	14.23	PK
5460	31.98	14.77	V	46.75	53.98	7.23	AV
5470	48.98	15.12	V	64.1	68.20	4.10	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.42	13.63	H	67.05	73.98	6.93	PK
5150	38.22	13.63	H	51.85	53.98	2.13	AV
5150	53.12	13.63	V	66.75	73.98	7.23	PK
5150	38.02	13.63	V	51.65	53.98	2.33	AV

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

Frequency [MHz]	Reading dBuV	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	56.91	14.13	H	71.04	73.98	2.94	PK
5350	36.31	14.13	H	50.44	53.98	3.54	AV
5350	56.51	14.13	V	70.64	73.98	3.34	PK
5350	36.01	14.13	V	50.14	53.98	3.84	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.71	14.77	H	59.48	73.98	14.50	PK
5460	32.30	14.77	H	47.07	53.98	6.91	AV
5470	49.03	15.12	H	64.15	68.20	4.05	PK
5460	44.25	14.77	V	59.02	73.98	14.96	PK
5460	31.98	14.77	V	46.75	53.98	7.23	AV
5470	48.87	15.12	V	63.99	68.20	4.21	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	47.57	13.63	H	61.20	73.98	12.78	PK
5150	37.59	13.63	H	51.22	53.98	2.76	AV
5150	47.32	13.63	V	60.95	73.98	13.03	PK
5150	37.22	13.63	V	50.85	53.98	3.13	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	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	51.24	14.13	H	65.37	73.98	8.61	PK
5350	36.33	14.13	H	50.46	53.98	3.52	AV
5350	51.08	14.13	V	65.21	73.98	8.77	PK
5350	36.02	14.13	V	50.15	53.98	3.83	AV

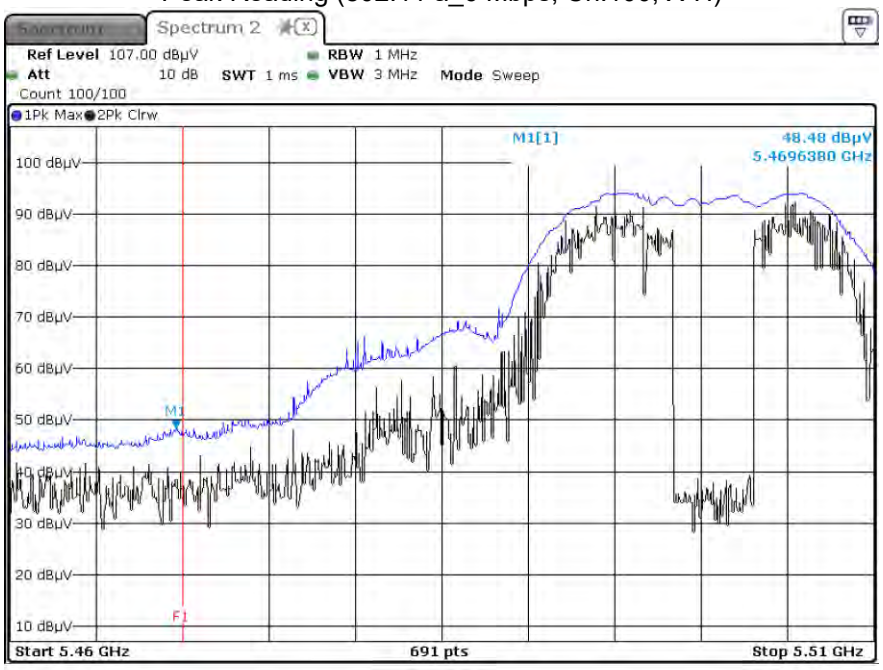
Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Reading DBuV	A.F+ C.L+ D.F-A.G + ATT [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	46.59	14.77	H	61.36	73.98	12.62	PK
5460	35.48	14.77	H	50.25	53.98	3.73	AV
5470	50.77	15.12	H	65.89	68.20	2.31	PK
5460	46.12	14.77	V	60.89	73.98	13.09	PK
5460	35.21	14.77	V	49.98	53.98	4.00	AV
5470	50.55	15.12	V	65.67	68.20	2.53	PK

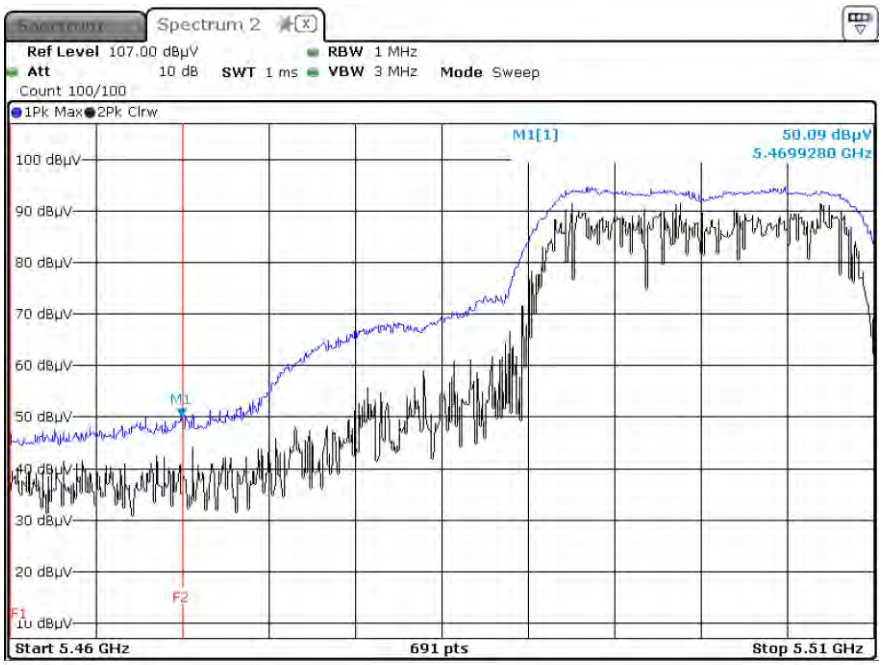
[Ant.1&Ant.2_MIMO(CDD)]

▣ Test Plots(UNII 1, 2A, 2C)

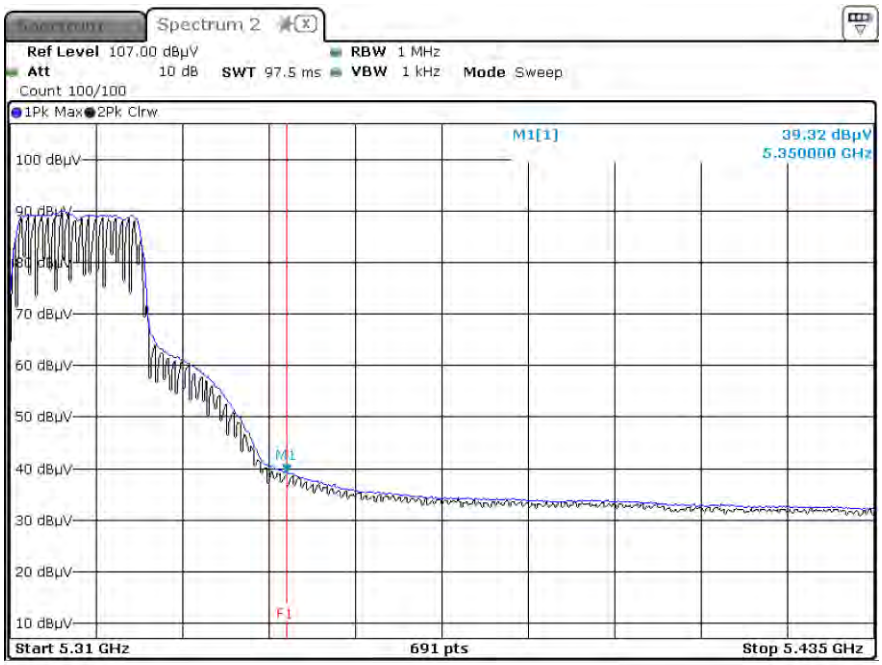
Peak Reading (802.11 a_6 Mbps, Ch.100, X-H)



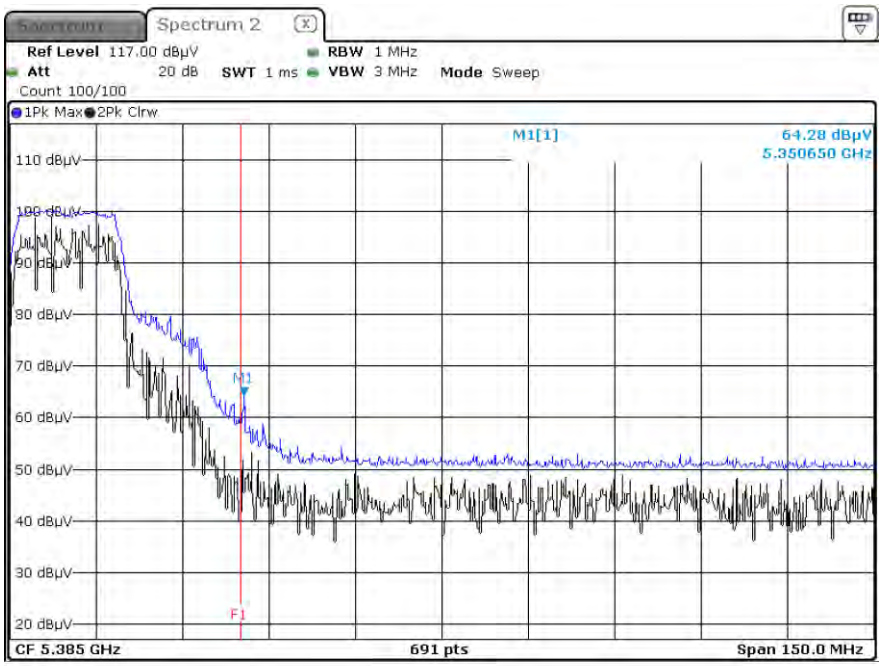
Average Reading (802.11 n(HT20)_MCS0, Ch.100, X-H)



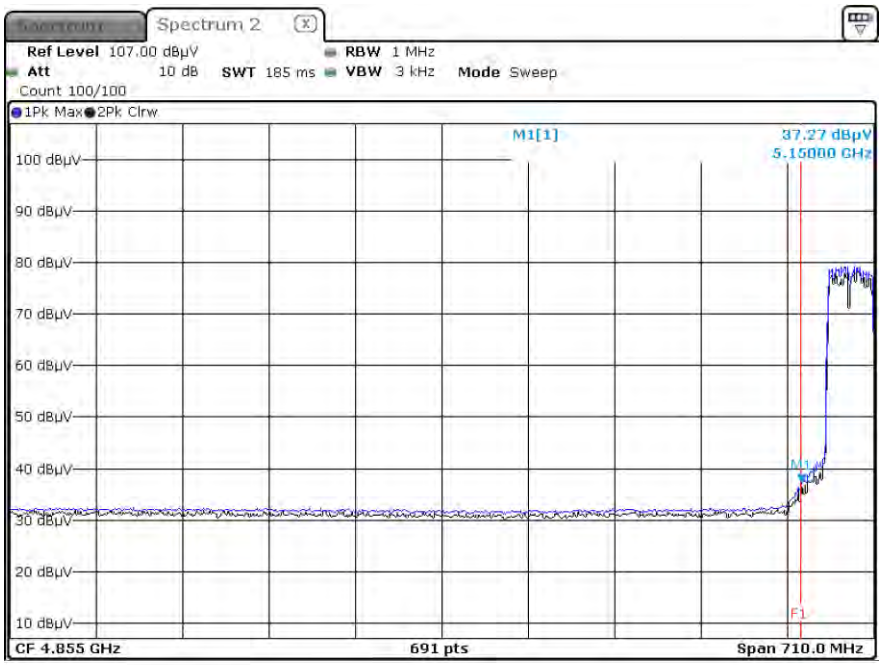
Average Reading (802.11 ac(VHT20)_MCS0, Ch.64, X-H)



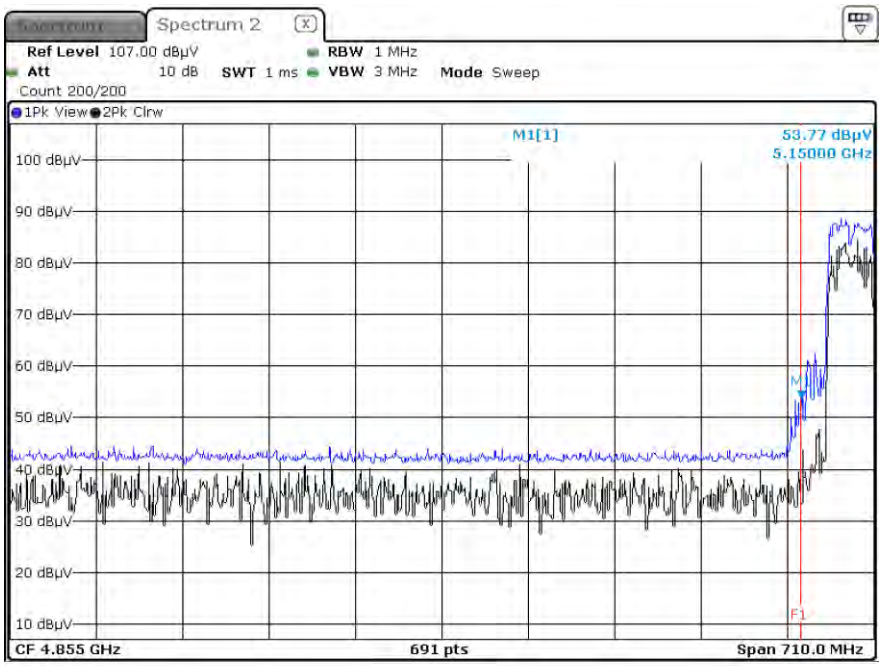
Peak Reading (802.11 ac(VHT20)_MCS0, Ch.64, X-H)



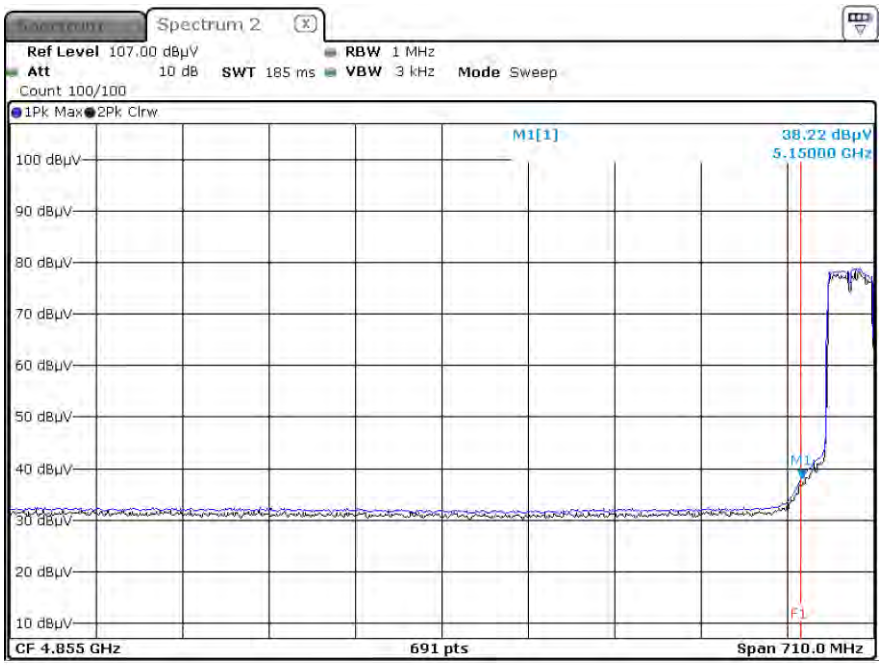
Average Reading (802.11 n(HT40)_MCS0, Ch.38, X-H)



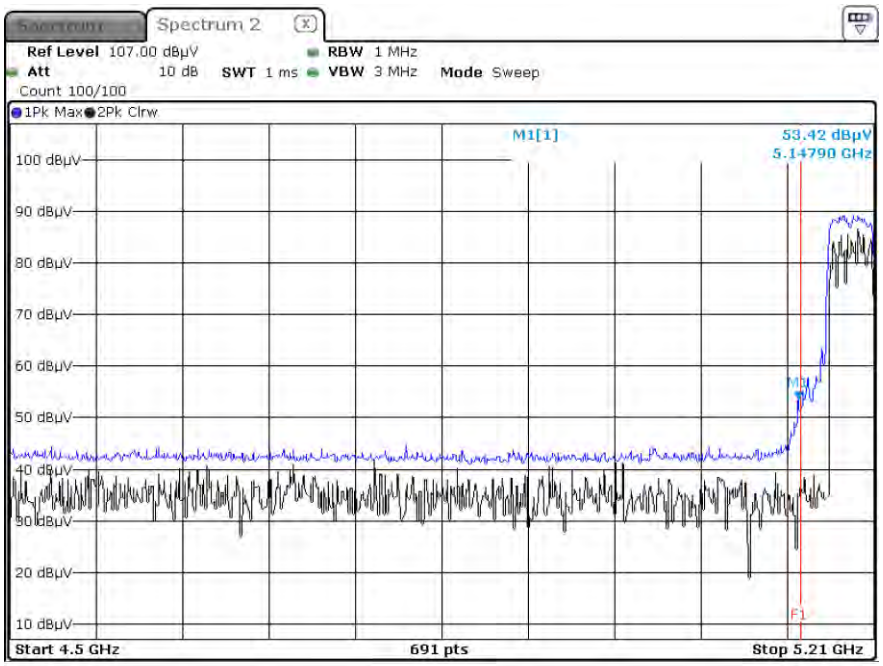
Peak Reading (802.11 n(HT40)_MCS0, Ch.38, X-H)



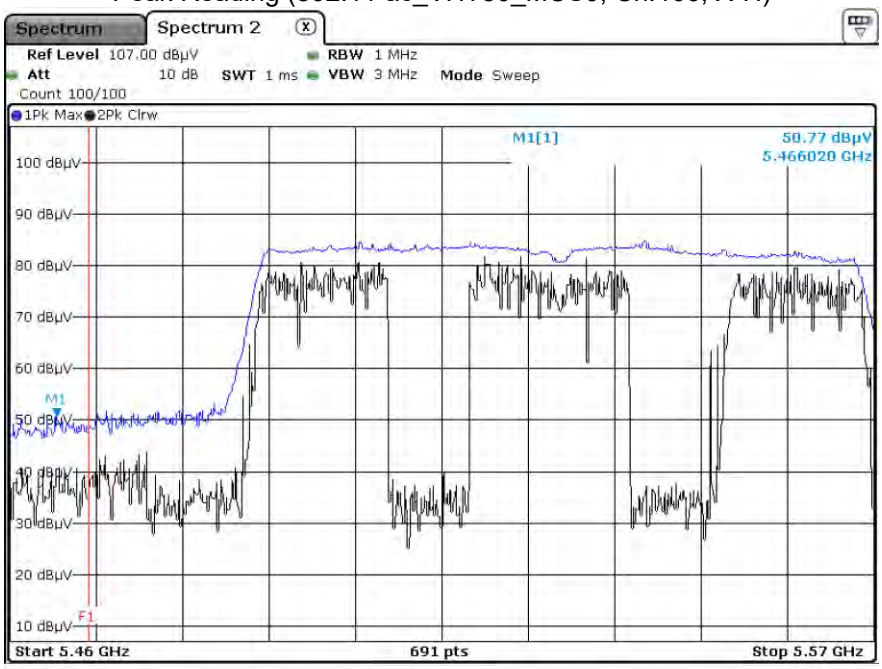
Average Reading (802.11 ac(VHT40)_MCS0, Ch.38, X-H)



Peak Reading (802.11 ac(VHT40)_MCS0, Ch.38, X-H)



Peak Reading (802.11 ac_VHT80_MCS0, Ch.106, X-H)

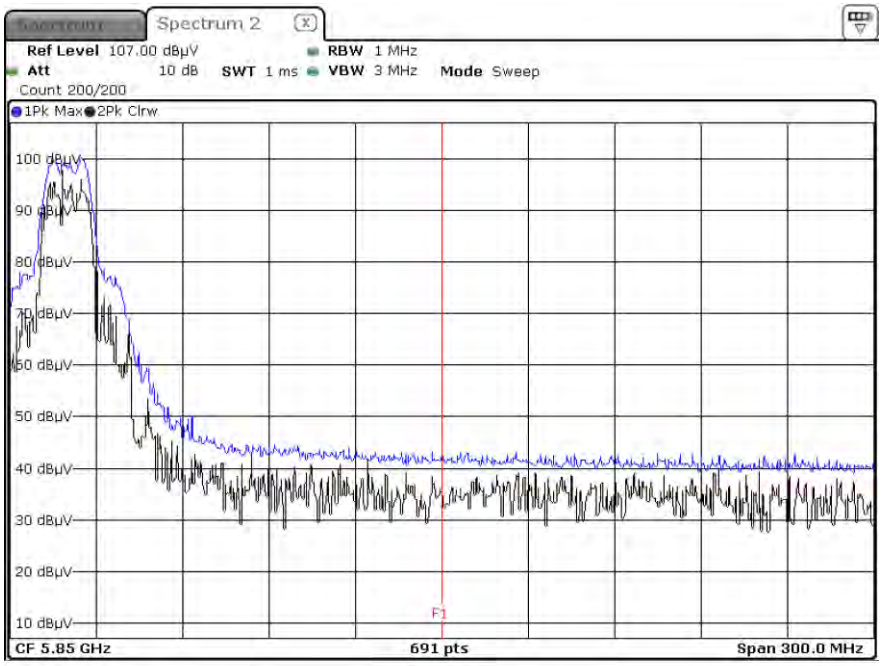


Note:

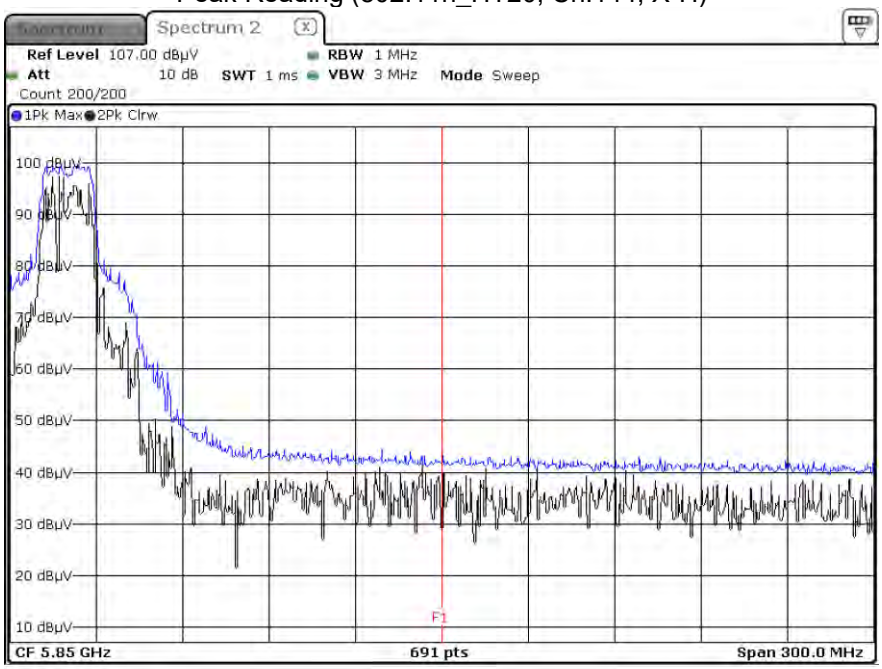
Only the worst case plots for Radiated Restricted Band Edge.

▣ Test Plots(Straddle Channel)

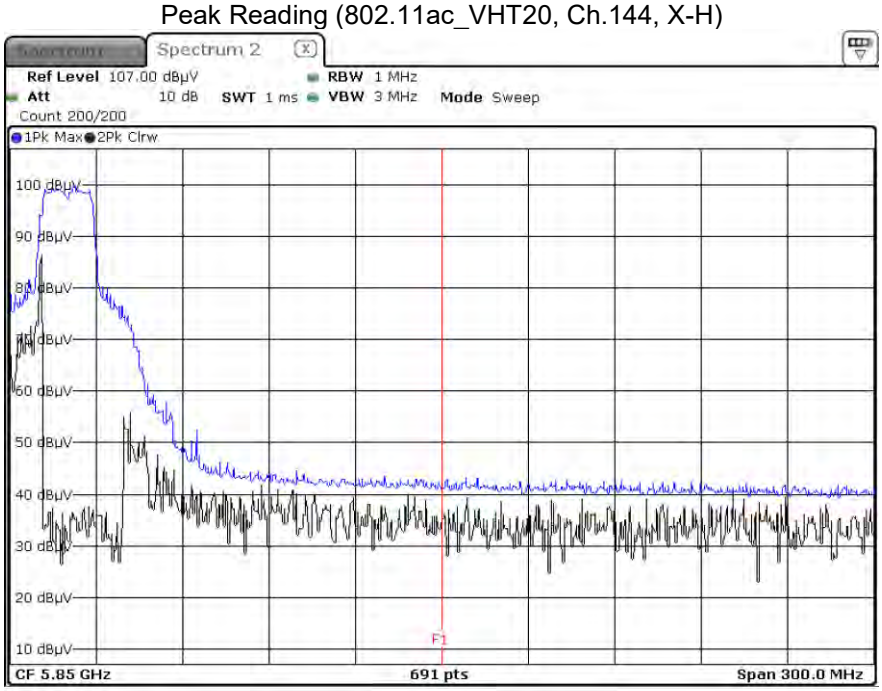
Peak Reading (802.11a, Ch.144, X-H)



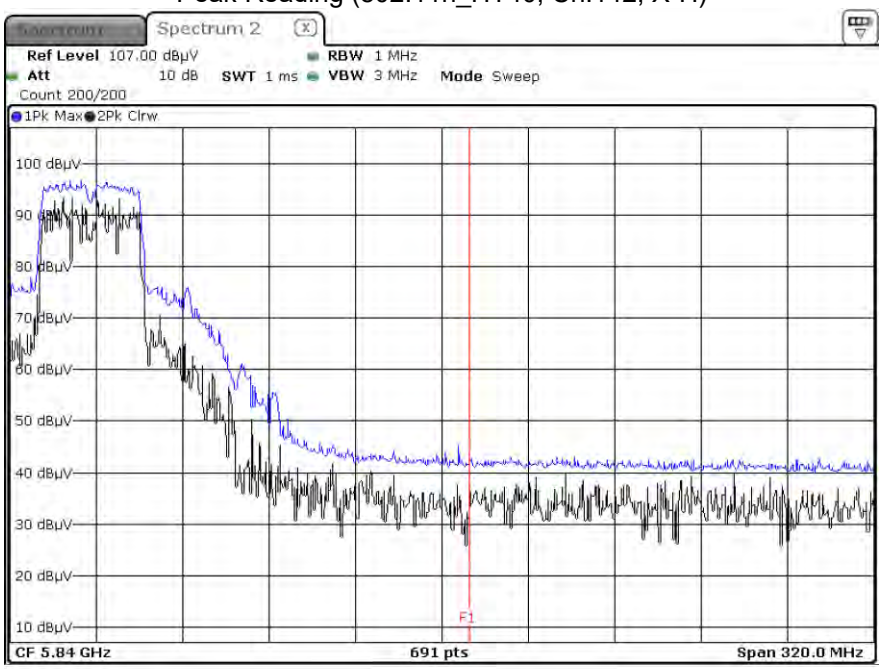
Peak Reading (802.11n_HT20, Ch.144, X-H)



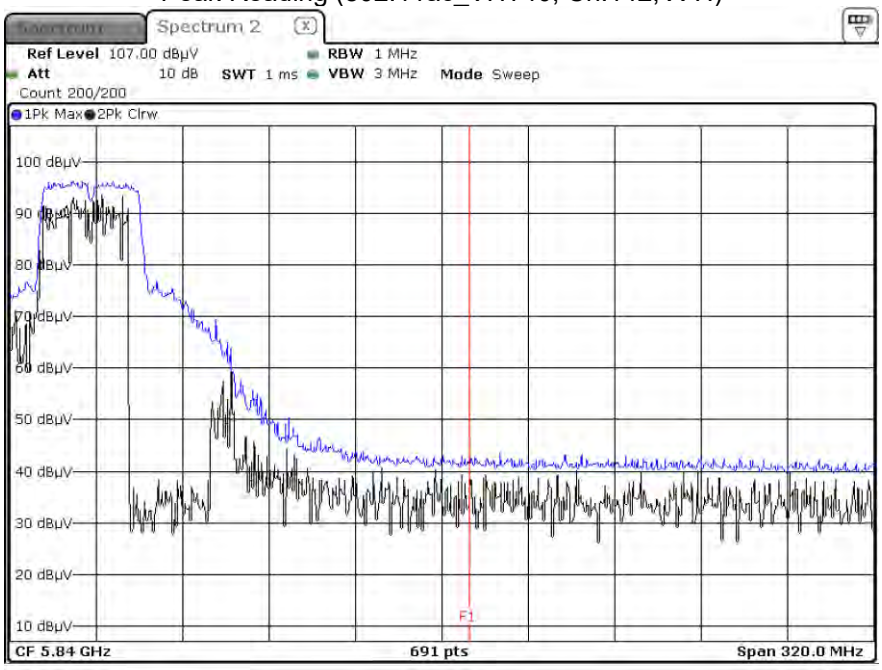
Peak Reading (802.11ac_VHT20, Ch.144, X-H)



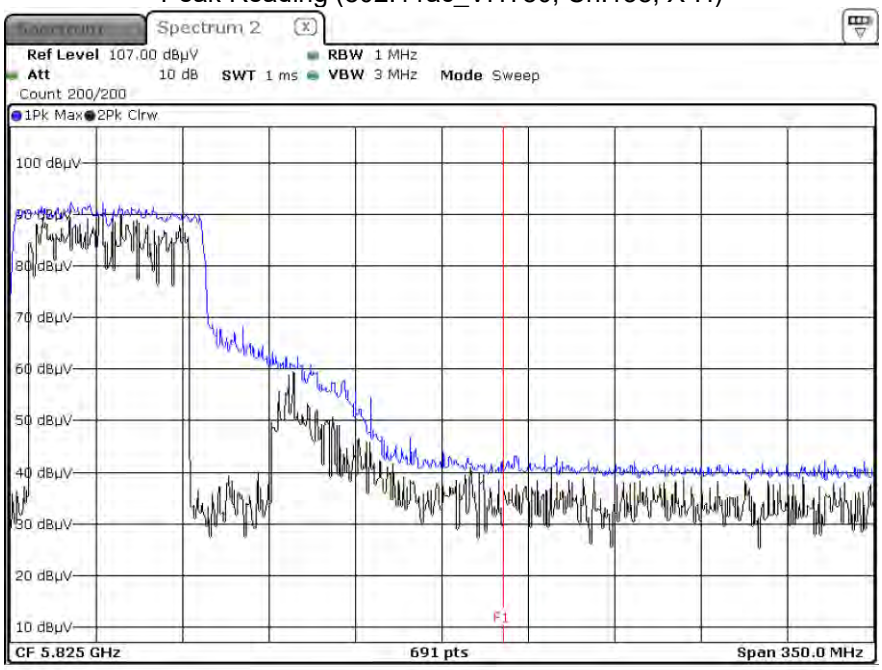
Peak Reading (802.11n_HT40, Ch.142, X-H)



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



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

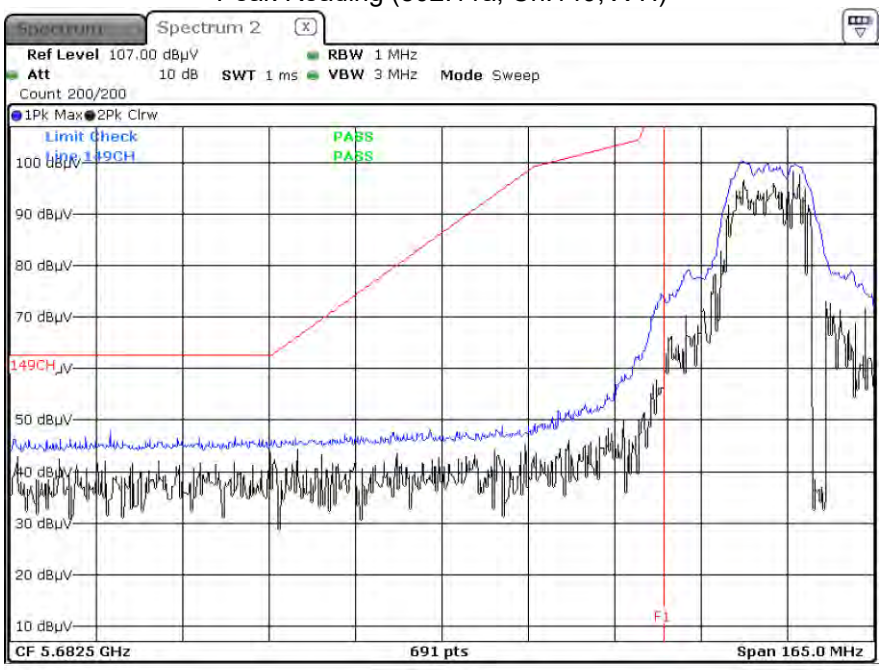


Note :

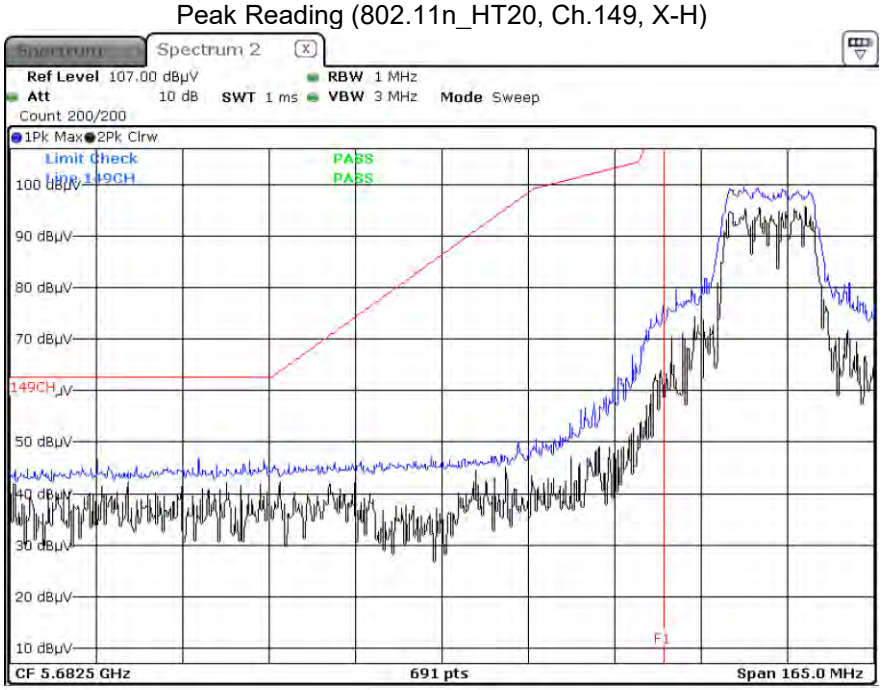
1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

▣ Test Plots(UNII 3)

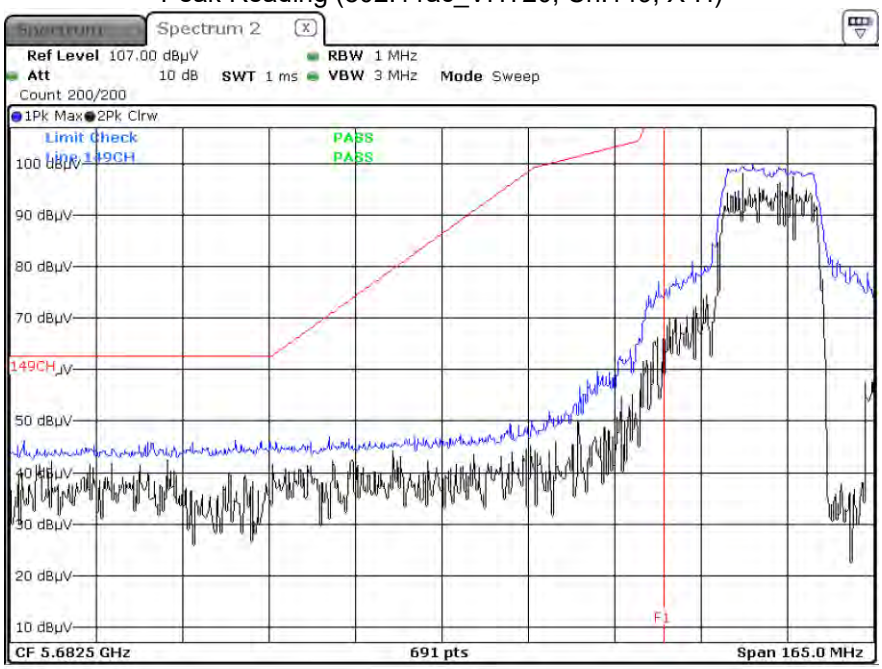
Peak Reading (802.11a, Ch.149, X-H)



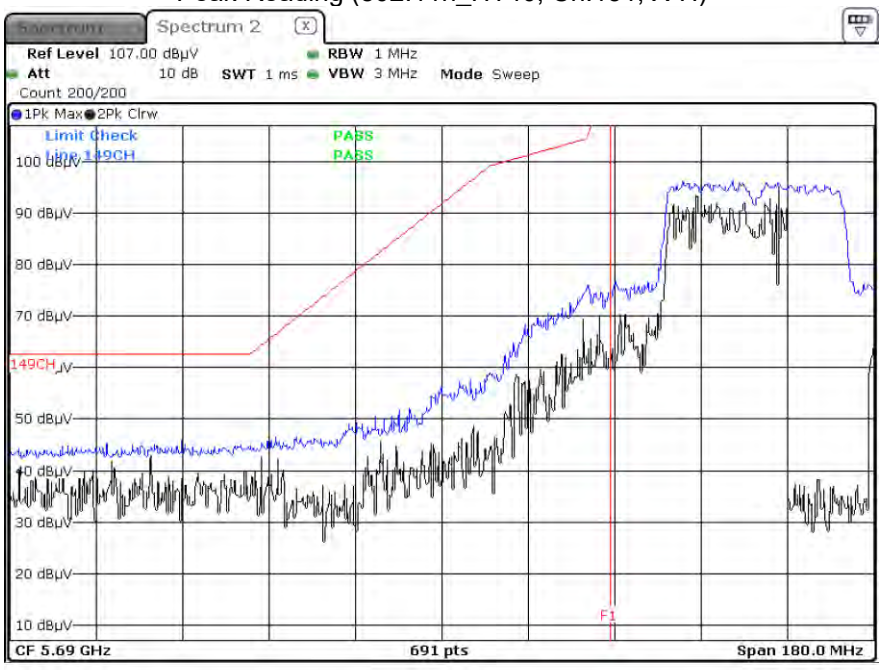
Peak Reading (802.11n_HT20, Ch.149, X-H)



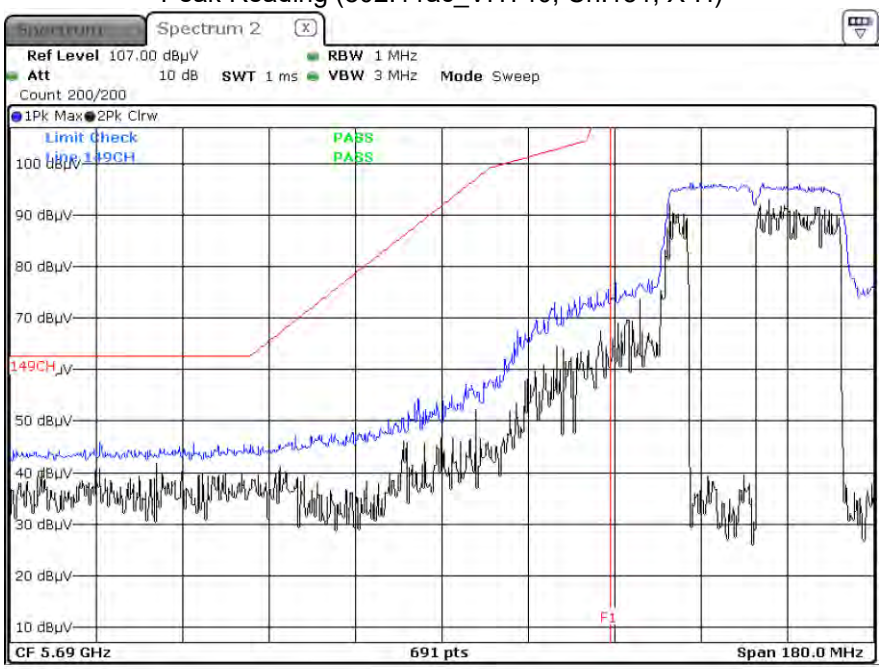
Peak Reading (802.11ac_VHT20, Ch.149, X-H)



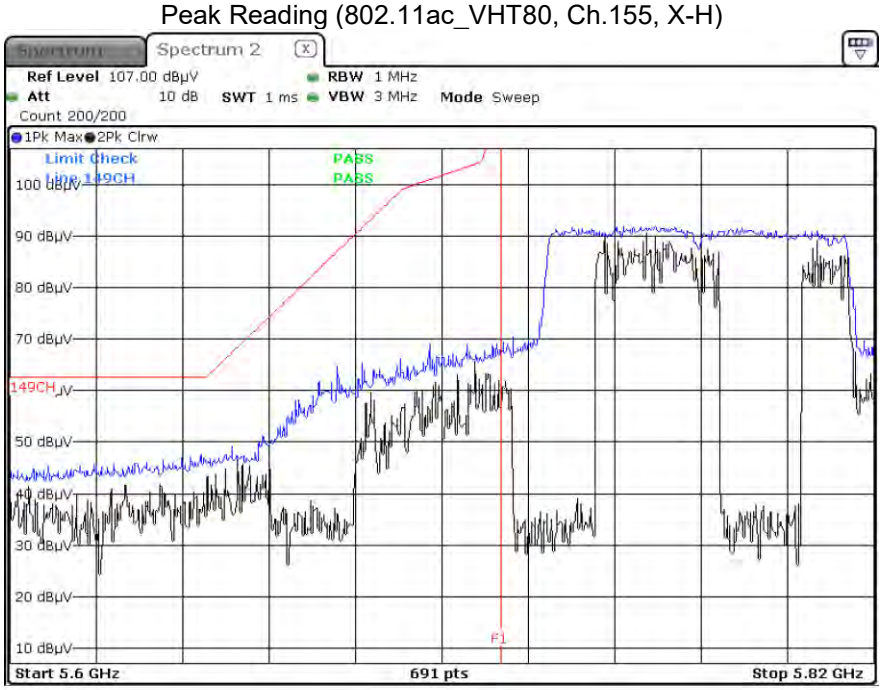
Peak Reading (802.11n_HT40, Ch.151, X-H)



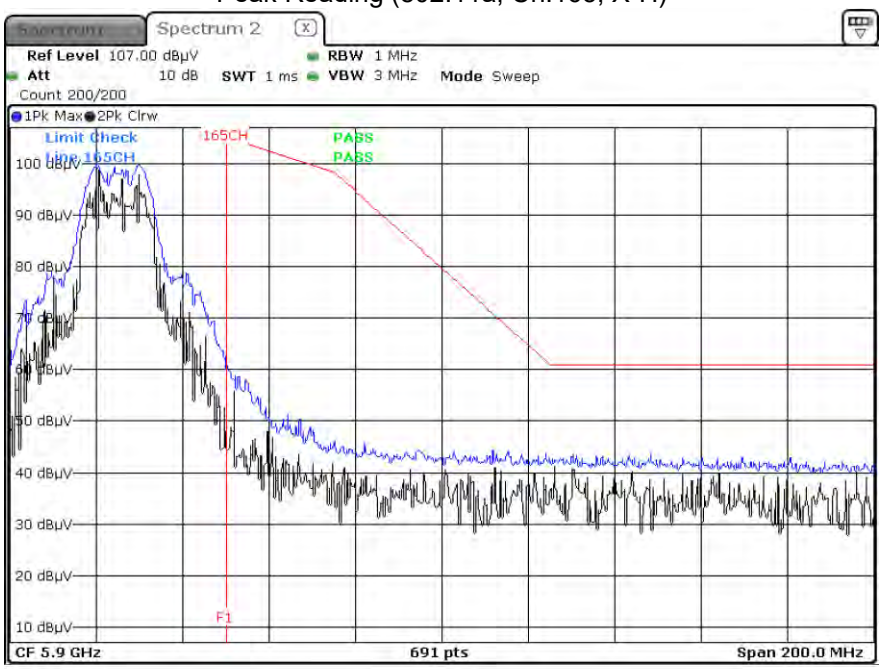
Peak Reading (802.11ac_VHT40, Ch.151, X-H)



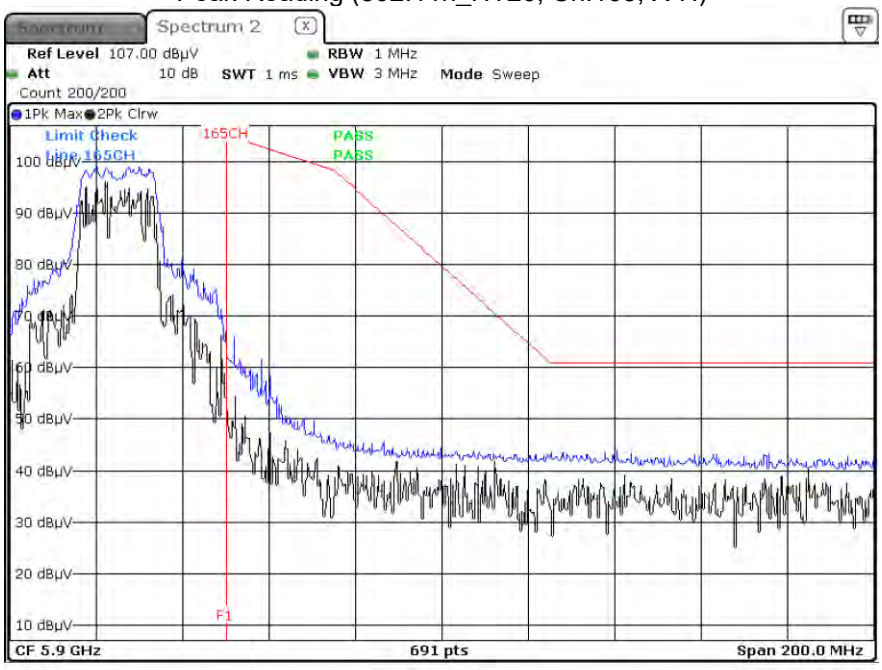
Peak Reading (802.11ac_VHT80, Ch.155, X-H)



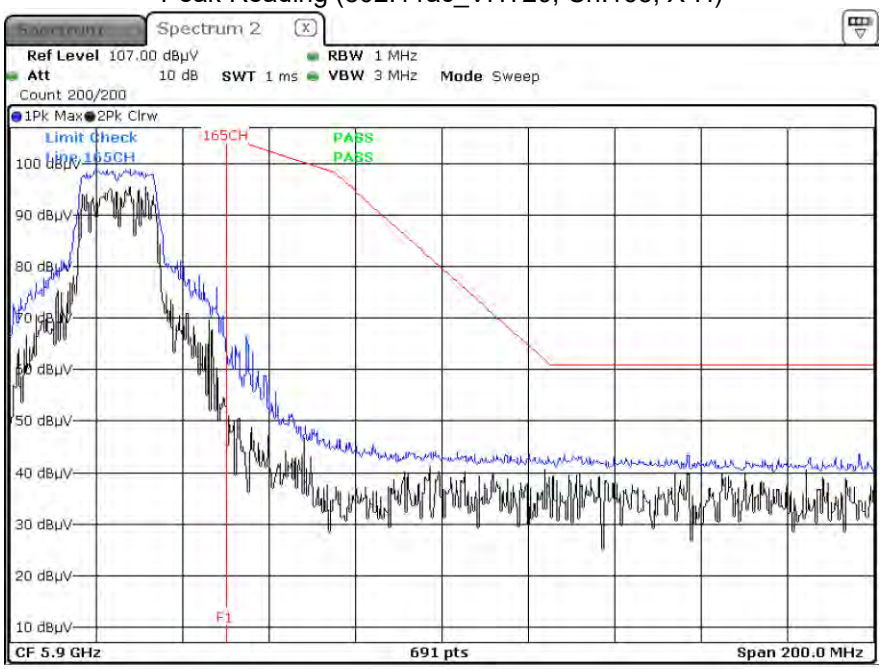
Peak Reading (802.11a, Ch.165, X-H)



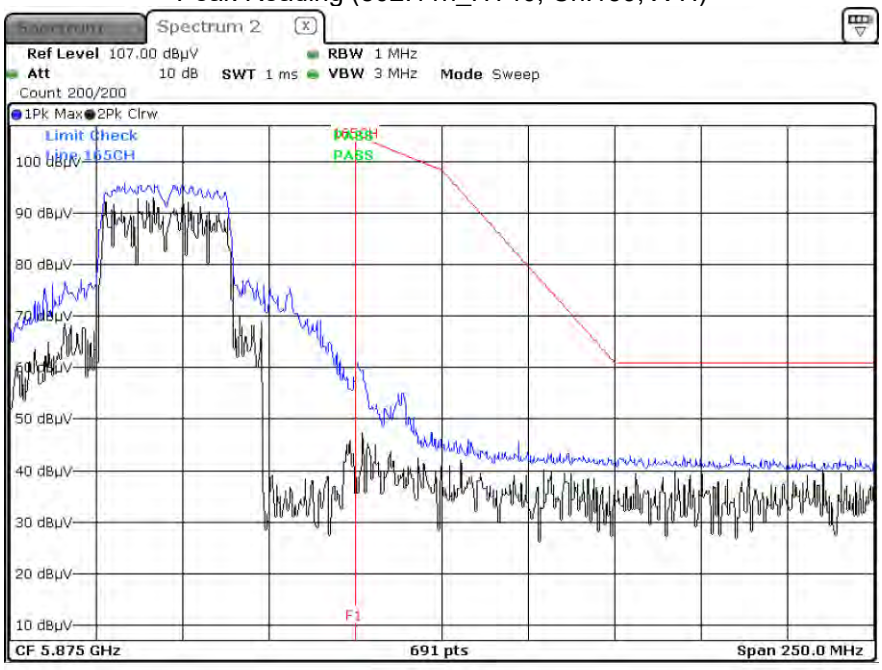
Peak Reading (802.11n_HT20, Ch.165, X-H)



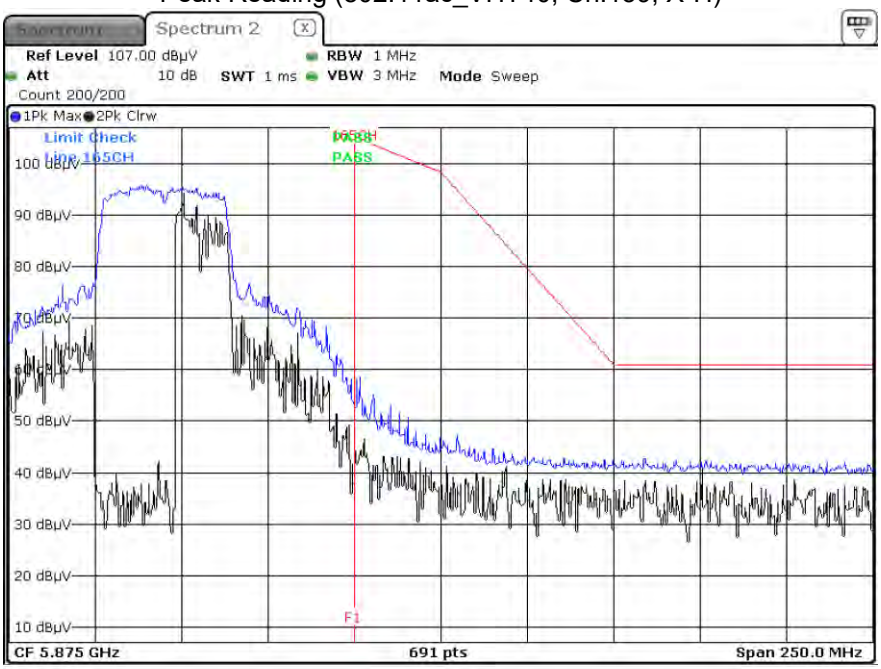
Peak Reading (802.11ac_VHT20, Ch.165, X-H)



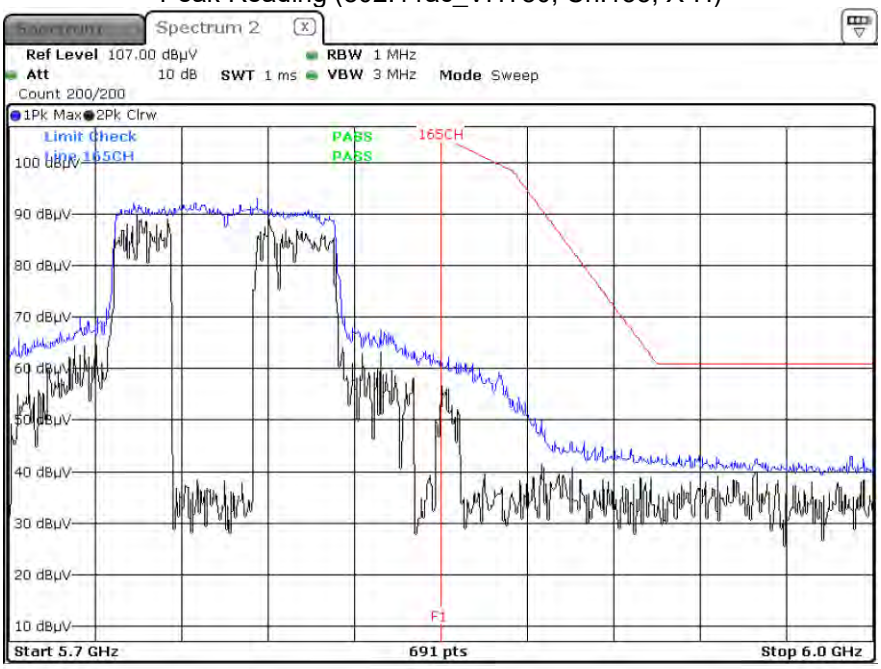
Peak Reading (802.11n_HT40, Ch.159, X-H)



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)

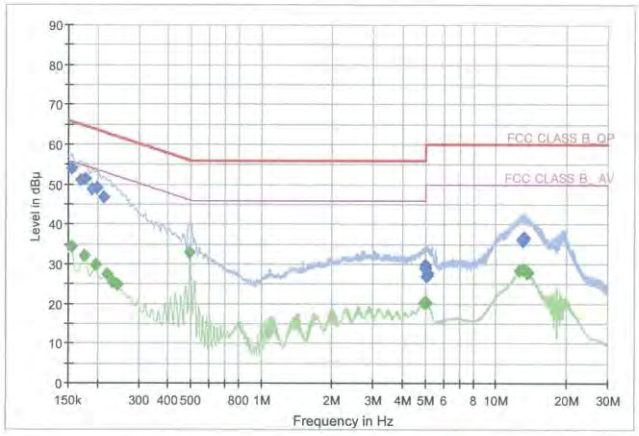
5GHz WLAN L1 1 / 2

Test Report

Common Information

EUT :	SM-G990B/DS
Manufacturer :	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions :	5GHz WLAN L1 (25W)
Operator Name:	
Comment:	

Full Spectrum



Final_Result_QPK

Frequency (MHz)	QuasiPeak	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1545	53.81	65.75	11.94	9.000	L1	OFF	9.6
0.1703	50.98	64.95	13.97	9.000	L1	OFF	9.6
0.1770	51.44	64.63	13.19	9.000	L1	OFF	9.6
0.1905	48.71	64.02	15.30	9.000	L1	OFF	9.6
0.1995	48.92	63.63	14.71	9.000	L1	OFF	9.6
0.2130	46.78	63.09	16.31	9.000	L1	OFF	9.6
4.9910	29.15	56.00	26.85	9.000	L1	OFF	9.9
4.9978	29.59	56.00	26.41	9.000	L1	OFF	9.9
5.0203	28.90	60.00	31.10	9.000	L1	OFF	9.9
5.0810	26.82	60.00	33.18	9.000	L1	OFF	9.9
5.1035	27.06	60.00	32.94	9.000	L1	OFF	9.9
5.1305	27.81	60.00	32.19	9.000	L1	OFF	9.9
12.8840	36.17	60.00	23.83	9.000	L1	OFF	10.2
13.0753	35.84	60.00	24.16	9.000	L1	OFF	10.2
13.1000	36.11	60.00	23.89	9.000	L1	OFF	10.2
13.1045	36.32	60.00	23.68	9.000	L1	OFF	10.2
13.1248	36.57	60.00	23.43	9.000	L1	OFF	10.2
13.1293	36.39	60.00	23.61	9.000	L1	OFF	10.2

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5GHz WLAN L1

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Final_Result_CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1545	34.38	55.75	21.38	9.000	L1	OFF	9.6
0.1748	31.94	54.73	22.79	9.000	L1	OFF	9.6
0.1973	29.71	53.73	24.02	9.000	L1	OFF	9.6
0.2198	27.27	52.83	25.55	9.000	L1	OFF	9.6
0.2333	25.41	52.33	26.93	9.000	L1	OFF	9.6
0.2423	24.86	52.02	27.16	9.000	L1	OFF	9.6
0.4965	32.87	46.06	13.18	9.000	L1	OFF	9.6
4.9753	20.31	46.00	25.69	9.000	L1	OFF	9.9
4.9978	20.32	46.00	25.68	9.000	L1	OFF	9.9
5.0000	20.29	46.00	25.71	9.000	L1	OFF	9.9
5.0675	20.33	50.00	29.67	9.000	L1	OFF	9.9
5.0900	20.06	50.00	29.94	9.000	L1	OFF	9.9
12.6185	28.21	50.00	21.79	9.000	L1	OFF	10.2
13.0033	28.54	50.00	21.46	9.000	L1	OFF	10.2
13.2283	28.43	50.00	21.57	9.000	L1	OFF	10.2
13.5005	28.11	50.00	21.89	9.000	L1	OFF	10.2
13.6108	28.05	50.00	21.95	9.000	L1	OFF	10.2
13.6310	27.79	50.00	22.21	9.000	L1	OFF	10.2

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Conducted Emissions (Line 2)

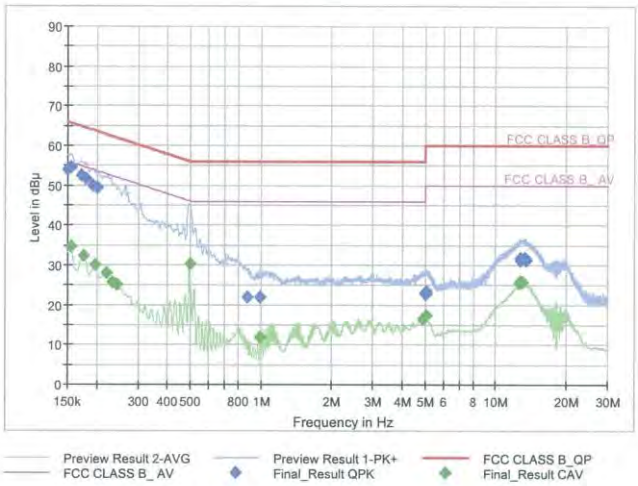
5GHz WLAN N 1 / 2

Test Report

Common Information

EUT :	SM-G990B/DS
Manufacturer :	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions :	5GHz WLAN N (25W)
Operator Name:	
Comment:	

Full Spectrum



Final_Result_QPK

Frequency (MHz)	QuasiPeak	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1500	54.04	66.00	11.96	9.000	N	OFF	9.6
0.1545	54.40	65.75	11.36	9.000	N	OFF	9.6
0.1725	52.37	64.84	12.47	9.000	N	OFF	9.6
0.1793	51.71	64.52	12.81	9.000	N	OFF	9.6
0.1928	49.91	63.92	14.01	9.000	N	OFF	9.6
0.2018	49.19	63.54	14.35	9.000	N	OFF	9.6
0.8803	21.85	56.00	34.15	9.000	N	OFF	9.6
0.9928	21.93	56.00	34.07	9.000	N	OFF	9.7
4.9978	23.08	56.00	32.92	9.000	N	OFF	9.9
5.0360	22.66	60.00	37.34	9.000	N	OFF	9.9
5.0585	22.72	60.00	37.28	9.000	N	OFF	9.9
5.0878	23.36	60.00	36.64	9.000	N	OFF	9.9
12.6883	31.10	60.00	28.90	9.000	N	OFF	10.2
12.7490	31.82	60.00	28.18	9.000	N	OFF	10.2
12.7715	31.70	60.00	28.30	9.000	N	OFF	10.2
13.2868	31.76	60.00	28.24	9.000	N	OFF	10.3
13.3295	31.64	60.00	28.36	9.000	N	OFF	10.3
13.4600	31.26	60.00	28.74	9.000	N	OFF	10.3

Final_Result_CAV

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5GHz WLAN N

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Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1545	34.49	55.75	21.26	9.000	N	OFF	9.6
0.1748	32.24	54.73	22.49	9.000	N	OFF	9.6
0.1973	29.93	53.73	23.80	9.000	N	OFF	9.6
0.2198	27.87	52.83	24.96	9.000	N	OFF	9.6
0.2333	25.69	52.33	26.64	9.000	N	OFF	9.6
0.2423	25.19	52.02	26.82	9.000	N	OFF	9.6
0.4988	30.33	46.02	15.69	9.000	N	OFF	9.6
0.9928	11.87	46.00	34.13	9.000	N	OFF	9.7
4.8988	16.36	46.00	29.64	9.000	N	OFF	9.9
4.9123	16.46	46.00	29.54	9.000	N	OFF	9.9
5.0473	17.43	50.00	32.57	9.000	N	OFF	9.9
5.0900	17.17	50.00	32.83	9.000	N	OFF	9.9
12.6253	25.28	50.00	24.72	9.000	N	OFF	10.2
12.6500	25.28	50.00	24.72	9.000	N	OFF	10.2
12.7288	25.69	50.00	24.31	9.000	N	OFF	10.2
12.7513	25.90	50.00	24.10	9.000	N	OFF	10.2
12.7738	25.84	50.00	24.16	9.000	N	OFF	10.2
13.0258	25.81	50.00	24.19	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
ESPAC	SU-642 /Temperature Chamber	03/15/2021	Annual	0093008124
Agilent	N9030A / Signal Analyzer	01/11/2021	Annual	MY49431210
Rohde & Schwarz	OSP 120 / Power Measurement Set	07/02/2021	Annual	101231
Agilent	N1911A / Power Meter	04/08/2021	Annual	MY45100523
Keysight	N1921A / Power Sensor	04/08/2021	Annual	MY57820067
Agilent	87300B / Directional Coupler	11/10/2020	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	05/20/2021	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	02/16/2021	Annual	MY50360067
Hewlett Packard	8493C / Attenuator(10 dB)	06/26/2020	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	03/19/2020	Biennial	1513-333
Schwarzbeck	VULB 9168 / Hybrid Antenna	02/22/2021	Biennial	760
Schwarzbeck	BBHA 9120D / Horn Antenna	05/19/2020	Biennial	02299
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	11/29/2019	Biennial	BBHA9170541
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	07/28/2020	Annual	102168
Agilent	N9030A / Signal Analyzer	01/11/2021	Annual	MY49431210
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
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	01/06/2021	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	02/08/2021	Annual	1
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	02/03/2021	Annual	8
Wainwright Instruments	WHKX8-6090-7000-18000-40SS/ High Pass Filter	02/03/2021	Annual	25
Api tech.	18B-03 / Attenuator (3 dB)	02/03/2021	Annual	1
Agilent	8493C-10 / Attenuator(10 dB)	02/03/2021	Annual	08285
CERNEX	CBLU1183540 / Power Amplifier	02/03/2021	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	02/03/2021	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	12/04/2020	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	03/23/2021	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-2106-FC022-P