APPENDIX A – TEST DATA OF CONDUCTED EMISSION

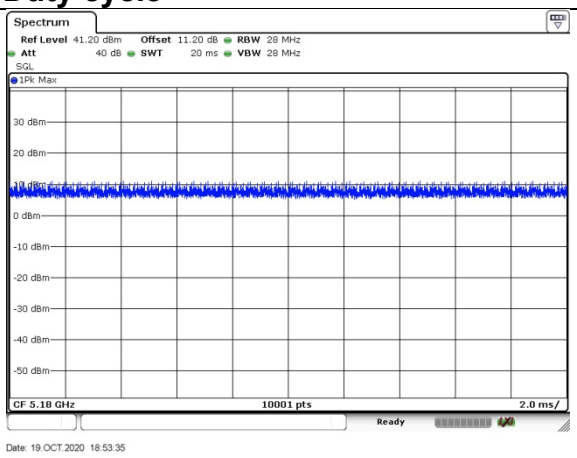
In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Data rate below means worst-case rate of each test item.
Worst-case data rates are shown as following table.

Test Mode	Data Rate
802.11a	6Mbps
802.11n HT20	MCS0(6.5 Mbps)
802.11n HT40	MCS0(13.5 Mbps)

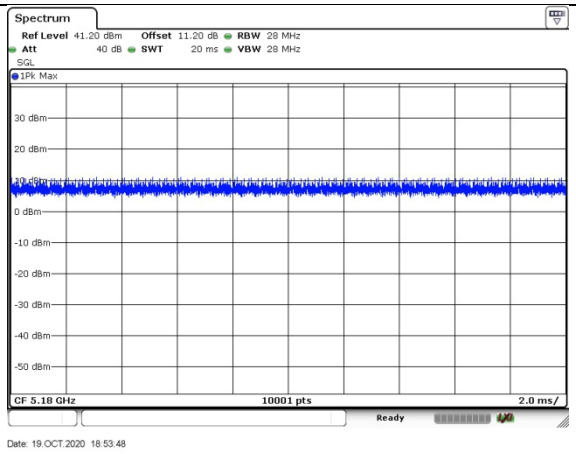
Antenna Gain and Limits

Frequency band	Frequency (MHz)	Antenna Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
UNII-1	5180	2.85	24.0	11.0
	5200	2.85	24.0	11.0
	5240	2.85	24.0	11.0
	5190	2.85	24.0	11.0
	5230	2.85	24.0	11.0
	5210	2.85	24.0	11.0
UNII-2A	5260	2.83	24.0	11.0
	5280	2.83	24.0	11.0
	5320	2.83	24.0	11.0
	5270	2.83	24.0	11.0
	5310	2.83	24.0	11.0
	5290	2.83	24.0	11.0
UNII-2C	5500	3.34	24.0	11.0
	5600	3.34	24.0	11.0
	5700	3.34	24.0	11.0
	5510	3.34	24.0	11.0
	5590	3.34	24.0	11.0
	5670	3.34	24.0	11.0
	5210	3.34	24.0	11.0
	5530	3.34	24.0	11.0

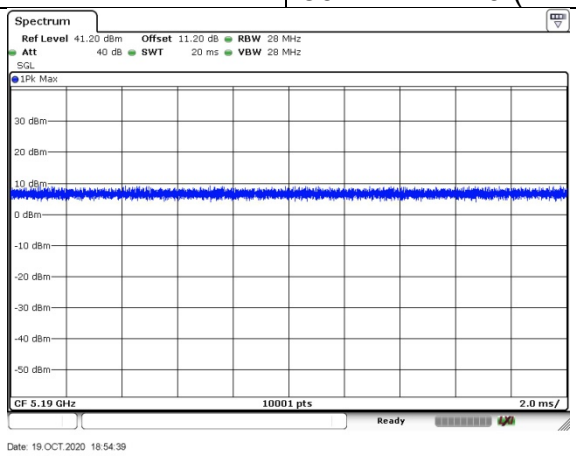
Duty cycle



802.11a (ex: 5180MHz)



802.11n HT20 (ex: 5180MHz)



802.11n HT40 (ex: 5190MHz)

Output Power

UNII-1

Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5180 MHz	5200 MHz	5240MHz	
802.11a	Main Ant	2.22	2.38	2.91	24.0
802.11n HT20	Main Ant	2.08	2.32	2.66	24.0
Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5190 MHz		5230 MHz	
802.11n HT40	Main Ant	2.31		2.62	24.0

UNII-2A

Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5260 MHz	5280 MHz	5320MHz	
802.11a	Main Ant	2.98	3.43	3.61	24.0
802.11n HT20	Main Ant	2.92	3.42	3.62	24.0
Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5270 MHz		5310 MHz	
802.11n HT40	Main Ant	3.13		3.62	24.0

UNII-2C

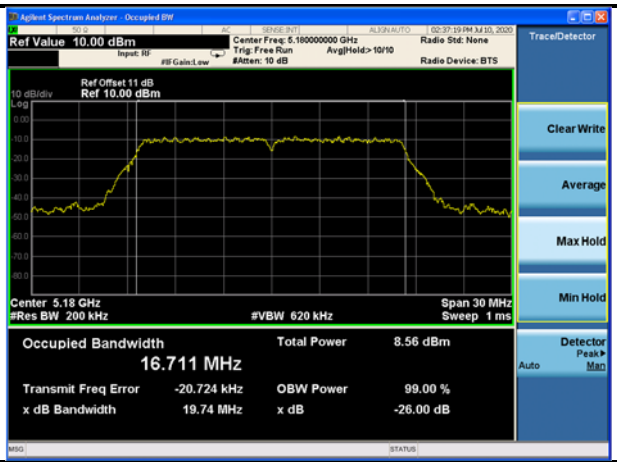
Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5500 MHz	5600 MHz	5700MHz	
802.11a	Main Ant	4.76	4.62	4.14	24.0
802.11n HT20	Main Ant	4.91	4.71	4.16	24.0
Test Mode	Ant	Average Power(dBm)			Limit(dBm)
		5510 MHz	5590 MHz	5670MHz	
802.11n HT40	Main Ant	4.77	4.72	4.36	24.0

Occupied Bandwidth

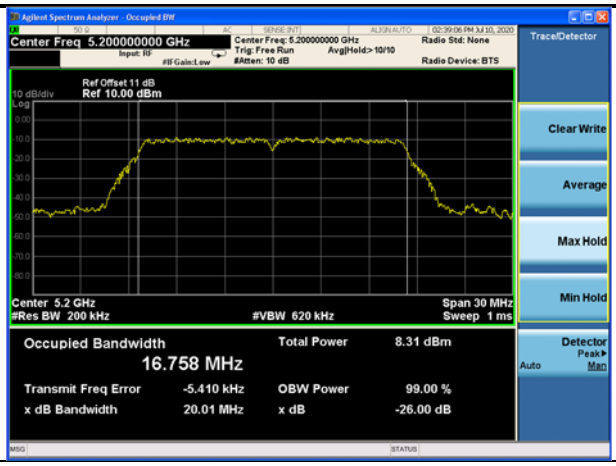
Offset 11dB = Attenuator 9.8dB+ Temporary antenna connector loss 0.2dB+ Cable loss 1dB
Test Mode: SISO

20M BW

Band	Carrier frequency (MHz)	99% Bandwidth(MHz)		Minimum 26dB Bandwidth(MHz)	
		802.11a	Figure number	802.11a	Figure number
UNII-1	5180	NA	1	19.74	1
	5200	NA	2	20.01	2
	5240	NA	3	19.92	3
UNII-2A	5260	NA	4	19.76	4
	5280	NA	5	19.89	5
	5320	NA	6	19.76	6
UNII-2C	5500	NA	7	19.92	7
	5600	NA	8	20.03	8
	5700	NA	9	19.66	9


Ref Value 10.00 dBm
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.18 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.711 MHz
Total Power 8.56 dBm
Transmit Freq Error -20.724 kHz
OBW Power 99.00 %
x dB Bandwidth 19.74 MHz
x dB -26.00 dB
Trace/Detector
Clear Write
Average
Max Hold
Min Hold
Detector

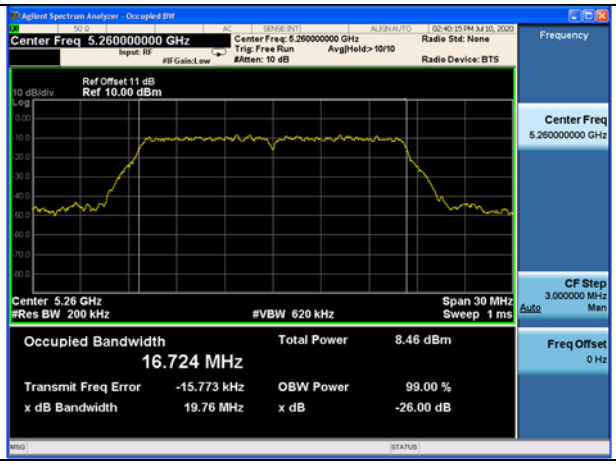
1


Center Freq 5.200000000 GHz
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.2 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.758 MHz
Total Power 8.31 dBm
Transmit Freq Error -5.410 kHz
OBW Power 99.00 %
x dB Bandwidth 20.01 MHz
x dB -26.00 dB
Trace/Detector
Clear Write
Average
Max Hold
Min Hold
Detector

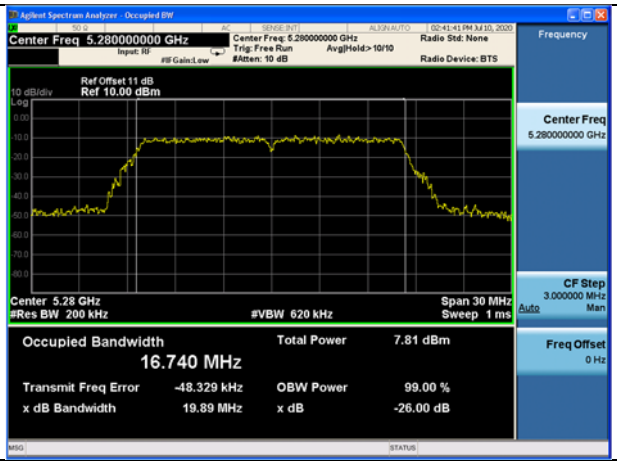
2


Center Freq 5.240000000 GHz
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.24 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.742 MHz
Total Power 8.20 dBm
Transmit Freq Error -9.768 kHz
OBW Power 99.00 %
x dB Bandwidth 19.92 MHz
x dB -26.00 dB
Frequency
Center Freq
5.240000000 GHz
CF Step
3.000000 MHz
Auto Man
Freq Offset
0 Hz

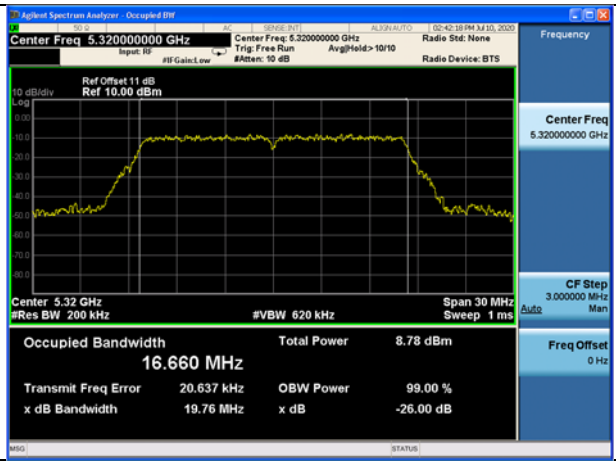
3


Center Freq 5.260000000 GHz
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.26 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.724 MHz
Total Power 8.46 dBm
Transmit Freq Error -15.773 kHz
OBW Power 99.00 %
x dB Bandwidth 19.76 MHz
x dB -26.00 dB
Frequency
Center Freq
5.260000000 GHz
CF Step
3.000000 MHz
Auto Man
Freq Offset
0 Hz

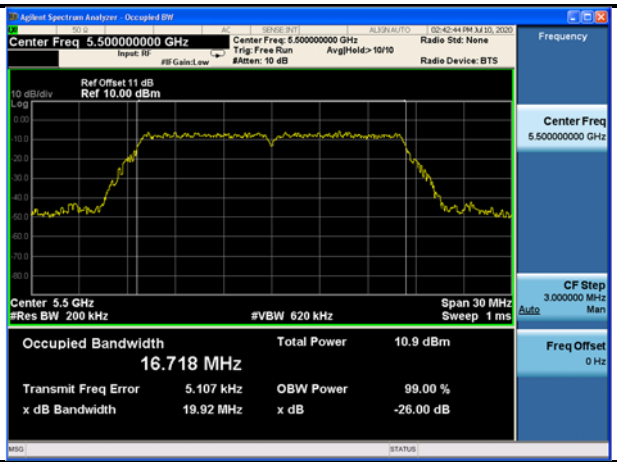
4


Center Freq 5.280000000 GHz
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.28 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.740 MHz
Total Power 7.81 dBm
Transmit Freq Error -48.329 kHz
OBW Power 99.00 %
x dB Bandwidth 19.89 MHz
x dB -26.00 dB
Frequency
Center Freq
5.280000000 GHz
CF Step
3.000000 MHz
Auto Man
Freq Offset
0 Hz

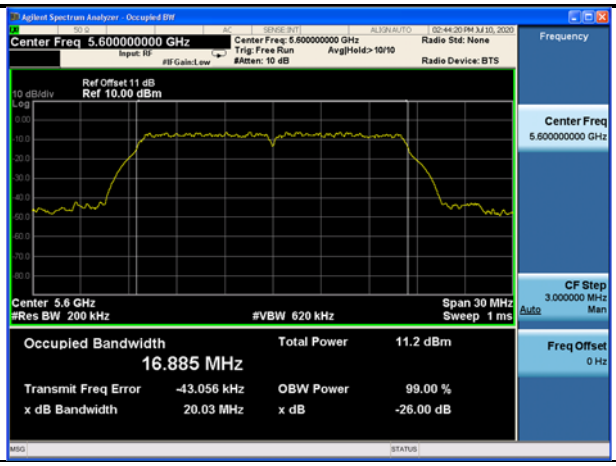
5


Center Freq 5.320000000 GHz
Ref Offset 11 dB
10 dB/div Ref 10.00 dBm
Center 5.32 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
Occupied Bandwidth
16.660 MHz
Total Power 8.78 dBm
Transmit Freq Error 20.637 kHz
OBW Power 99.00 %
x dB Bandwidth 19.76 MHz
x dB -26.00 dB
Frequency
Center Freq
5.320000000 GHz
CF Step
3.000000 MHz
Auto Man
Freq Offset
0 Hz

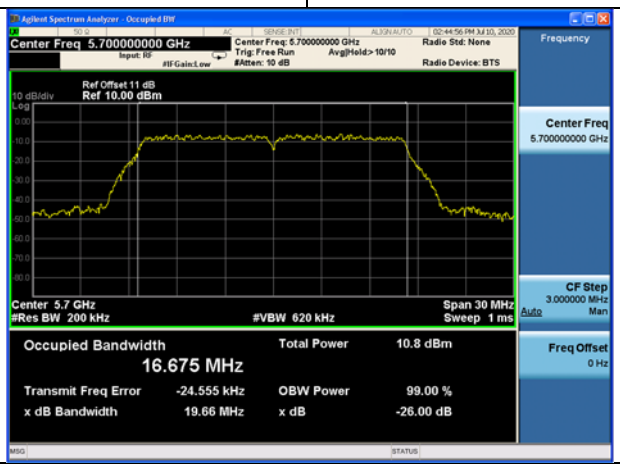
6


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.500000000 GHz
Center Freq: 5.500000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Log
Center Freq
5.500000000 GHz
Center 5.5 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
16.718 MHz
Total Power
10.9 dBm
Freq Offset
0 Hz
Transmit Freq Error
5.107 kHz
OBW Power
99.00 %
x dB Bandwidth
19.92 MHz
x dB
-26.00 dB
MSG
STATUS

7

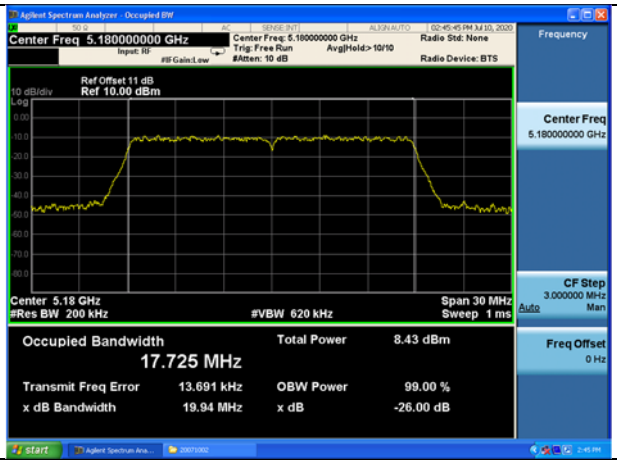

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.600000000 GHz
Center Freq: 5.600000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Log
Center Freq
5.600000000 GHz
Center 5.6 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
16.885 MHz
Total Power
11.2 dBm
Freq Offset
0 Hz
Transmit Freq Error
-43.056 kHz
OBW Power
99.00 %
x dB Bandwidth
20.03 MHz
x dB
-26.00 dB
MSG
STATUS

8

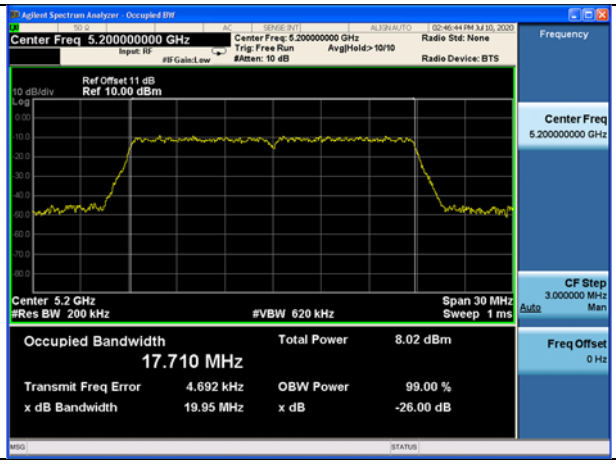

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.700000000 GHz
Center Freq: 5.700000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Log
Center Freq
5.700000000 GHz
Center 5.7 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
16.675 MHz
Total Power
10.8 dBm
Freq Offset
0 Hz
Transmit Freq Error
-24.555 kHz
OBW Power
99.00 %
x dB Bandwidth
19.66 MHz
x dB
-26.00 dB
MSG
STATUS

9

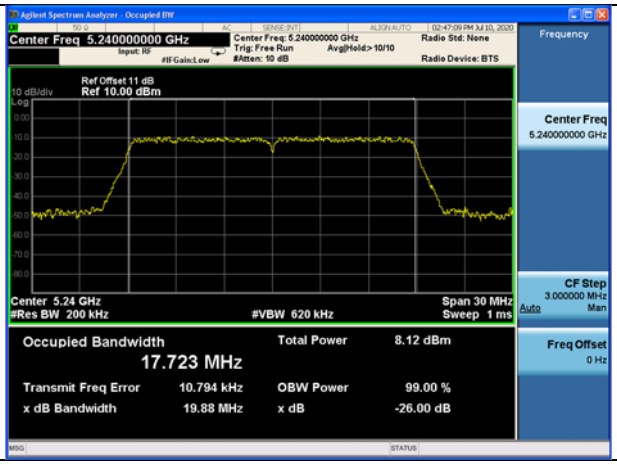
Band	Carrier frequency (MHz)	99% Bandwidth(MHz)		Minimum 26dB Bandwidth(MHz)	
		802.11n HT20	Figure number	802.11n HT20	Figure number
UNII-1	5180	NA	1	19.94	1
	5200	NA	2	19.95	2
	5240	NA	3	19.88	3
UNII-2A	5260	NA	4	19.97	4
	5280	NA	5	19.78	5
	5320	NA	6	19.94	6
UNII-2C	5500	NA	7	19.95	7
	5600	NA	8	19.89	8
	5700	NA	9	19.93	9



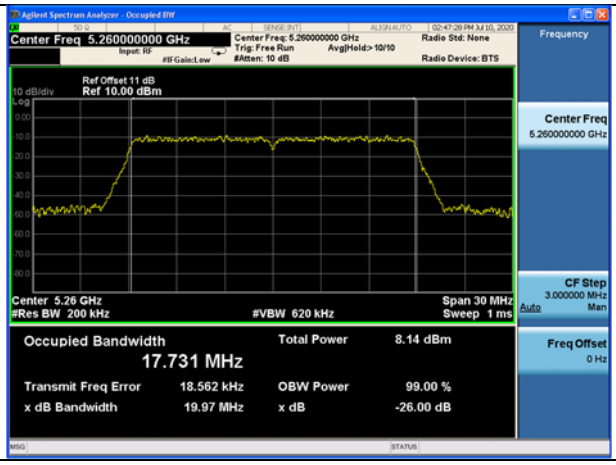
1



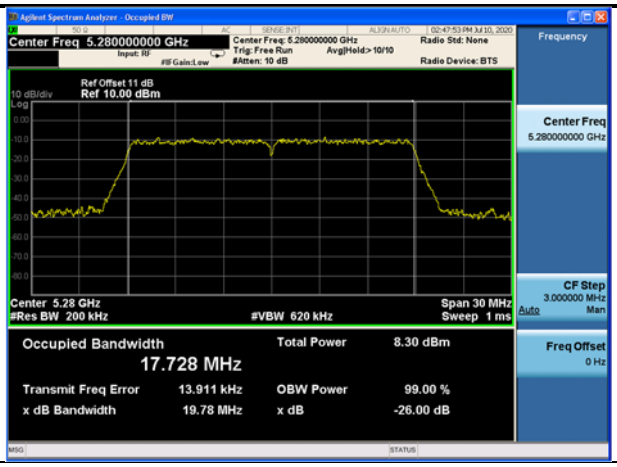
2



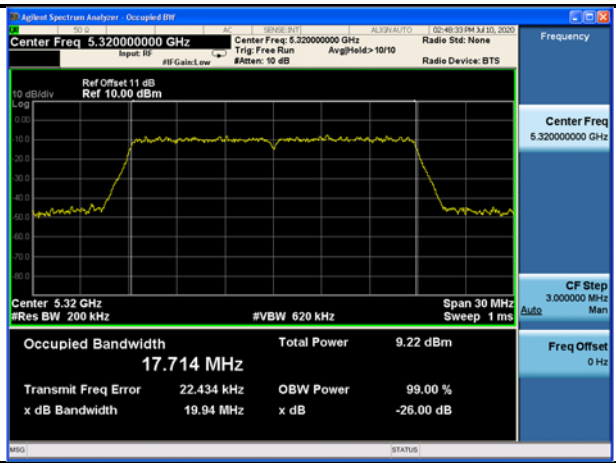
3



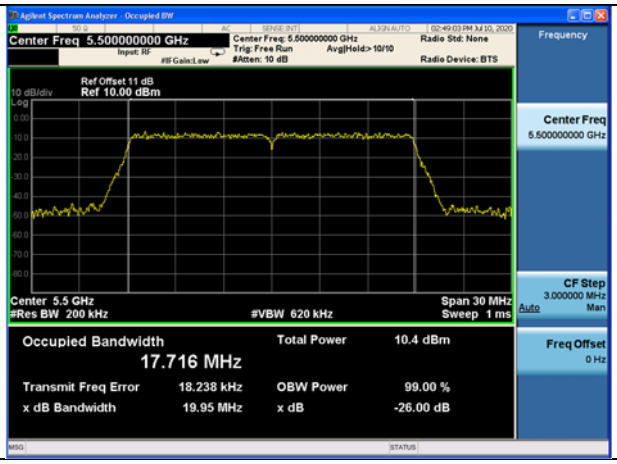
4


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.280000000 GHz
Center Freq: 5.280000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.280000000 GHz
Center 5.28 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.728 MHz
Total Power
8.30 dBm
Freq Offset
0 Hz
Transmit Freq Error
13.911 kHz
OBW Power
99.00 %
x dB Bandwidth
19.78 MHz
x dB
-26.00 dB
MSG
STATUS

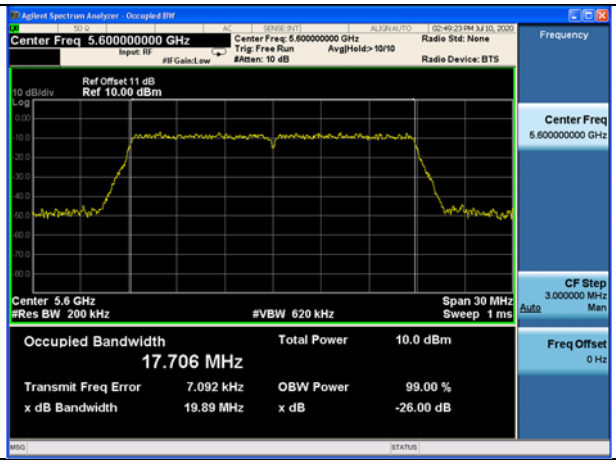
5


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.320000000 GHz
Center Freq: 5.320000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.320000000 GHz
Center 5.32 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.714 MHz
Total Power
9.22 dBm
Freq Offset
0 Hz
Transmit Freq Error
22.434 kHz
OBW Power
99.00 %
x dB Bandwidth
19.94 MHz
x dB
-26.00 dB
MSG
STATUS

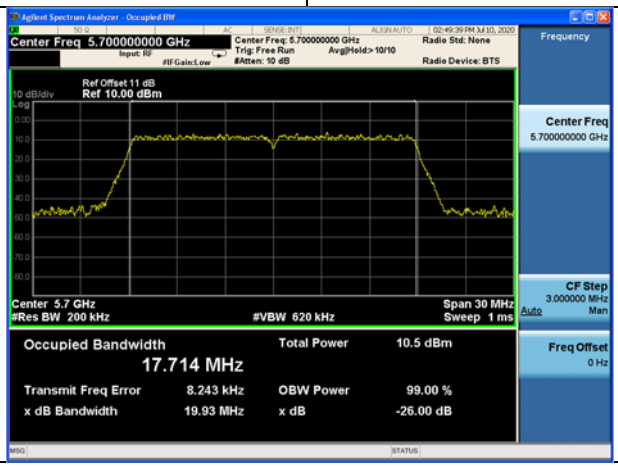
6


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.500000000 GHz
Center Freq: 5.500000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.500000000 GHz
Center 5.5 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.716 MHz
Total Power
10.4 dBm
Freq Offset
0 Hz
Transmit Freq Error
18.238 kHz
OBW Power
99.00 %
x dB Bandwidth
19.95 MHz
x dB
-26.00 dB
MSG
STATUS

7


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.600000000 GHz
Center Freq: 5.600000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.600000000 GHz
Center 5.6 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.706 MHz
Total Power
10.0 dBm
Freq Offset
0 Hz
Transmit Freq Error
7.092 kHz
OBW Power
99.00 %
x dB Bandwidth
19.89 MHz
x dB
-26.00 dB
MSG
STATUS

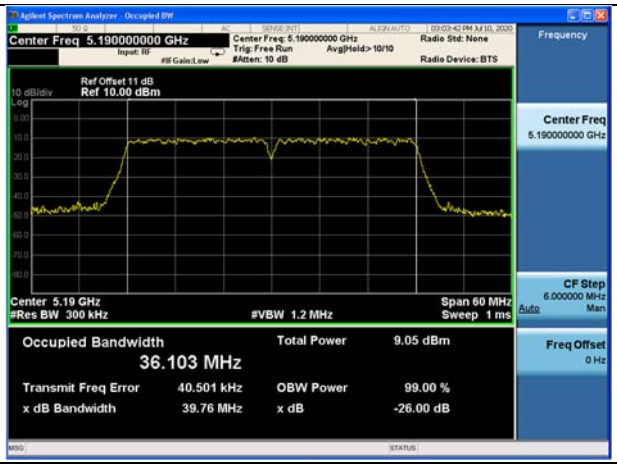
8


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.700000000 GHz
Center Freq: 5.700000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.700000000 GHz
Center 5.7 GHz
#Res BW 200 kHz
#VBW 620 kHz
Span 30 MHz
Sweep 1 ms
CF Step
3.000000 MHz
Auto
Man
Occupied Bandwidth
17.714 MHz
Total Power
10.5 dBm
Freq Offset
0 Hz
Transmit Freq Error
8.243 kHz
OBW Power
99.00 %
x dB Bandwidth
19.93 MHz
x dB
-26.00 dB
MSG
STATUS

9

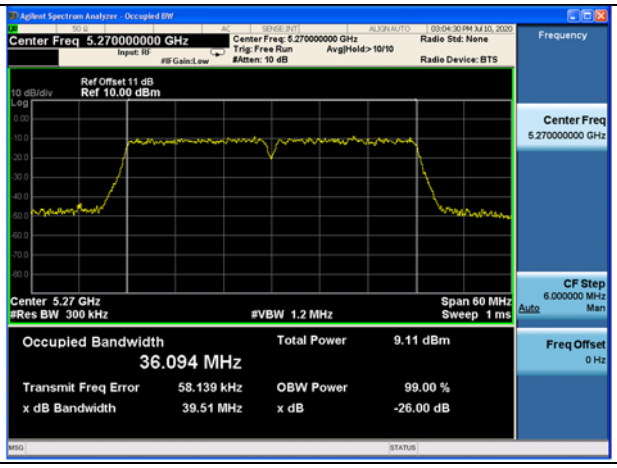
40M BW

Band	Carrier frequency (MHz)	99% Bandwidth(MHz)		Minimum 26dB Bandwidth(MHz)	
		802.11n	Figure number	802.11n	Figure number
UNII-1	5190	NA	1	39.76	1
	5230	NA	2	39.59	2
UNII-2A	5270	NA	3	39.51	3
	5310	NA	4	39.79	4
UNII-2C	5510	NA	5	39.49	5
	5590	NA	6	39.55	6
	5670	NA	7	39.55	7

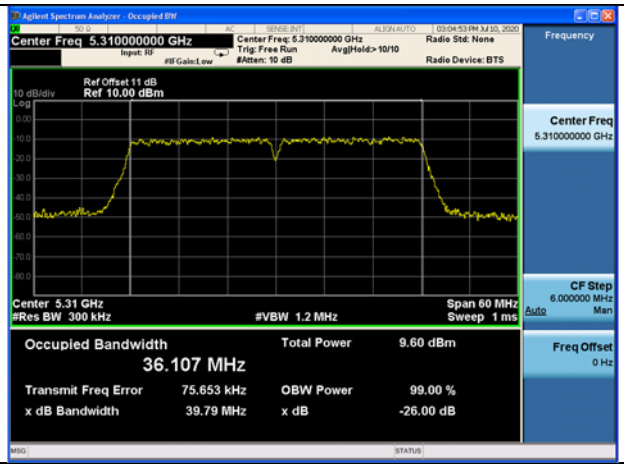


1

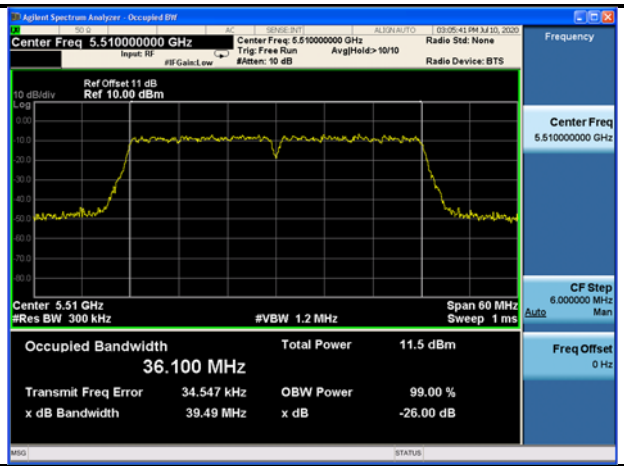
2



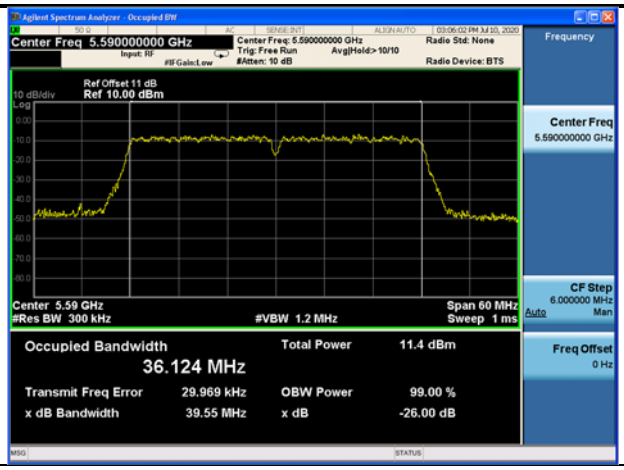
3



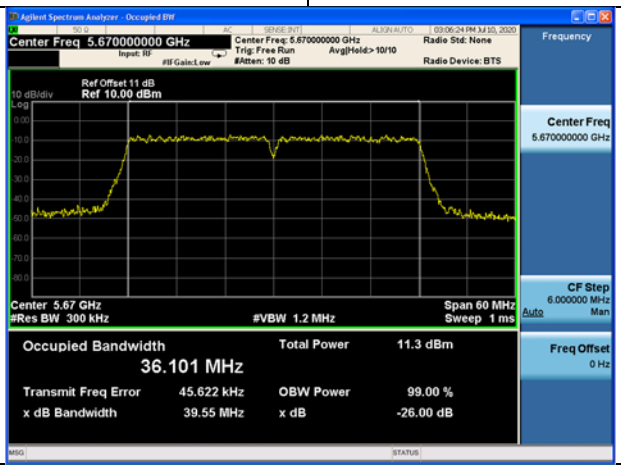
4


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.510000000 GHz
Center Freq: 5.510000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.510000000 GHz
Center 5.51 GHz
#Res BW 300 kHz
#VBW 1.2 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
36.100 MHz
Total Power
11.5 dBm
Freq Offset
0 Hz
Transmit Freq Error
34.547 kHz
OBW Power
99.00 %
x dB Bandwidth
39.49 MHz
x dB
-26.00 dB
MSG
STATUS

5


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.590000000 GHz
Center Freq: 5.590000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.590000000 GHz
Center 5.59 GHz
#Res BW 300 kHz
#VBW 1.2 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
36.124 MHz
Total Power
11.4 dBm
Freq Offset
0 Hz
Transmit Freq Error
29.969 kHz
OBW Power
99.00 %
x dB Bandwidth
39.55 MHz
x dB
-26.00 dB
MSG
STATUS

6

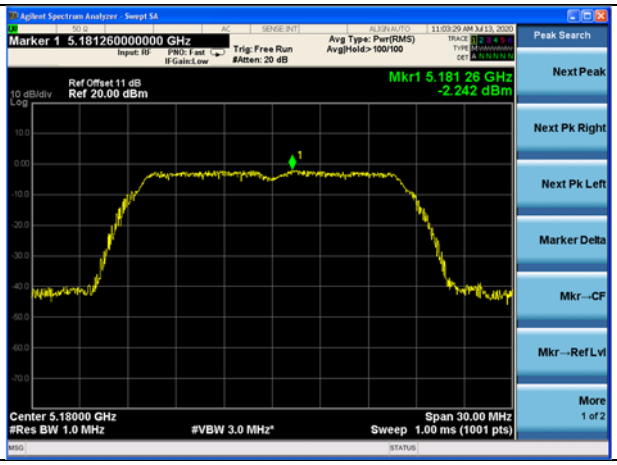

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.670000000 GHz
Center Freq: 5.670000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 11 dB
10 dB/div
Ref 10.00 dBm
Center Freq
5.670000000 GHz
Center 5.67 GHz
#Res BW 300 kHz
#VBW 1.2 MHz
Span 60 MHz
Sweep 1 ms
CF Step
6.000000 MHz
Auto
Man
Occupied Bandwidth
36.101 MHz
Total Power
11.3 dBm
Freq Offset
0 Hz
Transmit Freq Error
45.622 kHz
OBW Power
99.00 %
x dB Bandwidth
39.55 MHz
x dB
-26.00 dB
MSG
STATUS

7

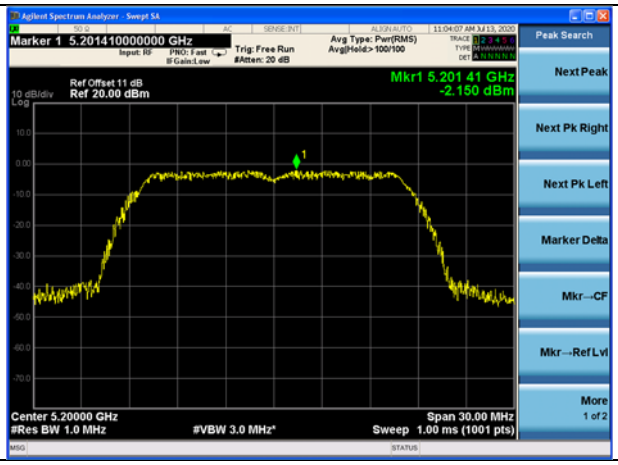
Transmitter Power Spectral Density

Offset 11dB = Attenuator 9.8dB+ Temporary antenna connector loss 0.2dB+ Cable loss 1dB
U-NII-1
Test Mode: 802.11a (SISO Main Ant)

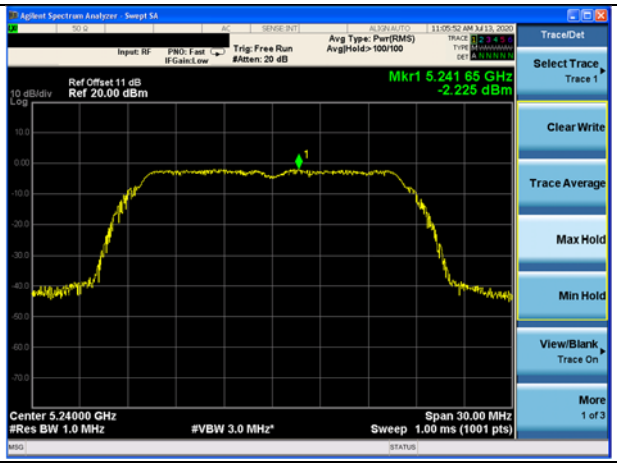
Carrier frequency (MHz)	Corrected Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Figure	Conclusion
5180	-2.242	11.0	1	pass
5200	-2.150	11.0	2	pass
5240	-2.225	11.0	3	pass
5260	-1.737	11.0	4	Pass
5280	-1.976	11.0	5	Pass
5320	-1.293	11.0	6	Pass
5500	0.292	11.0	7	Pass
5600	0.539	11.0	8	Pass
5700	0.163	11.0	9	Pass



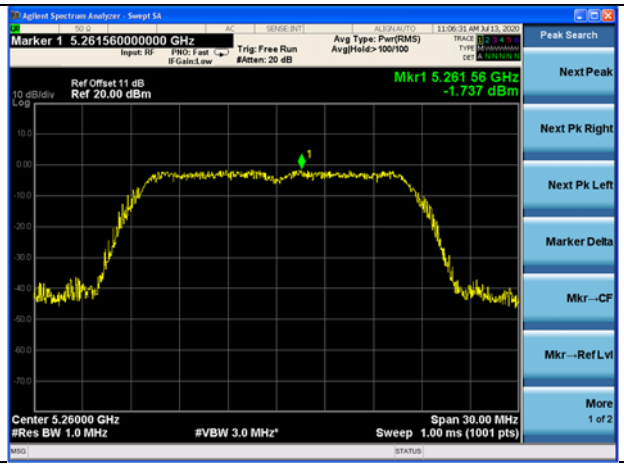
1



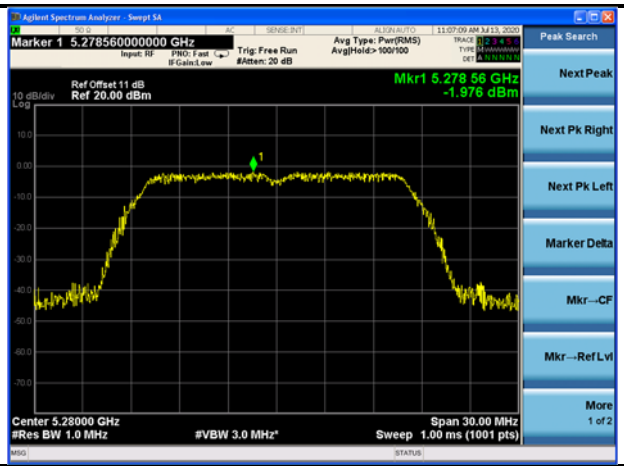
2



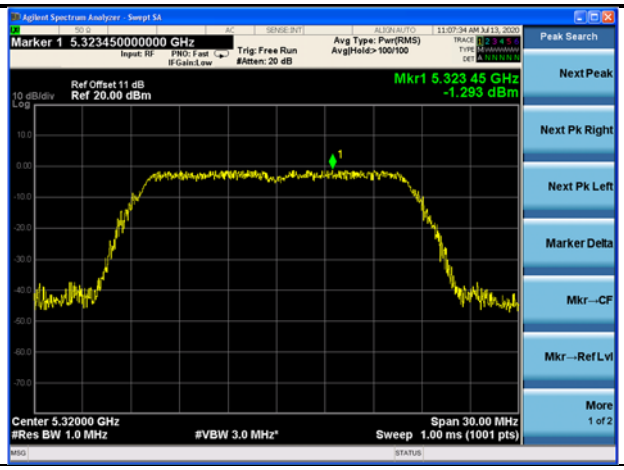
3



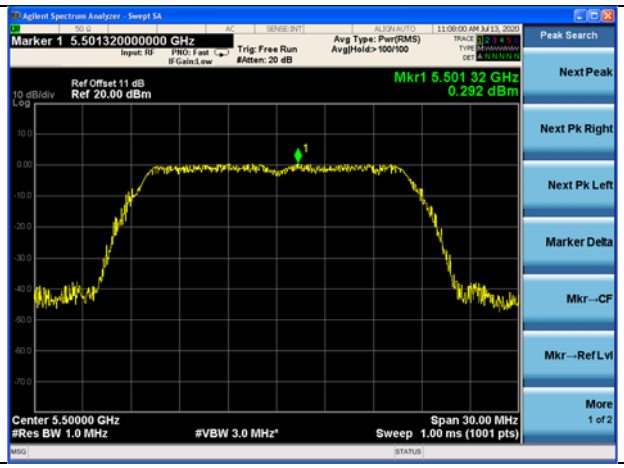
4


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.278560000000 GHz
Mkr1 5.278 56 GHz
-1.976 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.28000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

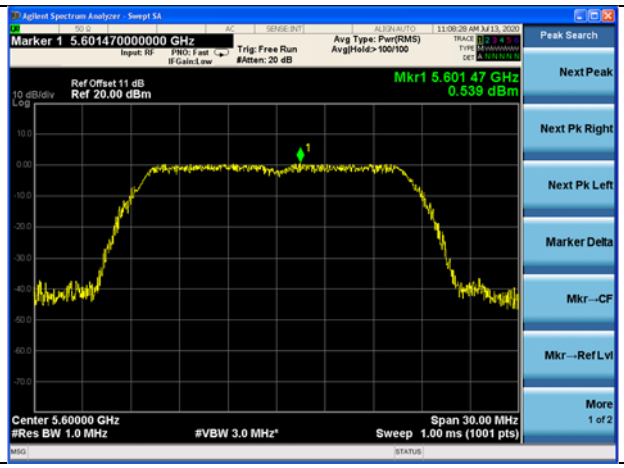
5


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.323450000000 GHz
Mkr1 5.323 45 GHz
-1.293 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.32000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

6


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.501320000000 GHz
Mkr1 5.501 32 GHz
0.292 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

7


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.601470000000 GHz
Mkr1 5.601 47 GHz
0.539 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.60000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

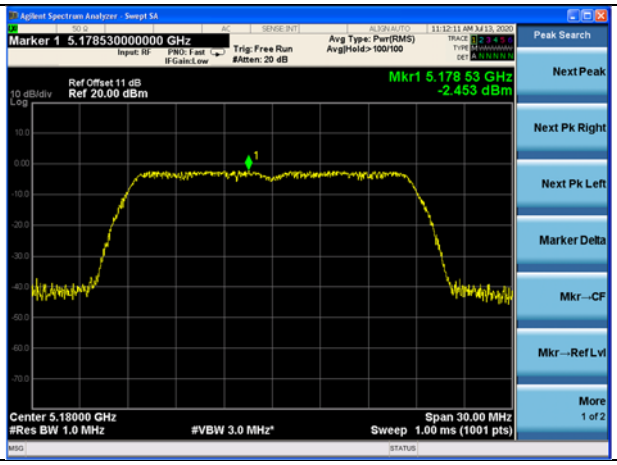
8


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.696490000000 GHz
Mkr1 5.696 49 GHz
0.163 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.70000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

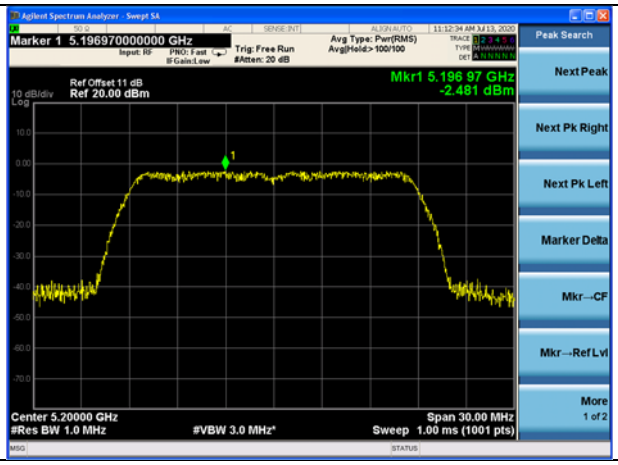
9

Test Mode: 802.11n HT20 (SISO Main Ant)

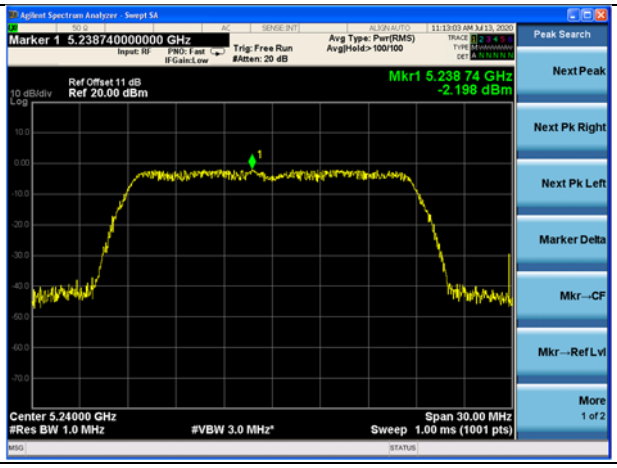
Carrier frequency (MHz)	Corrected Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Figure	Conclusion
5180	-2.453	11.0	1	pass
5200	-2.481	11.0	2	pass
5240	-2.198	11.0	3	pass
5260	-2.403	11.0	4	Pass
5280	-2.822	11.0	5	Pass
5320	-1.637	11.0	6	Pass
5500	-0.285	11.0	7	Pass
5600	-0.039	11.0	8	Pass
5700	-0.367	11.0	9	Pass



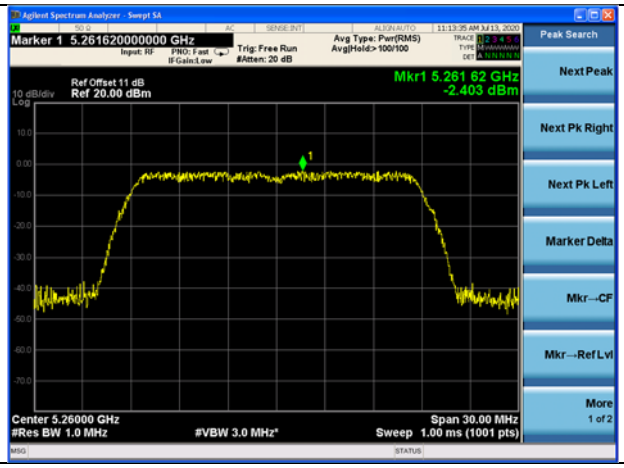
1



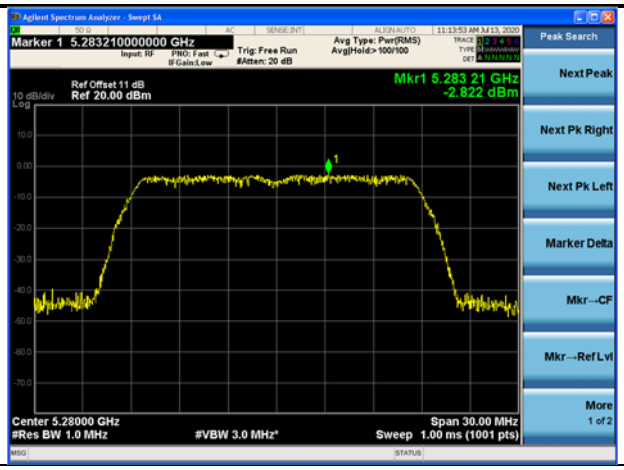
2



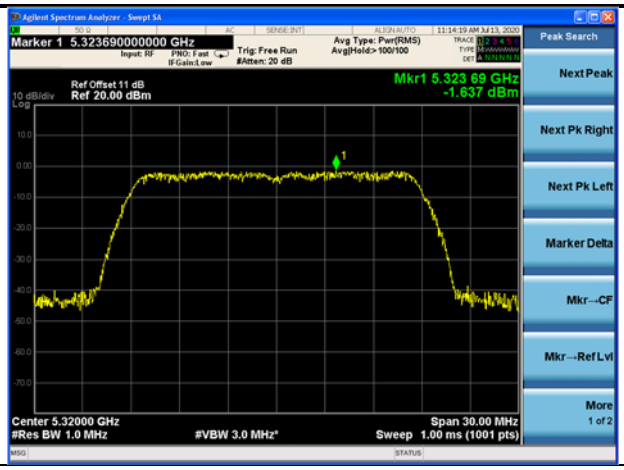
3



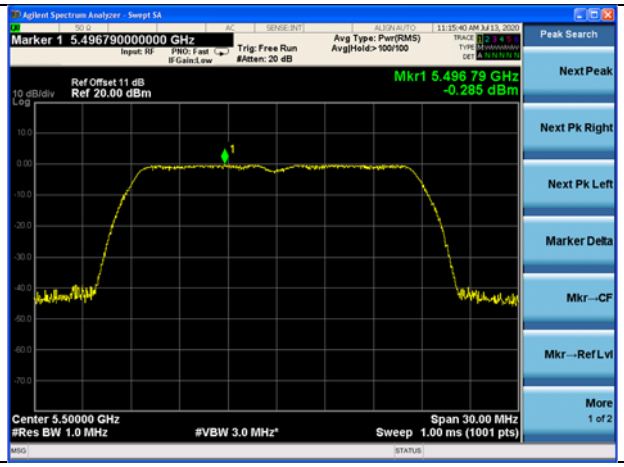
4


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.283210000000 GHz
Mkr1 5.283 21 GHz
-2.822 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.28000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

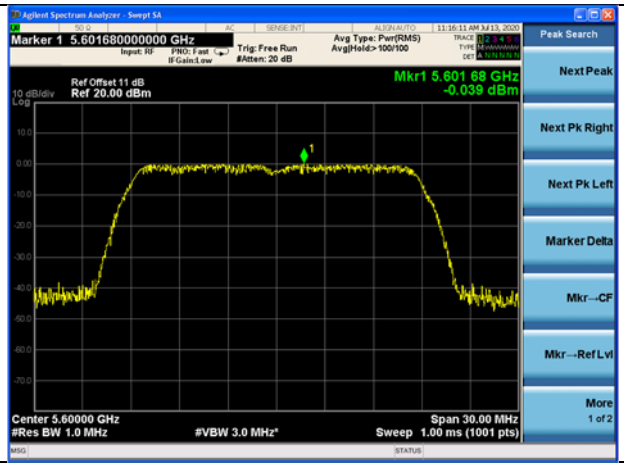
5


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.323690000000 GHz
Mkr1 5.323 69 GHz
-1.637 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.32000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

6


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.496790000000 GHz
Mkr1 5.496 79 GHz
-0.285 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.50000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

7


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.601680000000 GHz
Mkr1 5.601 68 GHz
-0.039 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.60000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

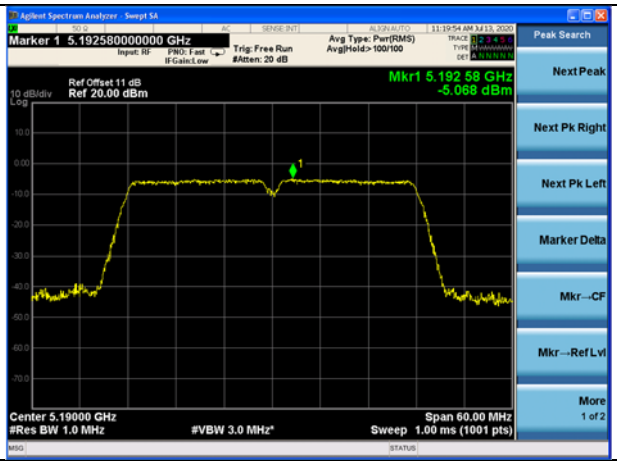
8


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.696550000000 GHz
Mkr1 5.696 55 GHz
-0.367 dBm
Ref Offset 11 dB
10 dB/div Ref 20.00 dBm
Center 5.70000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

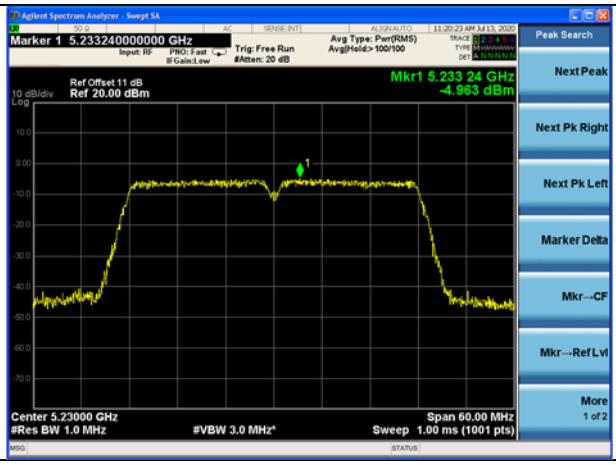
9

Test Mode: 802.11n HT40 (SISO Main Ant)

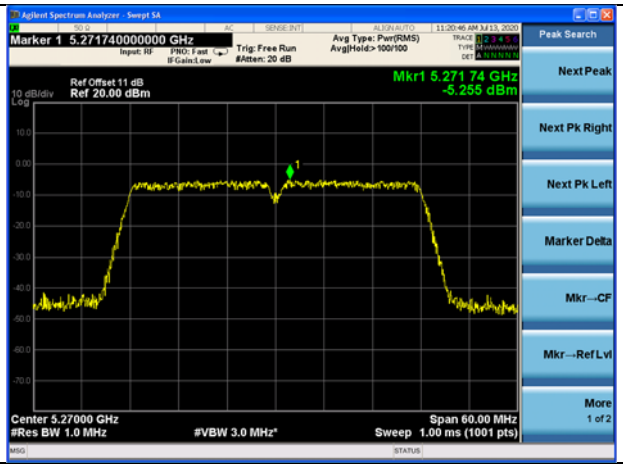
Carrier frequency (MHz)	Corrected Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)	Figure	Conclusion
5190	-5.068	11.0	1	pass
5230	-4.963	11.0	2	pass
5270	-5.255	11.0	3	pass
5310	-4.485	11.0	4	pass
5510	-2.592	11.0	5	pass
5590	-2.852	11.0	6	pass
5670	-2.883	11.0	7	pass



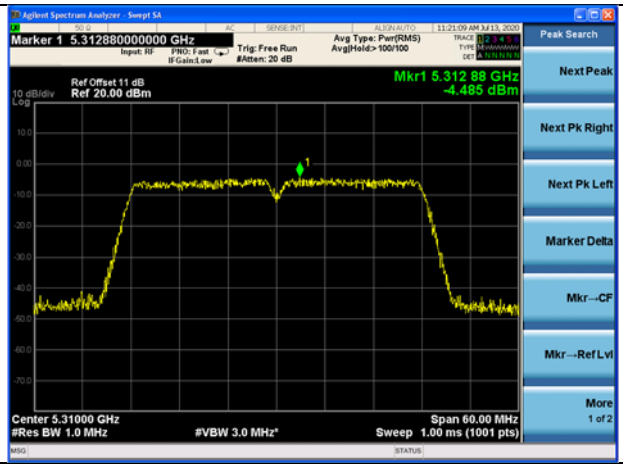
1



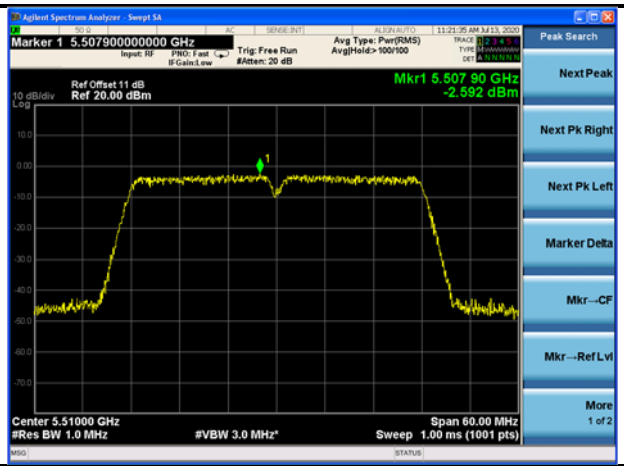
2



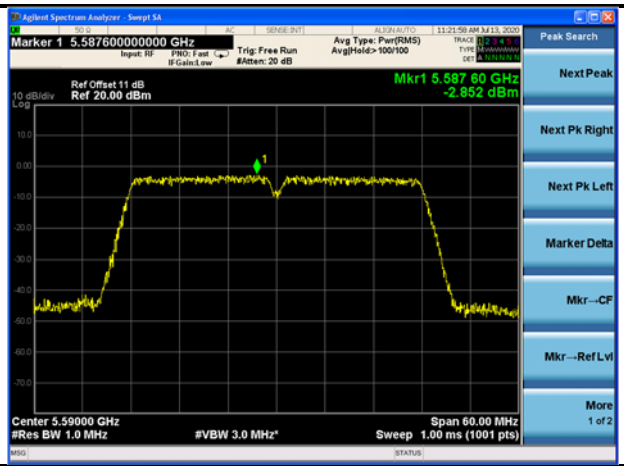
3



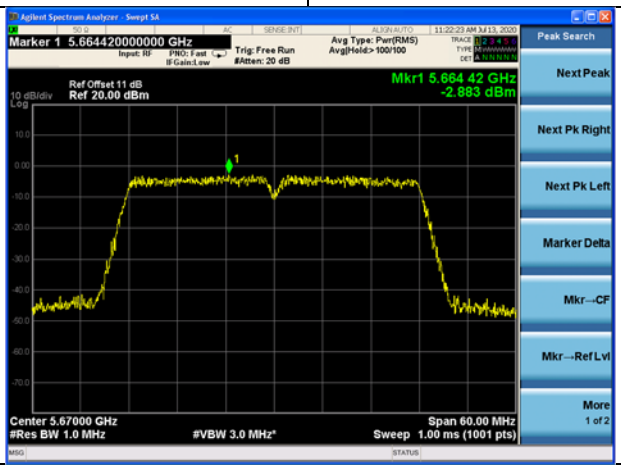
4


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.5079000000000 GHz
Avg Type: Pwr(RMS)
Avg|Hold:>100/100
Trig: Free Run
#Atten: 20 dB
Ref Offset 11 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.507 90 GHz
-2.592 dBm
Center 5.51000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

5


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.5876000000000 GHz
Avg Type: Pwr(RMS)
Avg|Hold:>100/100
Trig: Free Run
#Atten: 20 dB
Ref Offset 11 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.587 60 GHz
-2.852 dBm
Center 5.59000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

6


Agilent Spectrum Analyzer - Swept SA
Marker 1 5.664420000000 GHz
Avg Type: Pwr(RMS)
Avg|Hold:>100/100
Trig: Free Run
#Atten: 20 dB
Ref Offset 11 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.664 42 GHz
-2.883 dBm
Center 5.67000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.00 ms (1001 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

7

Frequency Stability

U-NII-1

Mod.	Data Rate	Ant	Frequency (MHz)	Frequency Stability(ppm)	Voltage(V)	Temperature(°C)
11a	6Mbps	1	5180	1.23	NV	-20
11a	6Mbps	1	5180	1.18	NV	-10
11a	6Mbps	1	5180	1.43	NV	0
11a	6Mbps	1	5180	1.90	NV	+10
11a	6Mbps	1	5180	1.55	HV	+20
11a	6Mbps	1	5180	-0.56	LV	+20
11a	6Mbps	1	5180	0.00	NV	+20
11a	6Mbps	1	5180	3.78	NV	+30
11a	6Mbps	1	5180	1.94	NV	+40
11a	6Mbps	1	5180	2.15	NV	+50

U-NII-2A

Mod.	Data Rate	Ant	Frequency (MHz)	Frequency Stability(ppm)	Voltage(V)	Temperature(°C)
11a	6Mbps	1	5260	2.86	NV	-20
11a	6Mbps	1	5260	1.92	NV	-10
11a	6Mbps	1	5260	2.77	NV	0
11a	6Mbps	1	5260	2.42	NV	+10
11a	6Mbps	1	5260	2.43	HV	+20
11a	6Mbps	1	5260	1.34	LV	+20
11a	6Mbps	1	5260	0.00	NV	+20
11a	6Mbps	1	5260	4.34	NV	+30
11a	6Mbps	1	5260	3.98	NV	+40
11a	6Mbps	1	5260	3.81	NV	+50

U-NII-2C

Mod.	Data Rate	Ant	Frequency (MHz)	Frequency Stability(ppm)	Voltage(V)	Temperature(°C)
11a	6Mbps	1	5500	3.16	NV	-20
11a	6Mbps	1	5500	2.82	NV	-10
11a	6Mbps	1	5500	2.09	NV	0
11a	6Mbps	1	5500	2.10	NV	+10
11a	6Mbps	1	5500	1.94	HV	+20
11a	6Mbps	1	5500	0.25	LV	+20
11a	6Mbps	1	5500	0.00	NV	+20
11a	6Mbps	1	5500	4.42	NV	+30
11a	6Mbps	1	5500	1.94	NV	+40
11a	6Mbps	1	5500	3.21	NV	+50

Dynamic Frequency Selection

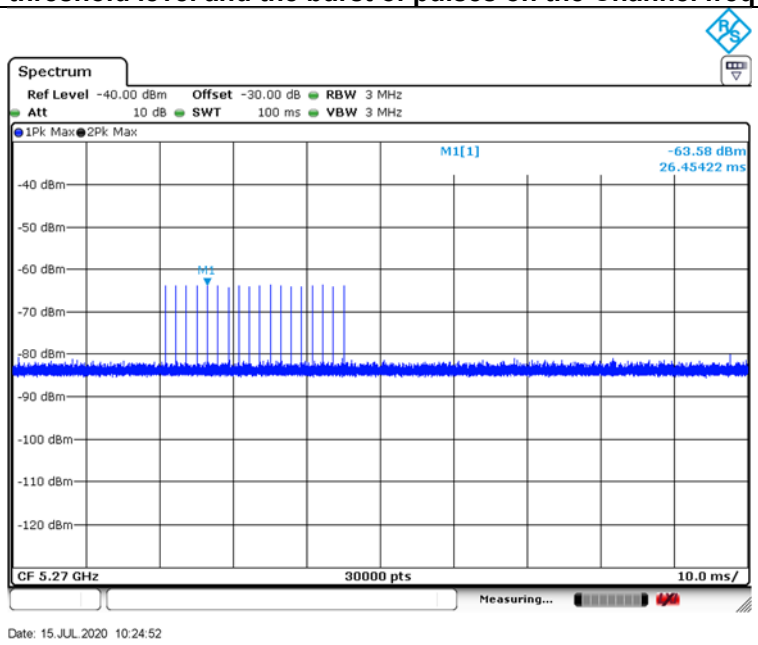
DESCRIPTION OF Master Device

The Master Device is a SKSpruce Technologies Co., Ltd., Indoor Access Point, FCC ID: 2AHKT-WIA3300-20. The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm.

Radar Waveform Calibration Result

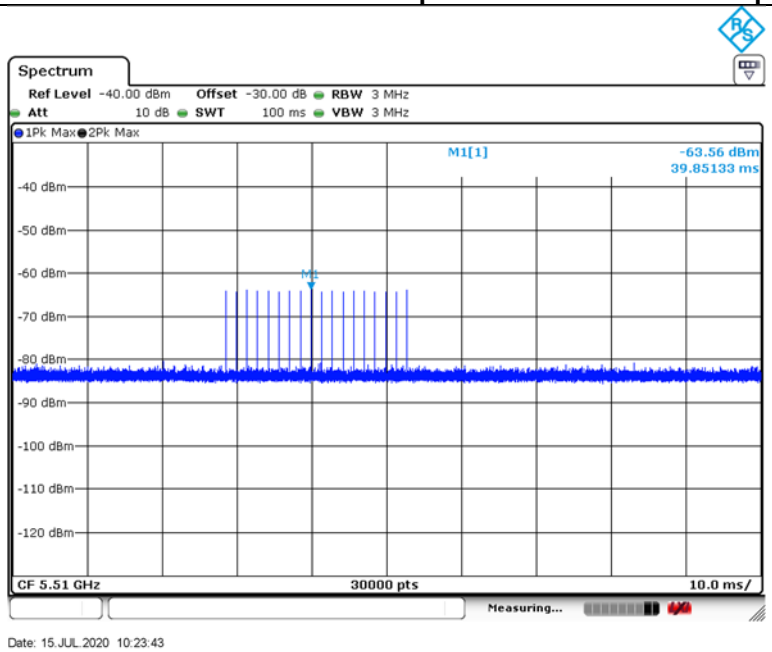
<40MHz / 5270 MHz> Radar Type 0

Radar / DFS detection threshold level and the burst of pulses on the Channel frequency

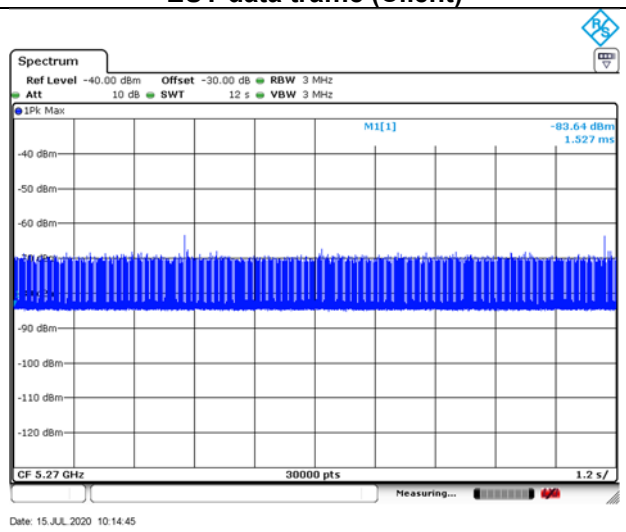
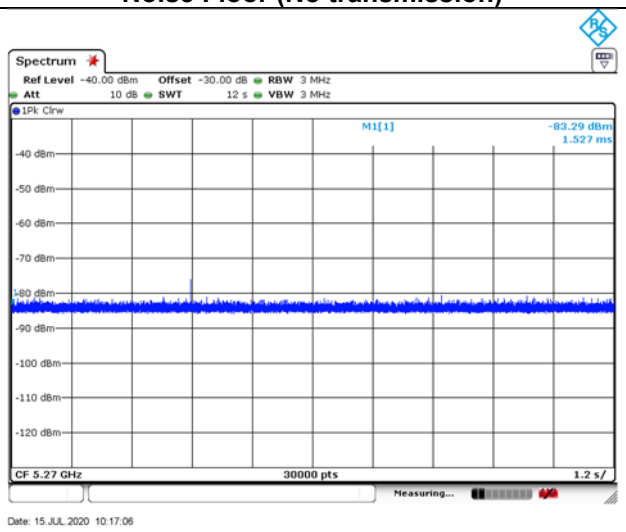
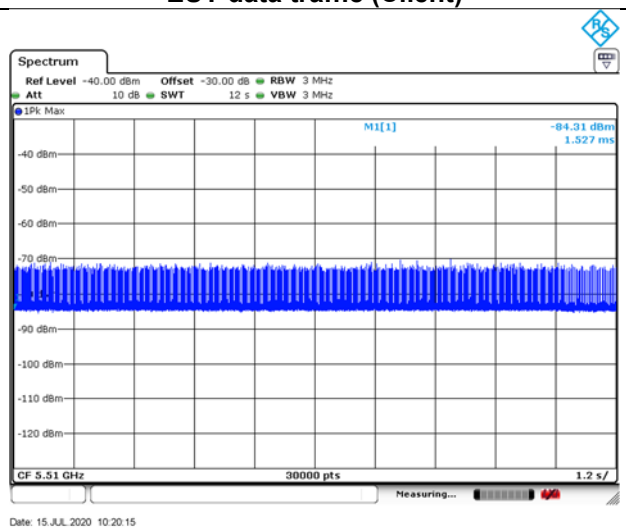
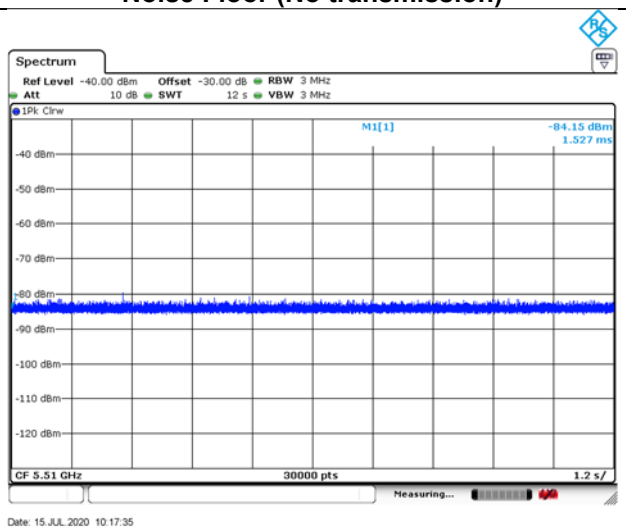


<40MHz / 5510 MHz> Radar Type 0

Radar / DFS detection threshold level and the burst of pulses on the Channel frequency



Data Traffic and Noise Floor Plots

<40MHz / 5270 MHz> EUT data traffic (Client)	<40MHz / 5270 MHz> Noise Floor (No transmission)
	
<40MHz / 5510 MHz> EUT data traffic (Client)	**<40MHz / 5510 MHz> Noise Floor (No transmission)**
	

Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test

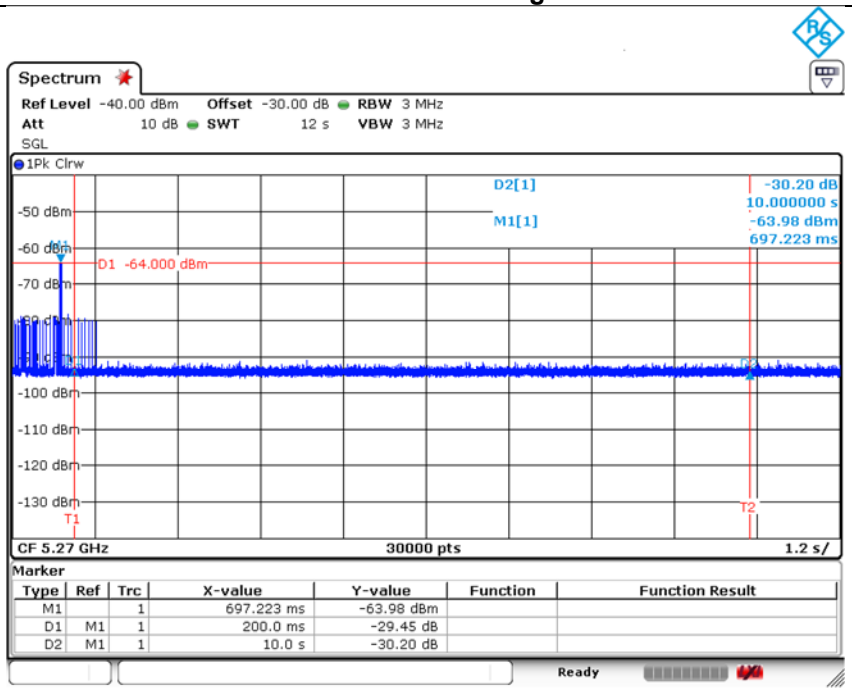
Frequency	Test Item	Test Result	Limit	Pass/Fail
5270MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms +24ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass
5510MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms +24ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass

Note*: We notice clearly that “Channel Move Time” is less than 10s from the figure.
The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

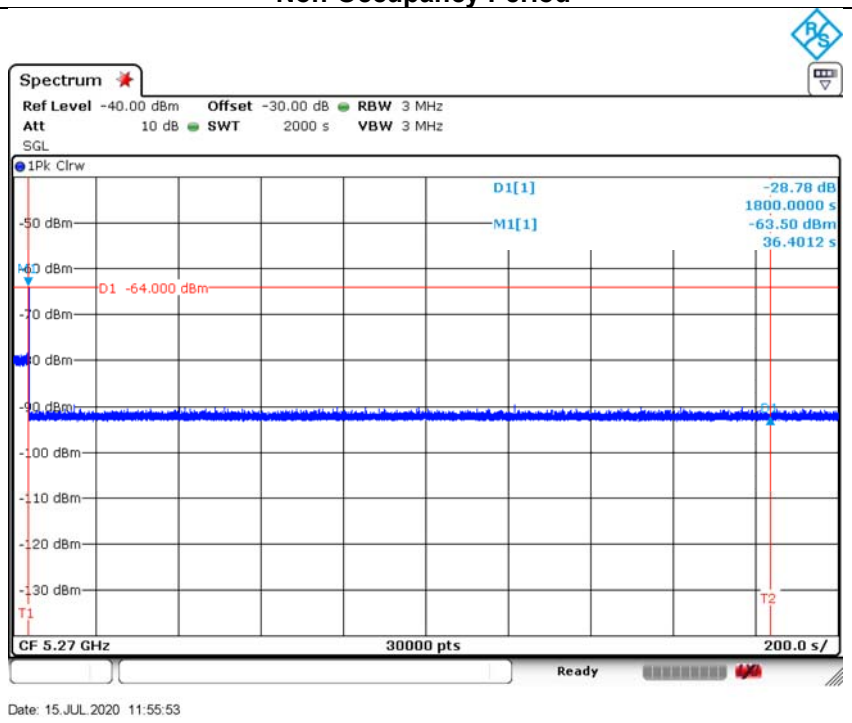
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots

<40MHz / 5270 MHz>

Channel Move Time & Channel Closing Transmission Time



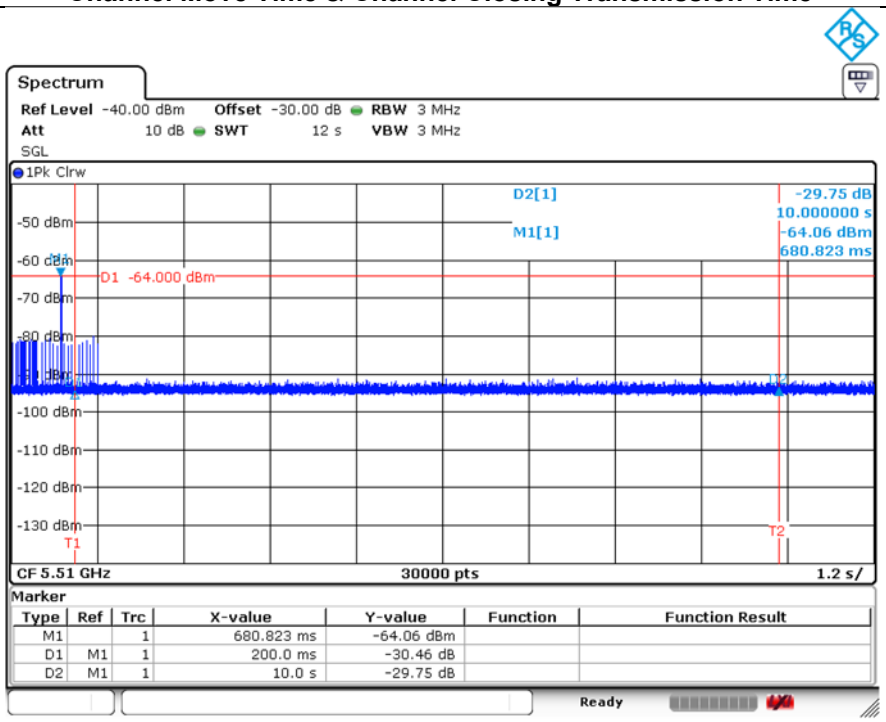
Non-Occupancy Period



Note:
Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(6) X Dwell (0.4 ms) < 260ms

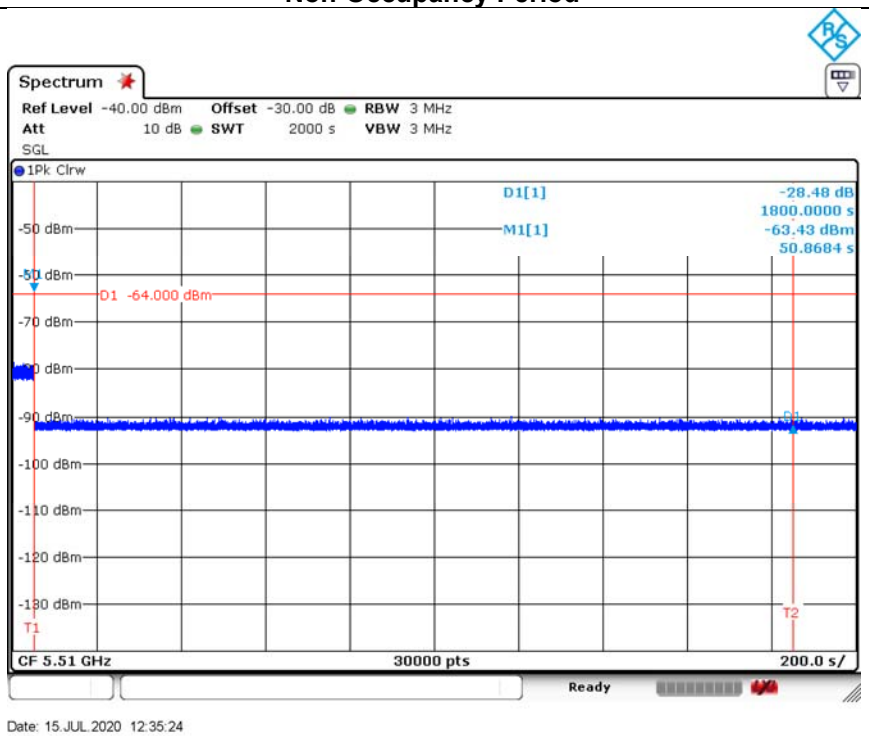
<40MHz / 5510MHz>

Channel Move Time & Channel Closing Transmission Time



Date: 15.JUL.2020 11:03:39

Non-Occupancy Period



Date: 15.JUL.2020 12:35:24

Note:
Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(6) X Dwell (0.4 ms) < 260ms