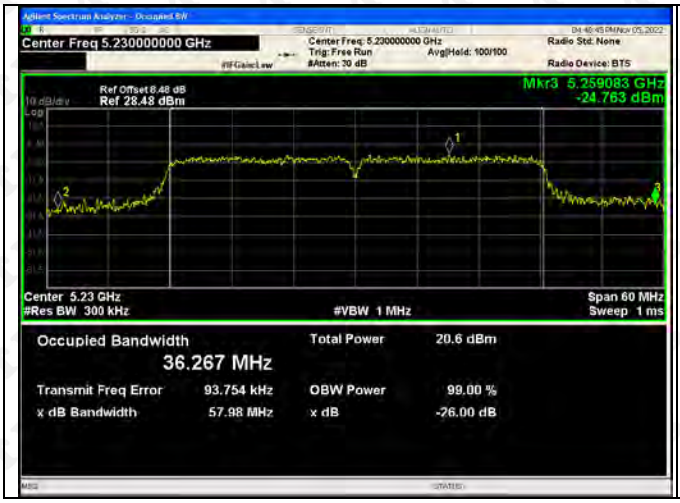
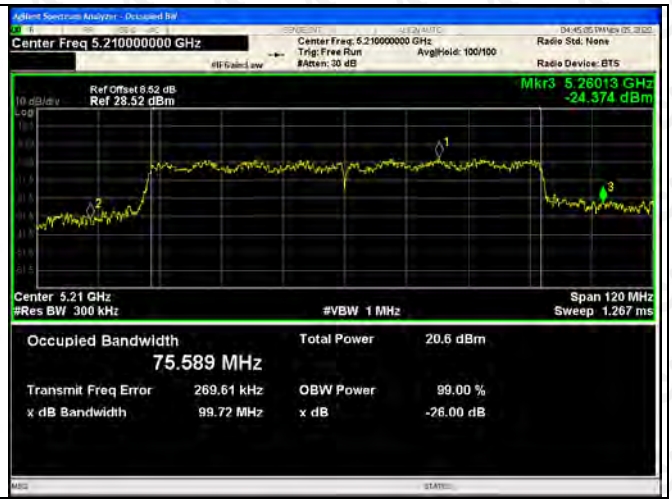
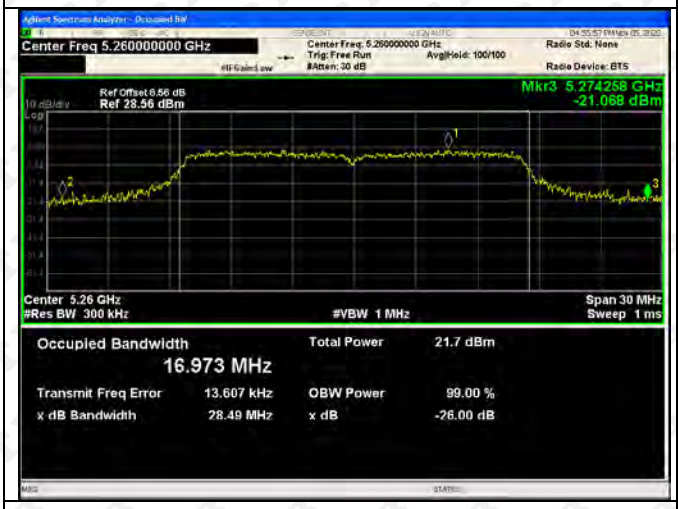

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.230000000 GHz
Center Freq: 5.230000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.48 dB
10 dB/div
Ref 28.48 dBm
Mkr3 5.259083 GHz
-24.763 dBm
Center 5.23 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.267 MHz
Total Power 20.6 dBm
Transmit Freq Error 93.754 kHz
OBW Power 99.00 %
x dB Bandwidth 57.98 MHz
x dB -26.00 dB

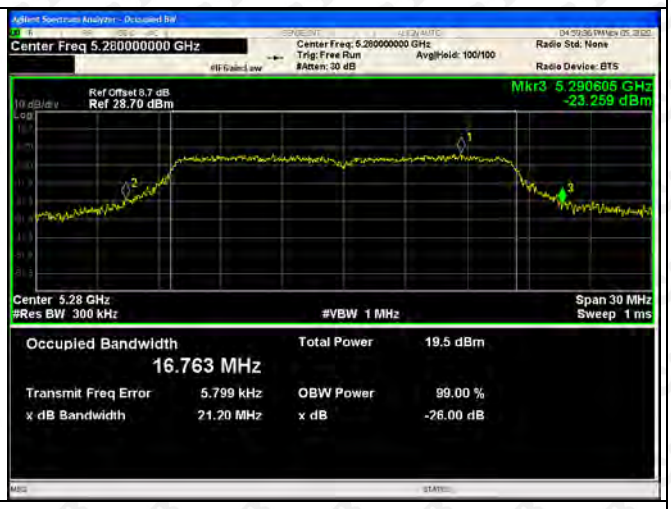

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.210000000 GHz
Center Freq: 5.210000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.52 dB
10 dB/div
Ref 28.52 dBm
Mkr3 5.26013 GHz
-24.374 dBm
Center 5.21 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 120 MHz
Sweep 1.267 ms
Occupied Bandwidth
75.589 MHz
Total Power 20.6 dBm
Transmit Freq Error 269.61 kHz
OBW Power 99.00 %
x dB Bandwidth 99.72 MHz
x dB -26.00 dB

5260-5320MHz
ANT1

802.11a-5260

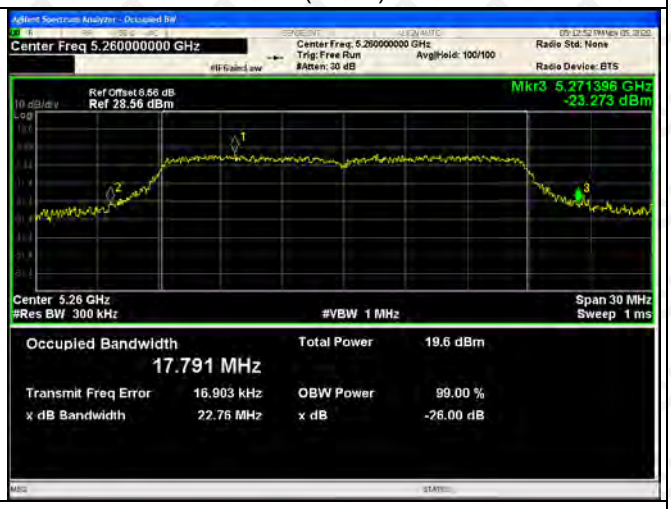



802.11a-5280



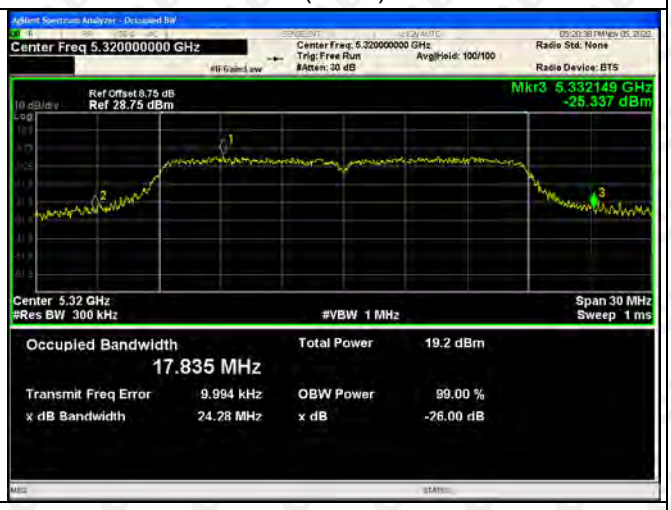

802.11a-5320


802.11n(HT20)-5260



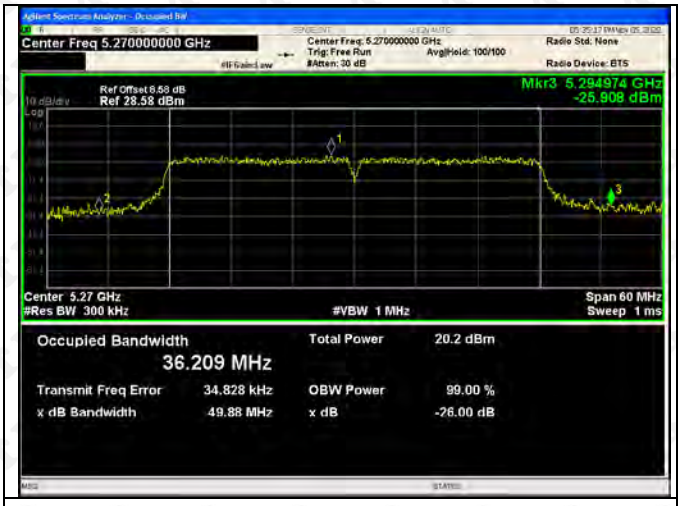

802.11n(HT20)-5280


802.11n(HT20)-5320

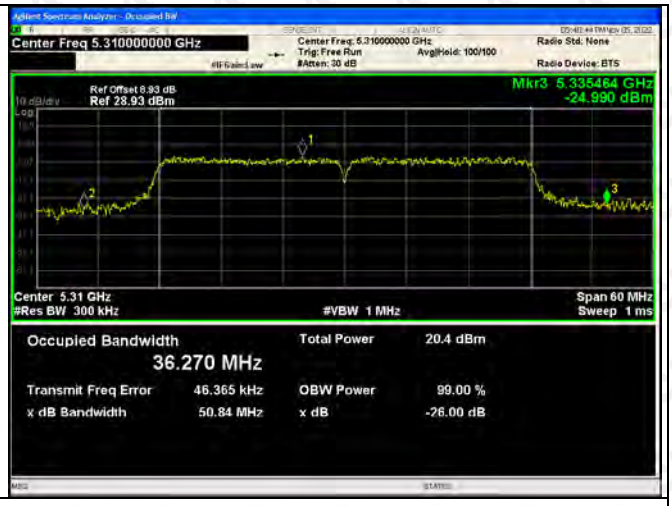



802.11n(HT40)-5270

802.11n(HT40)-5310



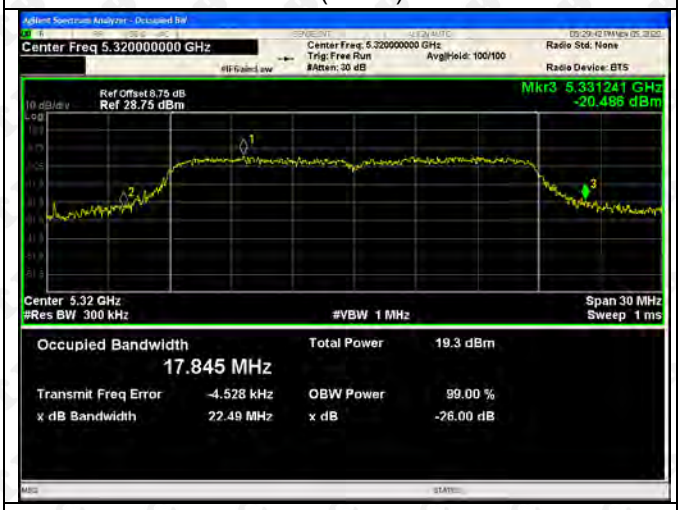

802.11ac(VH20)-5260



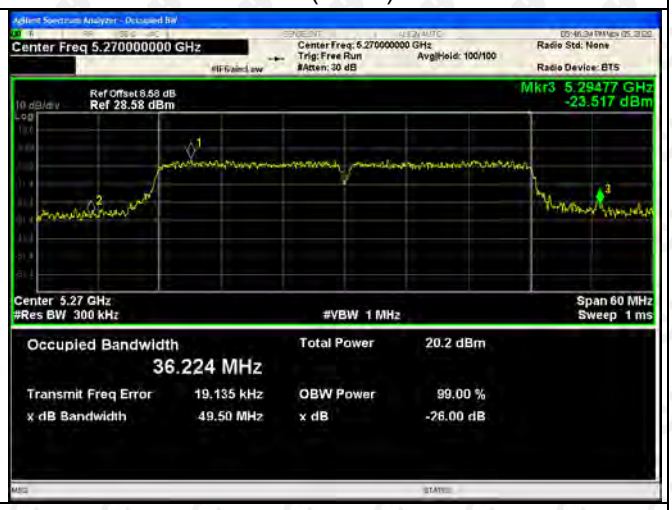

802.11ac(VH20)-5280


802.11ac(VH20)-5320

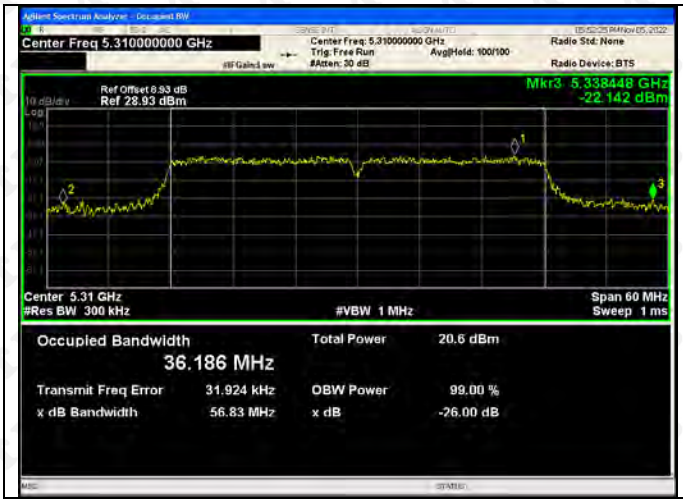

802.11ac(VH40)-5270




802.11ac(VH40)-5310



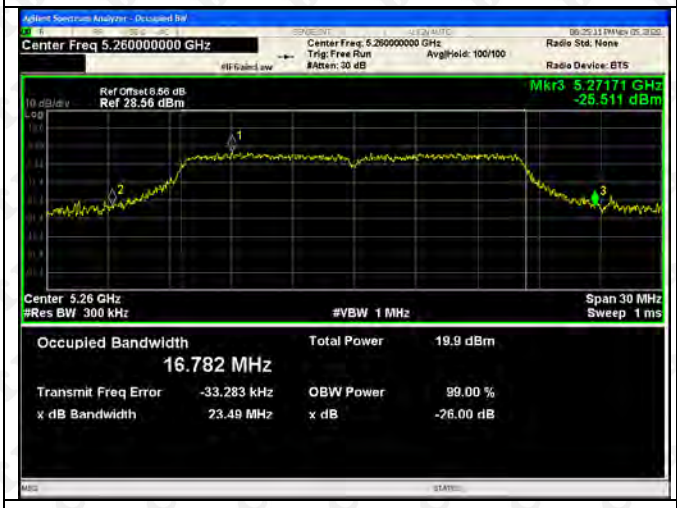

802.11ac(VH80)-5290


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.310000000 GHz
Center Freq: 5.310000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.93 dB
10 dB/div
Ref 28.93 dBm
Mkr3 5.338448 GHz
-22.142 dBm
Center 5.31 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.186 MHz
Total Power 20.6 dBm
Transmit Freq Error 31.924 kHz
OBW Power 99.00 %
x dB Bandwidth 56.83 MHz
x dB -26.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.290000000 GHz
Center Freq: 5.290000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.05 dB
10 dB/div
Ref 29.05 dBm
Mkr3 5.341356 GHz
-22.528 dBm
Center 5.29 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 120 MHz
Sweep 1.267 ms
Occupied Bandwidth
75.591 MHz
Total Power 21.1 dBm
Transmit Freq Error 95.254 kHz
OBW Power 99.00 %
x dB Bandwidth 102.5 MHz
x dB -26.00 dB

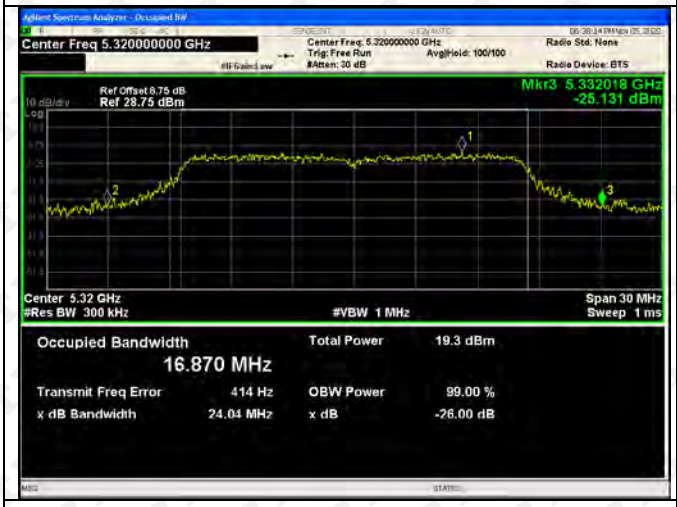
ANT2

802.11a-5260



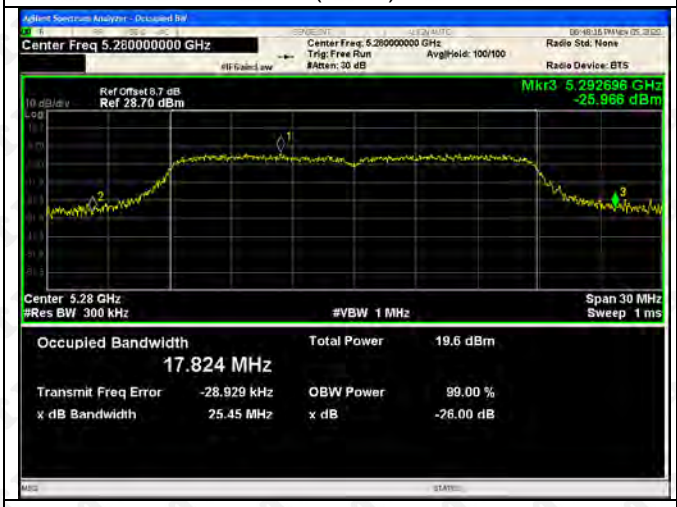

802.11a-5280


802.11a-5320




802.11n(HT20)-5260

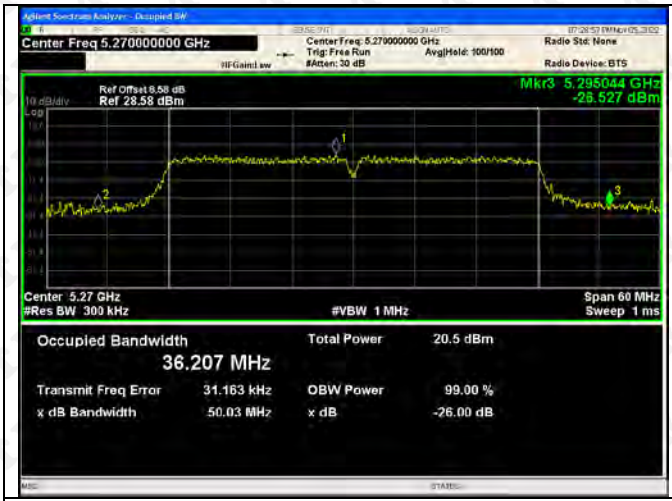

802.11n(HT20)-5280



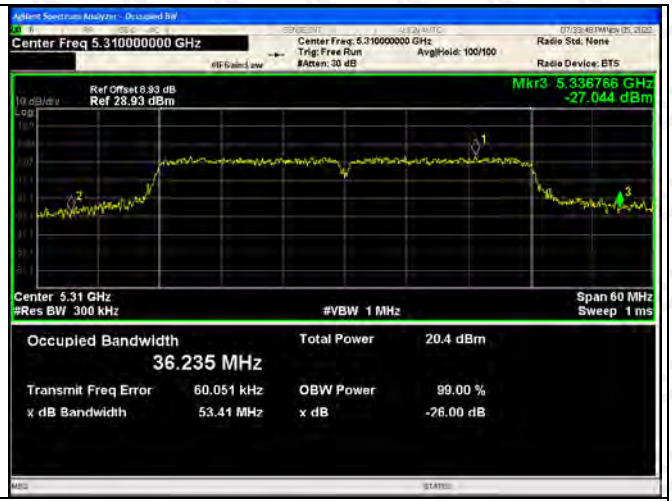

802.11n(HT20)-5320


802.11n(HT40)-5270

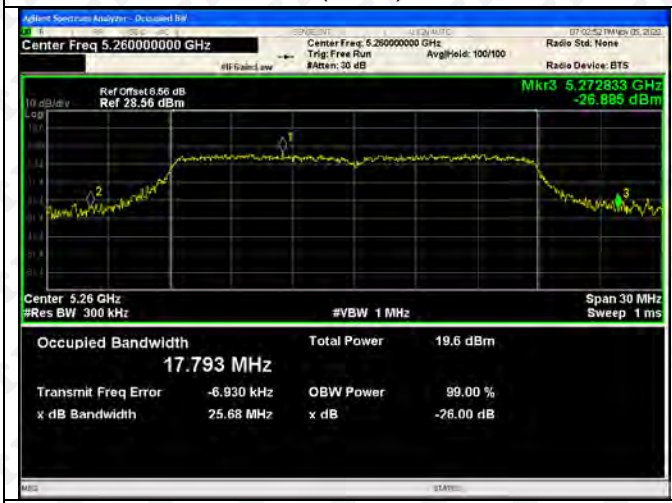
802.11n(HT40)-5310




802.11ac(VH20)-5260

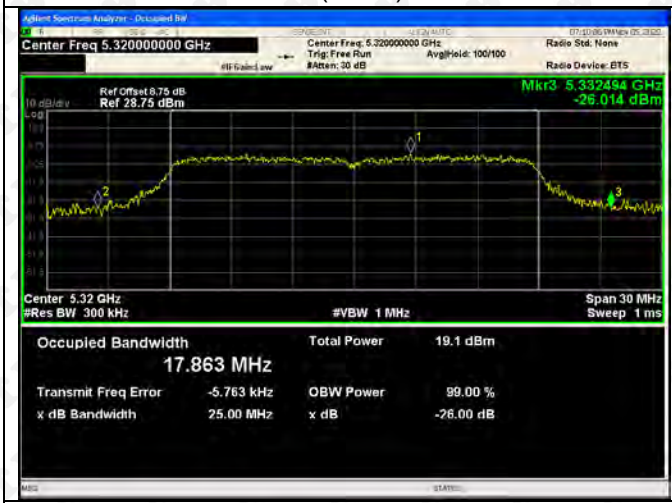



802.11ac(VH20)-5280




802.11ac(VH20)-5320

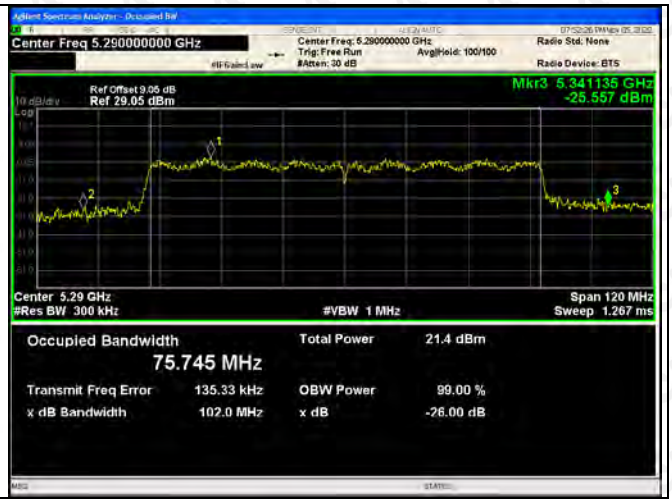

802.11ac(VH40)-5270



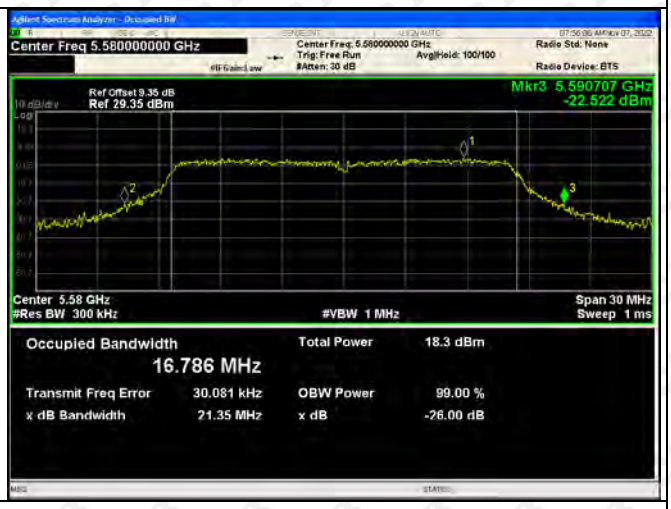
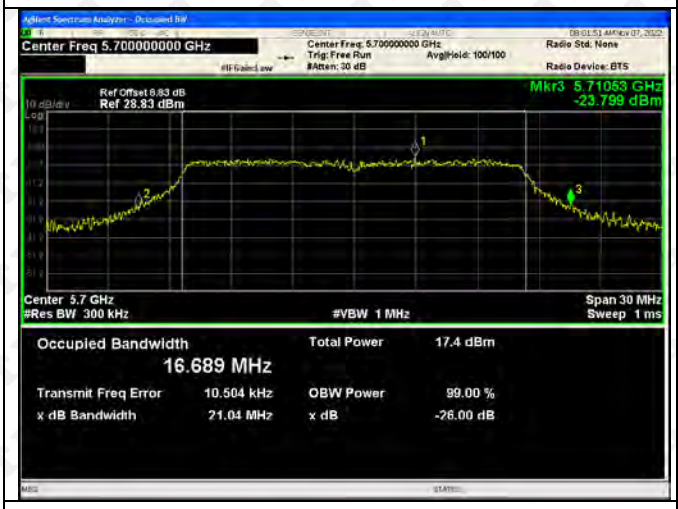
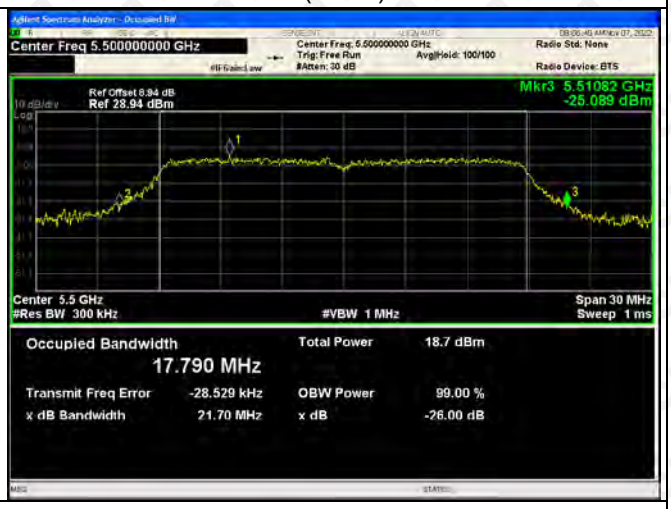
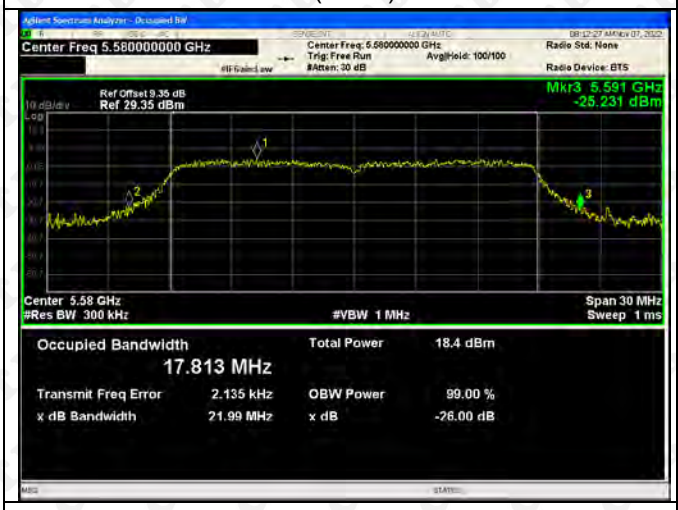
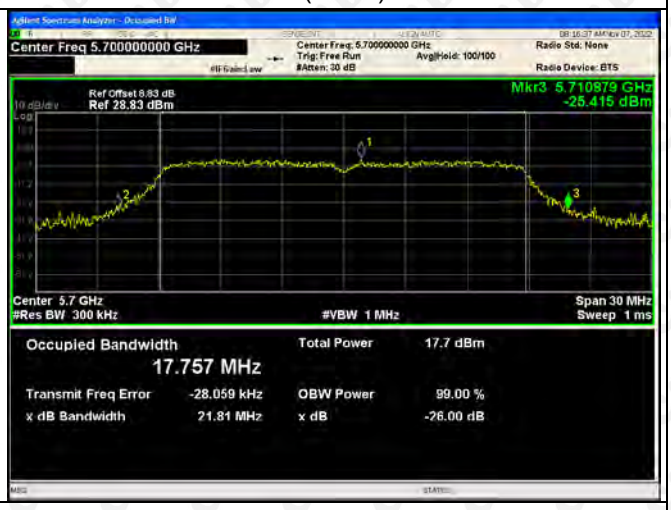

802.11ac(VH40)-5310

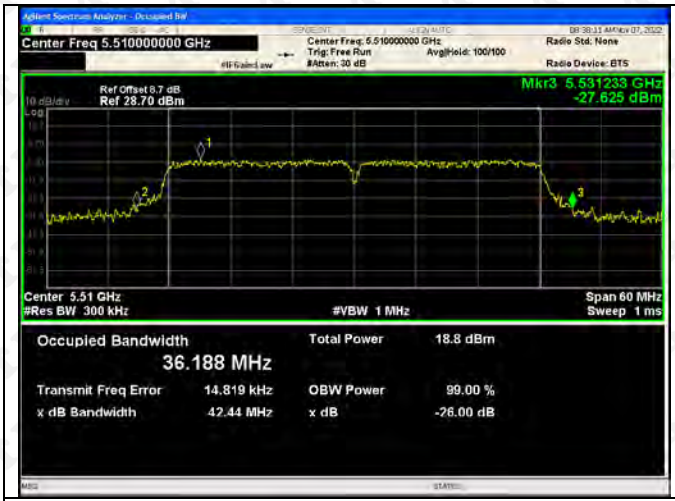

802.11ac(VH80)-5290


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.310000000 GHz
Center Freq: 5.310000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.93 dB
10 dB/div
Ref 28.93 dBm
Mkr3 5.338095 GHz
-25.520 dBm
Center 5.31 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.260 MHz
Total Power 20.2 dBm
Transmit Freq Error 81.705 kHz
OBW Power 99.00 %
x dB Bandwidth 56.03 MHz
x dB -26.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.290000000 GHz
Center Freq: 5.290000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.05 dB
10 dB/div
Ref 29.05 dBm
Mkr3 5.341135 GHz
-25.557 dBm
Center 5.29 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 120 MHz
Sweep 1.267 ms
Occupied Bandwidth
75.745 MHz
Total Power 21.4 dBm
Transmit Freq Error 135.33 kHz
OBW Power 99.00 %
x dB Bandwidth 102.0 MHz
x dB -26.00 dB

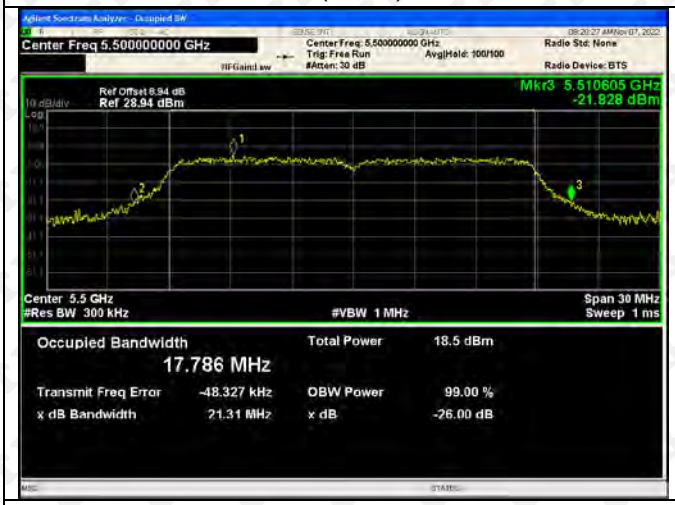
5500-5700MHz
ANT1

| 802.11a-5500 | 802.11a-5580 |
|---|---|
|  |  |
| 802.11a-5700 | 802.11n(HT20)-5500 |
|  |  |
| 802.11n(HT20)-5580 | 802.11n(HT20)-5700 |
|  |  |
| 802.11n(HT40)-5510 | 802.11n(HT40)-5670 |



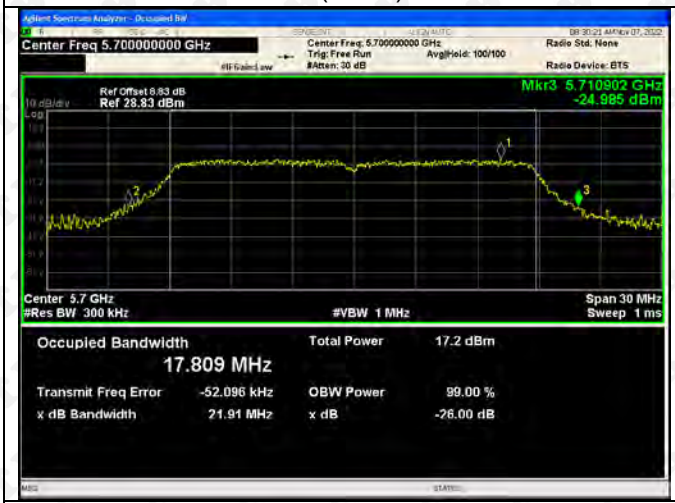

802.11ac(VH20)-5500


802.11ac(VH20)-5580



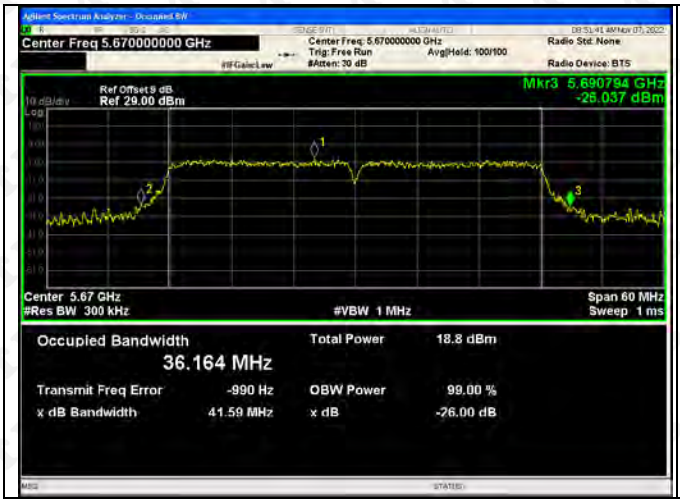

802.11ac(VH20)-5700


802.11ac(VH40)-5510




802.11ac(VH40)-5670


802.11ac(VH80)-5530


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.670000000 GHz
Center Freq: 5.670000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9 dB
10 dB/div
Ref 29.00 dBm
Mkr3 5.690794 GHz
-28.037 dBm
Center 5.67 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.164 MHz
Total Power 18.8 dBm
Transmit Freq Error -990 Hz
OBW Power 99.00 %
x dB Bandwidth 41.59 MHz
x dB -26.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.530000000 GHz
Center Freq: 5.530000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.88 dB
10 dB/div
Ref 28.88 dBm
Mkr3 5.57444 GHz
-30.260 dBm
Center 5.53 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 120 MHz
Sweep 1.267 ms
Occupied Bandwidth
75.561 MHz
Total Power 20.1 dBm
Transmit Freq Error -35.957 kHz
OBW Power 99.00 %
x dB Bandwidth 88.95 MHz
x dB -26.00 dB

ANT2

802.11a-5500

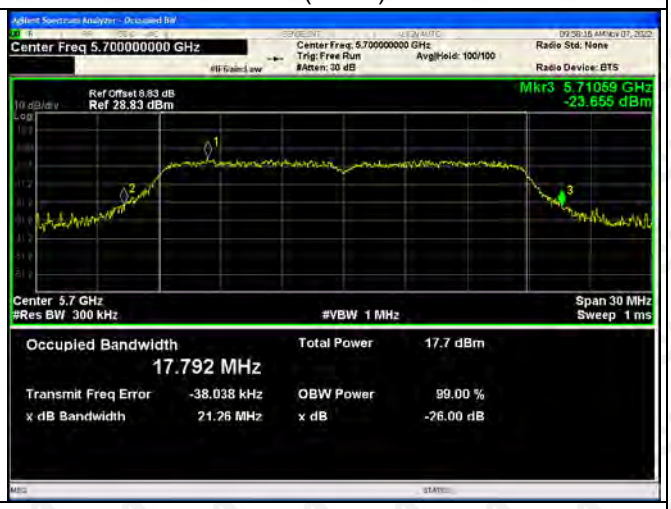

802.11a-5580


802.11a-5700


802.11n(HT20)-5500

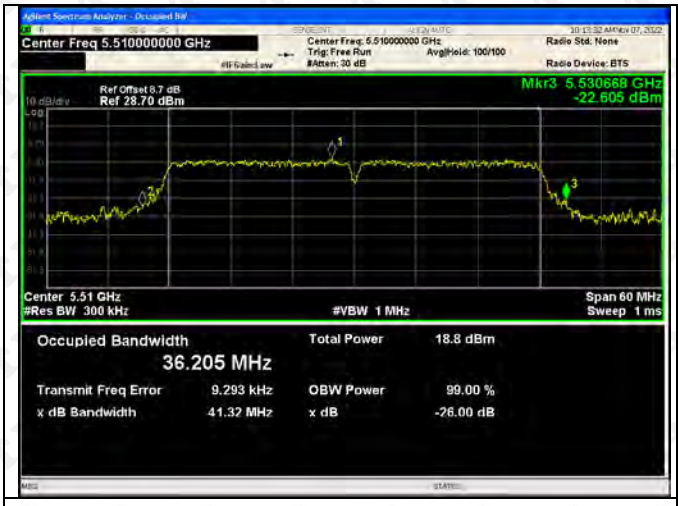

802.11n(HT20)-5580


802.11n(HT20)-5700

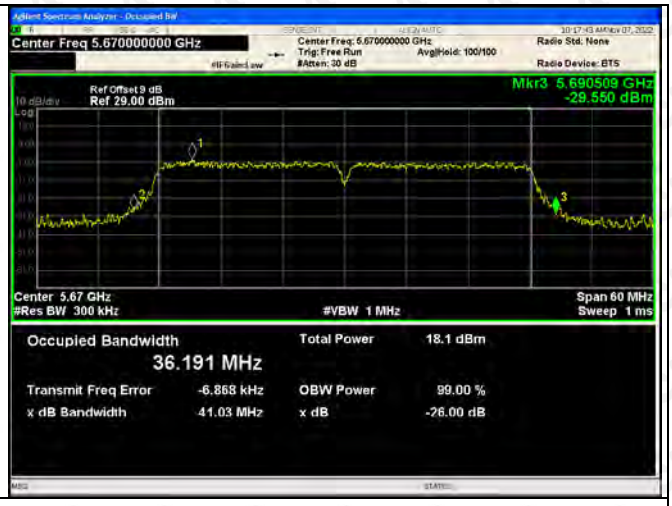



802.11n(HT40)-5510

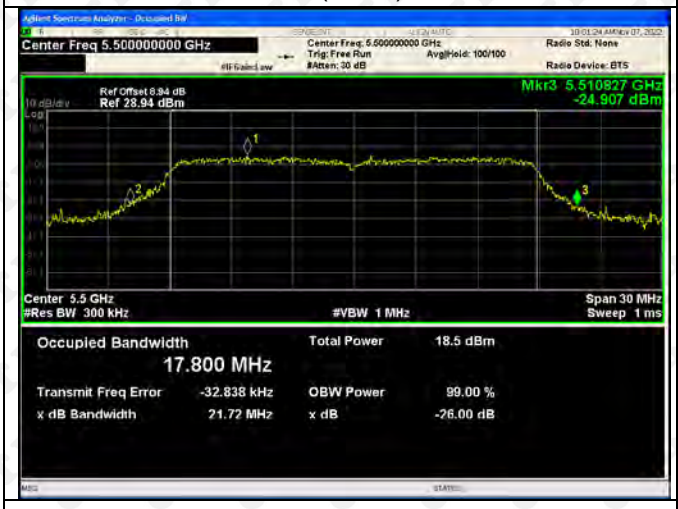
802.11n(HT40)-5670




802.11ac(VH20)-5500

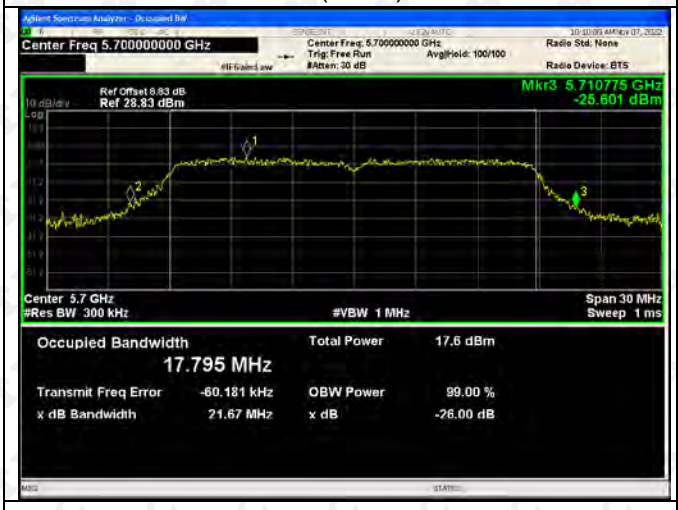



802.11ac(VH20)-5580




802.11ac(VH20)-5700


802.11ac(VH40)-5510




802.11ac(VH40)-5670

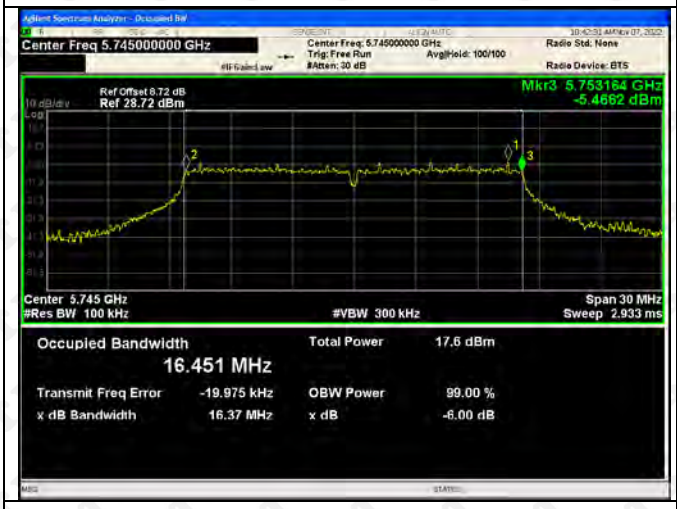

802.11ac(VH80)-5530


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.670000000 GHz
Center Freq: 5.670000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9 dB
10 dB/div
Ref 29.00 dBm
Mkr3 5.690508 GHz
-26.532 dBm
Center 5.67 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.173 MHz
Total Power 18.5 dBm
Transmit Freq Error -14.470 kHz
OBW Power 99.00 %
x dB Bandwidth 41.05 MHz
x dB -26.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.530000000 GHz
Center Freq: 5.530000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 8.88 dB
10 dB/div
Ref 28.88 dBm
Mkr3 5.575423 GHz
-30.281 dBm
Center 5.53 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 120 MHz
Sweep 1.267 ms
Occupied Bandwidth
75.547 MHz
Total Power 19.9 dBm
Transmit Freq Error 30.137 kHz
OBW Power 99.00 %
x dB Bandwidth 90.78 MHz
x dB -26.00 dB

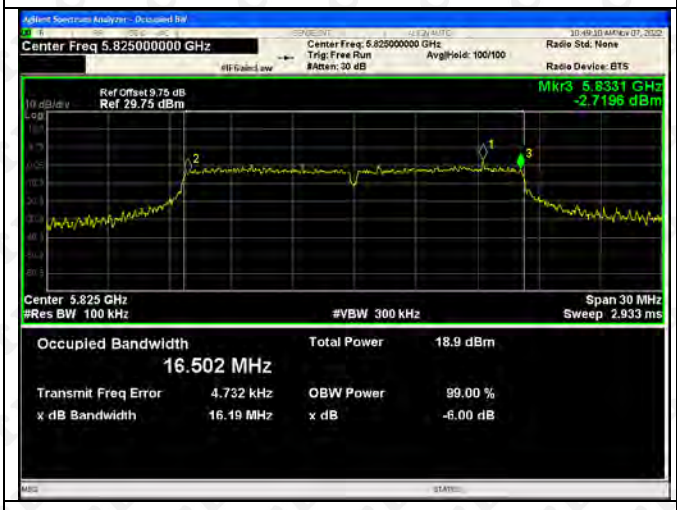
5745-5825MHz
ANT1

802.11a-5745




802.11a-5785


802.11a-5825



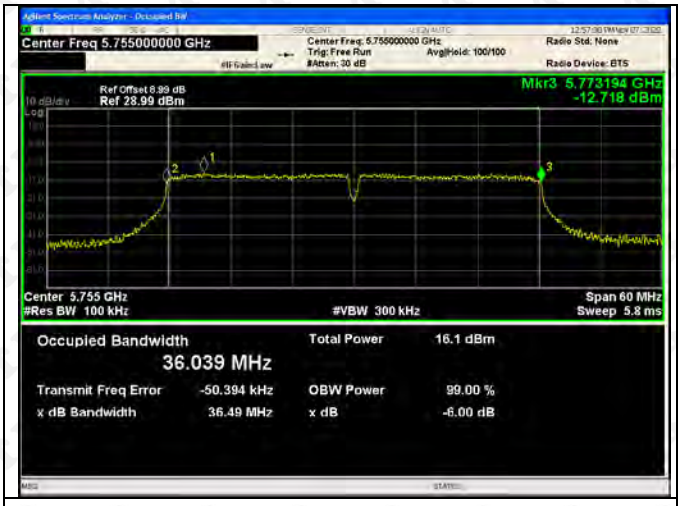

802.11n(HT20)-5745


802.11n(HT20)-5785

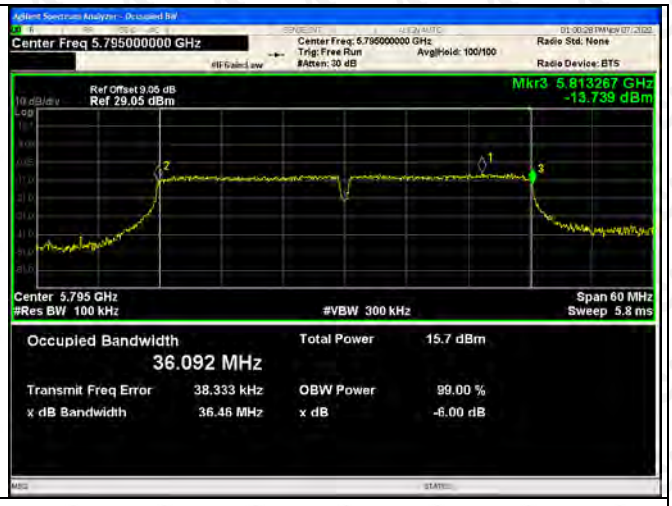

802.11n(HT20)-5825


802.11n(HT40)-5755

802.11n(HT40)-5795




802.11ac(VH20)-5745

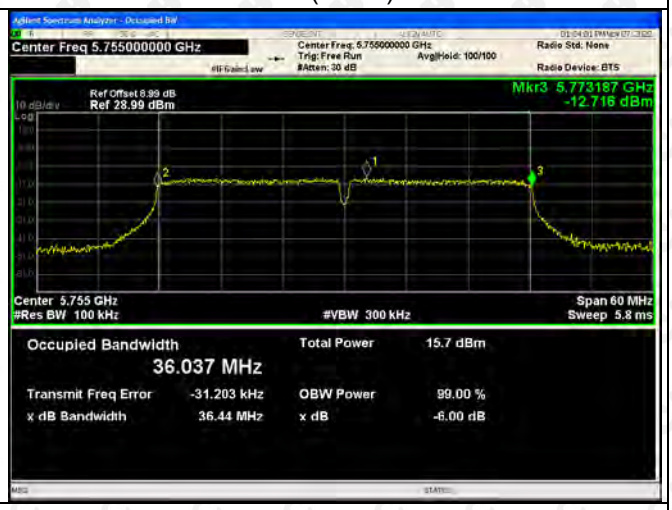



802.11ac(VH20)-5785

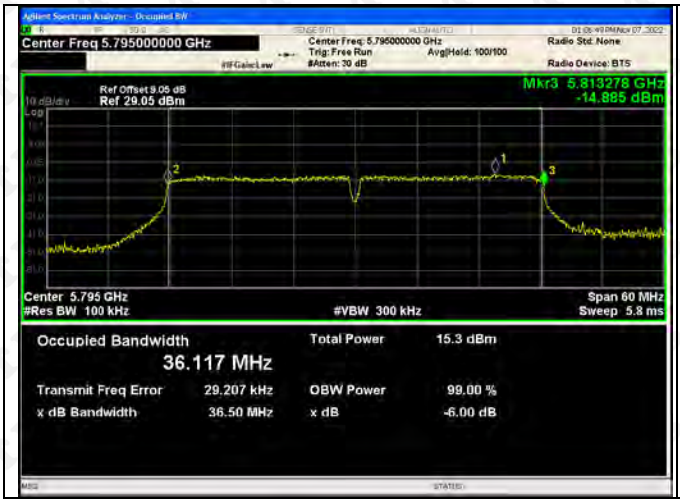

802.11ac(VH20)-5825

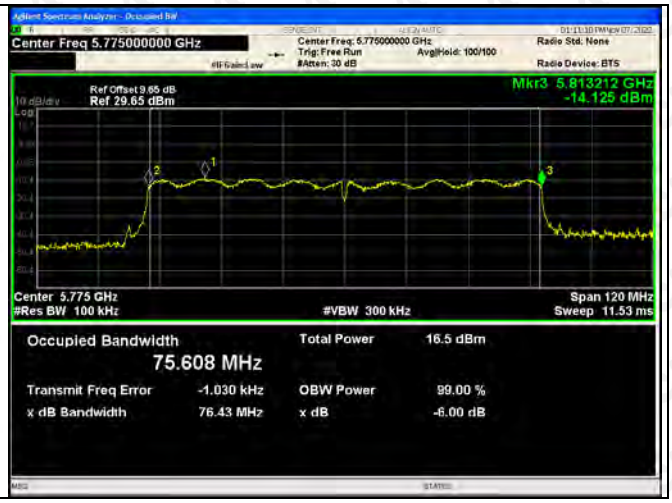

802.11ac(VH40)-5755


802.11ac(VH40)-5795



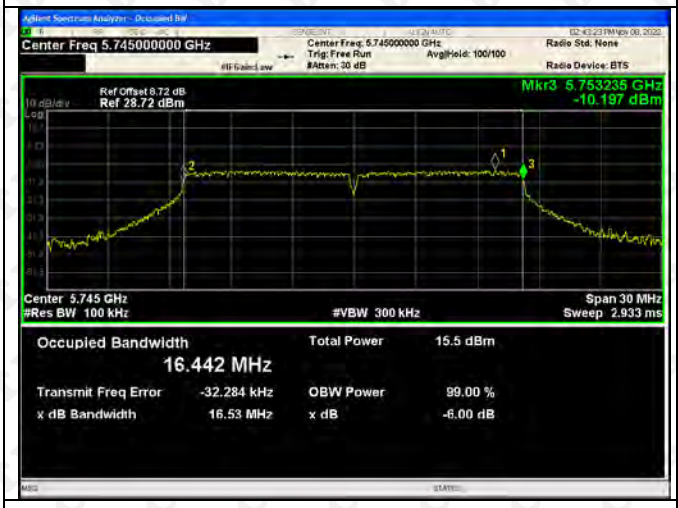

802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.795000000 GHz
Center Freq: 5.795000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.05 dB
10 dB/div
Ref 29.05 dBm
Mkr3 5.813278 GHz
-14.885 dBm
Center 5.795 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 60 MHz
Sweep 5.8 ms
Occupied Bandwidth
36.117 MHz
Total Power 15.3 dBm
Transmit Freq Error 29.207 kHz
OBW Power 99.00 %
x dB Bandwidth 36.50 MHz
x dB -6.00 dB

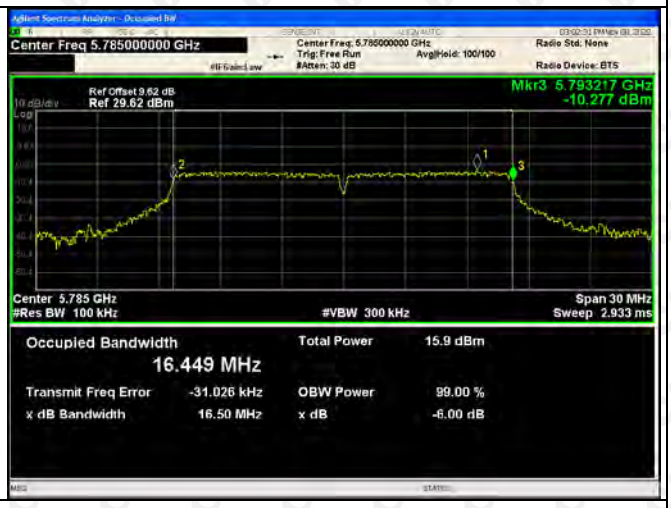

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.65 dB
10 dB/div
Ref 29.65 dBm
Mkr3 5.813212 GHz
-14.125 dBm
Center 5.775 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120 MHz
Sweep 11.53 ms
Occupied Bandwidth
75.608 MHz
Total Power 16.5 dBm
Transmit Freq Error -1.030 kHz
OBW Power 99.00 %
x dB Bandwidth 76.43 MHz
x dB -6.00 dB

ANT2

802.11a-5745




802.11a-5785




802.11a-5825

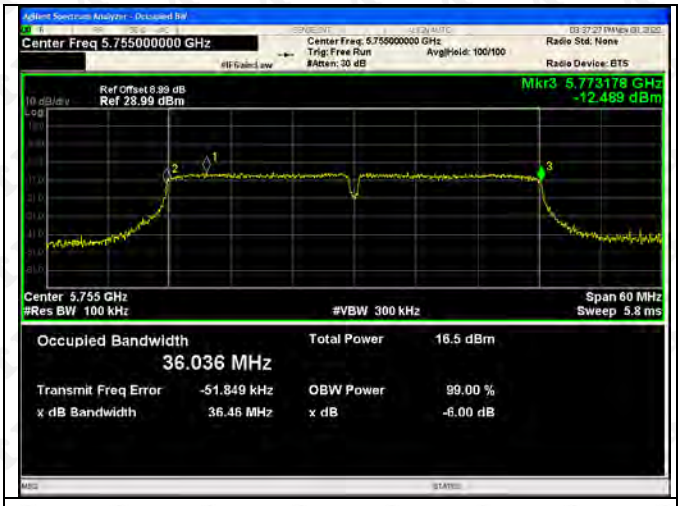

802.11n(HT20)-5745


802.11n(HT20)-5785

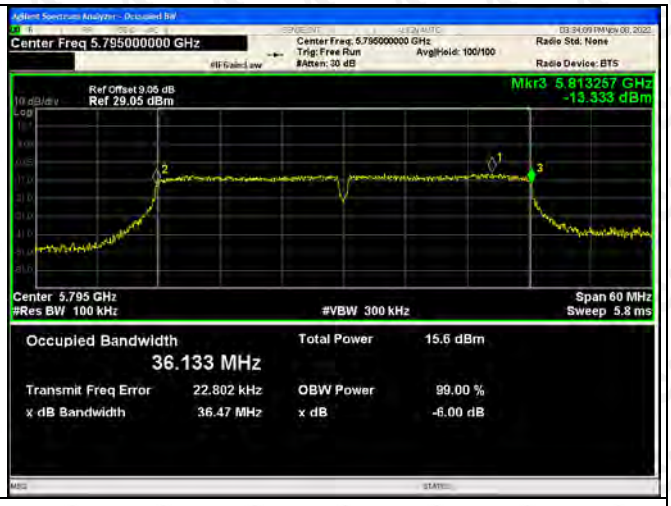

802.11n(HT20)-5825


802.11n(HT40)-5755

802.11n(HT40)-5795




802.11ac(VH20)-5745



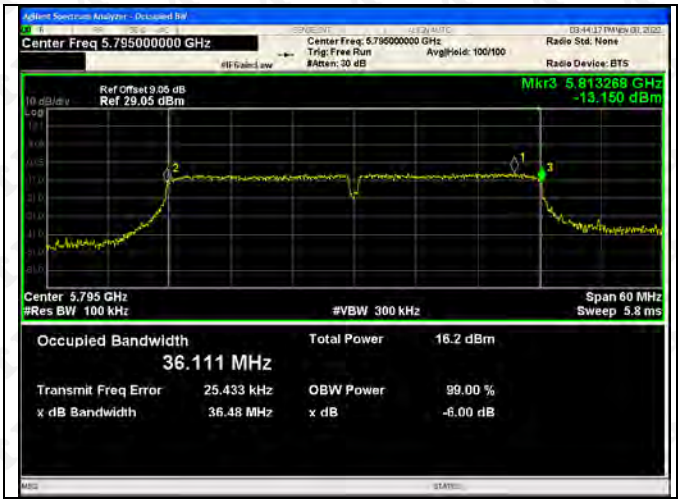

802.11ac(VH20)-5785

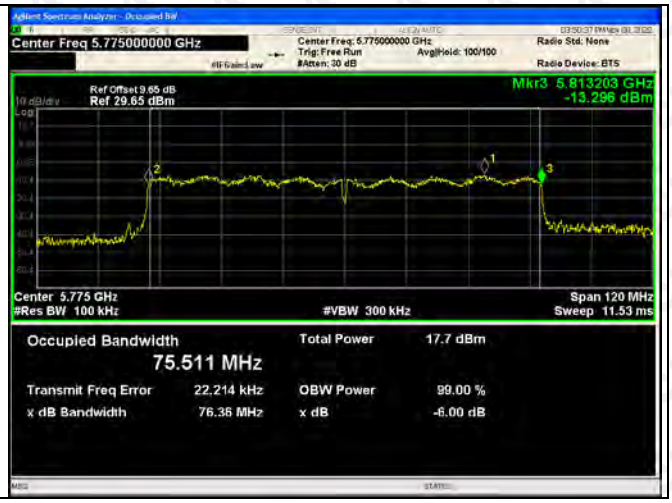

802.11ac(VH20)-5825


802.11ac(VH40)-5755


802.11ac(VH40)-5795

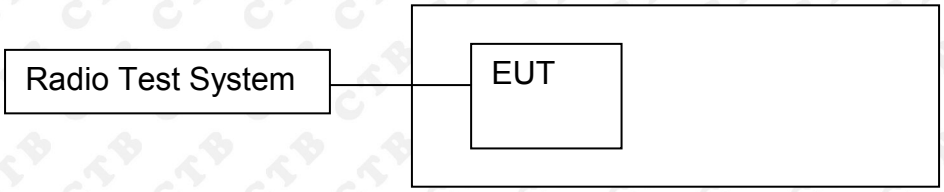

802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.795000000 GHz
Center Freq: 5.795000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.05 dB
10 dB/div
Ref 29.05 dBm
Mkr3 5.813268 GHz
-13.150 dBm
Center 5.795 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 60 MHz
Sweep 5.8 ms
Occupied Bandwidth
36.111 MHz
Total Power 16.2 dBm
Transmit Freq Error 25.433 kHz
OBW Power 99.00 %
x dB Bandwidth 36.48 MHz
x dB -6.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Ref Offset 9.65 dB
10 dB/div
Ref 29.65 dBm
Mkr3 5.813203 GHz
-13.296 dBm
Center 5.775 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120 MHz
Sweep 11.53 ms
Occupied Bandwidth
75.511 MHz
Total Power 17.7 dBm
Transmit Freq Error 22.214 kHz
OBW Power 99.00 %
x dB Bandwidth 76.36 MHz
x dB -6.00 dB

## 11. POWER SPECTRAL DENSITY

11.1 Block Diagram Of Test Setup




11.2 Limit

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

11.3 Test procedure

According to KDB789033 D02v02r01 sectionE, the following is the measurement procedure.

For devices operating in the bands 5.15−5.25 GHz, 5.25−5.35 GHz, and 5.47−5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725−5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:
a) Set RBW ≥ 1/*T*, where *T* is defined in II.B.I.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10 log (1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.
Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since RBW=100 kHz is available on nearly all spectrum analyzers.

11.4 Test Result

5180-5240MHz
ANT1+ANT2

| Test mode | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 802.11a | 5180 | 6.619 | 6.898 | / | 11 | Pass |
| | 5200 | 6.987 | 6.516 | / | 11 | Pass |
| | 5240 | 6.848 | 6.976 | / | 11 | Pass |
| 802.11n(HT20) | 5180 | 6.353 | 6.219 | 9.771 | 11 | Pass |
| | 5200 | 6.56 | 6.704 | 9.768 | 11 | Pass |
| | 5240 | 7.037 | 7.217 | 9.923 | 11 | Pass |
| 802.11n(HT40) | 5190 | 4.545 | 3.964 | 9.297 | 11 | Pass |
| | 5230 | 4.297 | 4.745 | 9.643 | 11 | Pass |
| 802.11ac(VH20) | 5210 | 2.603 | 2.689 | 10.138 | 11 | Pass |
| | 5180 | 6.445 | 7.019 | 7.275 | 11 | Pass |
| | 5200 | 6.946 | 6.64 | 7.537 | 11 | Pass |
| 802.11ac(VH40) | 5240 | 7.166 | 6.88 | 5.657 | 11 | Pass |
| | 5190 | 3.964 | 4.111 | 9.752 | 11 | Pass |
| 802.11ac(VH80) | 5230 | 4.357 | 4.314 | 9.806 | 11 | Pass |

5260-5320MHz
ANT1+ANT2

| Test mode | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 802.11a | 5260 | 7.111 | 7.265 | / | 10.86 | Pass |
| | 5280 | 7.037 | 6.68 | / | 10.86 | Pass |
| | 5320 | 7.453 | 6.727 | / | 10.86 | Pass |
| 802.11n(HT20) | 5260 | 6.762 | 6.975 | 9.880 | 10.86 | Pass |
| | 5280 | 6.663 | 6.58 | 9.632 | 10.86 | Pass |
| | 5320 | 6.377 | 6.339 | 9.368 | 10.86 | Pass |
| 802.11n(HT40) | 5270 | 3.735 | 4.157 | 6.961 | 10.86 | Pass |
| | 5310 | 4.298 | 4.248 | 7.283 | 10.86 | Pass |
| 802.11ac(VH20) | 5260 | 2.775 | 2.691 | 5.744 | 10.86 | Pass |
| | 5280 | 6.692 | 6.705 | 9.709 | 10.86 | Pass |
| | 5320 | 6.735 | 6.71 | 9.733 | 10.86 | Pass |
| 802.11ac(VH40) | 5270 | 6.517 | 6.688 | 9.614 | 10.86 | Pass |
| | 5310 | 6.418 | 3.856 | 10.199 | 10.86 | Pass |
| 802.11ac(VH80) | 5290 | 4.384 | 4.672 | 9.872 | 10.86 | Pass |

5500-5700MHz
ANT1+ANT2

| Test mode | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 802.11a | 5500 | 6.548 | 7.13 | / | 10.63 | Pass |
| | 5580 | 7.351 | 7.374 | / | 10.63 | Pass |
| | 5700 | 6.47 | 6.971 | / | 10.63 | Pass |
| 802.11n(HT20) | 5500 | 6.795 | 6.834 | 9.825 | 10.63 | Pass |
| | 5580 | 6.694 | 6.366 | 9.543 | 10.63 | Pass |
| | 5700 | 5.958 | 6.005 | 8.992 | 10.63 | Pass |
| 802.11n(HT40) | 5510 | 4.619 | 4.757 | 7.699 | 10.63 | Pass |
| | 5670 | 4.354 | 4.062 | 7.221 | 10.63 | Pass |
| 802.11ac(VH20) | 5530 | 1.61 | 3.172 | 5.471 | 10.63 | Pass |
| | 5500 | 7.385 | 7.233 | 10.320 | 10.63 | Pass |
| | 5580 | 6.662 | 6.64 | 9.661 | 10.63 | Pass |
| 802.11ac(VH40) | 5700 | 5.956 | 6.192 | 9.086 | 10.63 | Pass |
| | 5510 | 4.406 | 3.864 | 9.825 | 10.63 | Pass |
| 802.11ac(VH80) | 5670 | 4.078 | 3.445 | 9.543 | 10.63 | Pass |

5745-5825MHz
ANT1+ANT2

| Test mode | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| 802.11a | 5745 | 4.088 | 1.436 | / | 29.85 | Pass |
| | 5785 | 3.827 | 1.629 | / | 29.85 | Pass |
| | 5825 | 4.742 | 3.954 | / | 29.85 | Pass |
| 802.11n(HT20) | 5745 | 3.926 | 2.788 | 6.404 | 29.85 | Pass |
| | 5785 | 2.282 | 1.807 | 5.061 | 29.85 | Pass |
| | 5825 | 3.562 | 3.594 | 6.588 | 29.85 | Pass |
| 802.11n(HT40) | 5755 | -1.422 | -1.165 | 1.719 | 29.85 | Pass |
| | 5795 | -1.212 | -0.272 | 2.294 | 29.85 | Pass |
| 802.11ac(VH20) | 5745 | -2.801 | -1.273 | 1.040 | 29.85 | Pass |
| | 5785 | 3.355 | 1.829 | 5.669 | 29.85 | Pass |
| | 5825 | 3.645 | 2.139 | 5.967 | 29.85 | Pass |
| 802.11ac(VH40) | 5755 | 4.847 | 3.897 | 7.408 | 29.85 | Pass |
| | 5795 | -1.081 | -0.19 | 6.404 | 29.85 | Pass |
| 802.11ac(VH80) | 5775 | -1.355 | -1.429 | 5.061 | 29.85 | Pass |

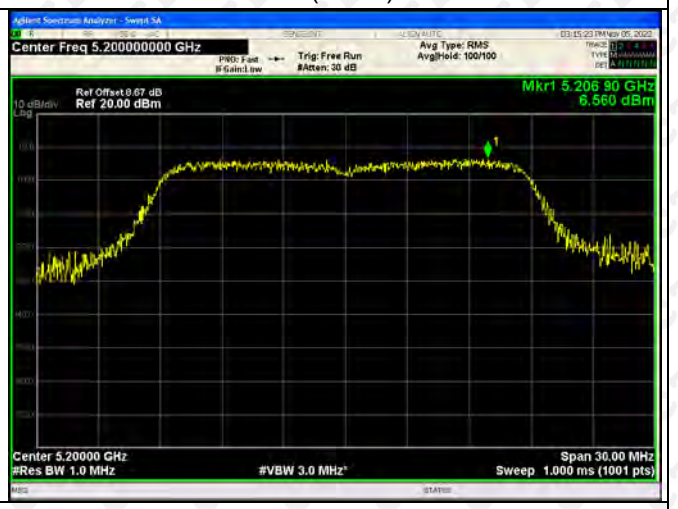
5180-5240MHz
ANT1

| 802.11a-5180 | 802.11a-5200 |
|---|---|
|  |  |
| 802.11a-5240 | 802.11n(HT20)-5180 |
|  |  |
| 802.11n(HT20)-5200 | 802.11n(HT20)-5240 |
|  |  |
| 802.11n(HT40)-5190 | 802.11n(HT40)-5230 |


802.11ac(VH20)-5180


802.11ac(VH20)-5200


802.11ac(VH20)-5240




802.11ac(VH40)-5190


802.11ac(VH40)-5230


802.11ac(VH80)-5210


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.230000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.48 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.244 10 GHz
4.297 dBm
Center 5.23000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.210000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.52 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.237 12 GHz
2.603 dBm
Center 5.21000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

ANT2

802.11a-5180

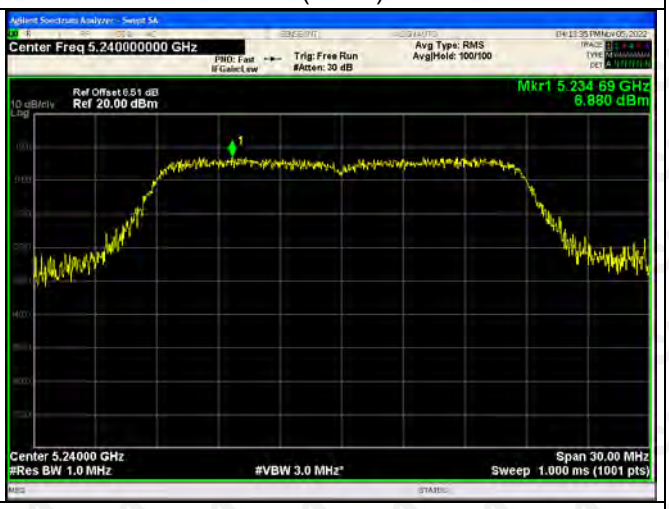

802.11a-5200


802.11a-5240


802.11n(HT20)-5180


802.11n(HT20)-5200


802.11n(HT20)-5240




802.11n(HT40)-5190

802.11n(HT40)-5230


802.11ac(VH20)-5180


802.11ac(VH20)-5200


802.11ac(VH20)-5240


802.11ac(VH40)-5190

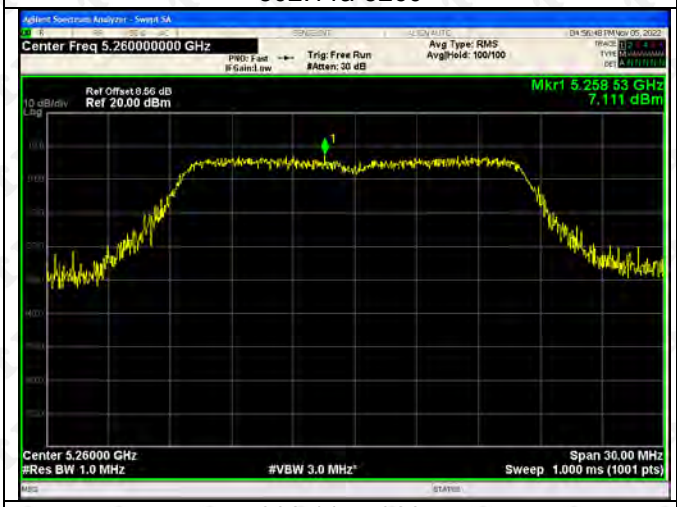
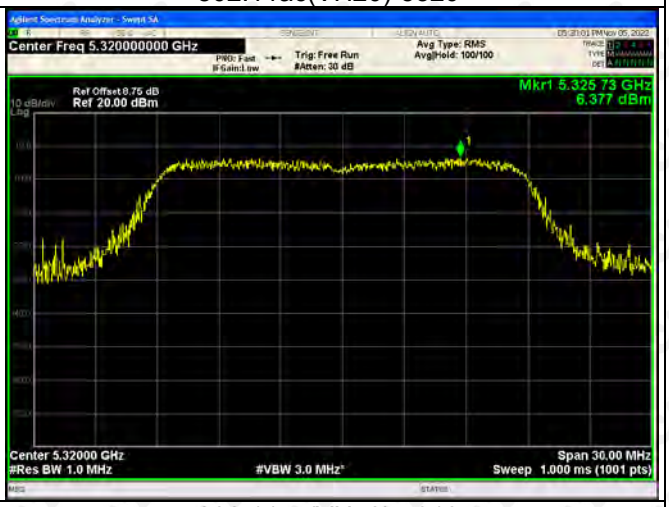

802.11ac(VH40)-5230


802.11ac(VH80)-5210


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.230000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.48 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.242 42 GHz
4.745 dBm
Center 5.23000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.210000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.52 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.236 40 GHz
2.689 dBm
Center 5.21000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

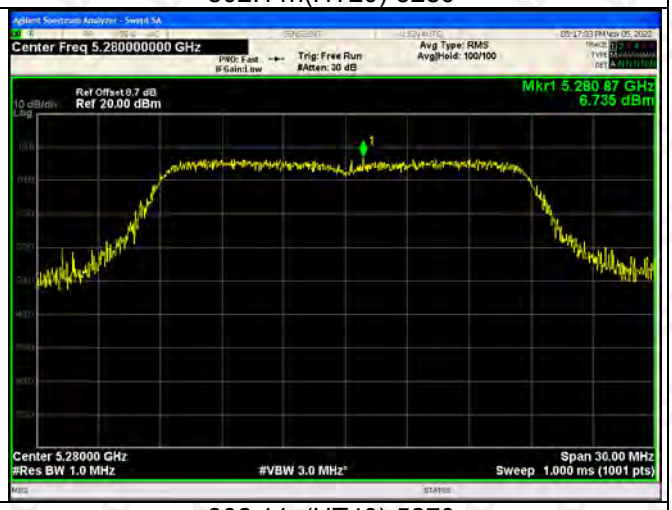
5260-5320MHz
ANT1

| 802.11a-5260 | 802.11a-5280 |
|---|---|
|  |  |
| 802.11a-5320 | 802.11ac(VH20)-5260 |
|  |  |
| 802.11ac(VH20)-5280 | 802.11ac(VH20)-5320 |
|  |  |
| 802.11ac(VH40)-5270 | 802.11ac(VH40)-5310 |


802.11n(HT20)-5260


802.11n(HT20)-5280


802.11n(HT20)-5320




802.11n(HT40)-5270


802.11n(HT40)-5310


802.11ac(HT80)-5290


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.310000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.93 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.293 80 GHz
4.384 dBm
Center 5.31000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.290000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.263 48 GHz
2.775 dBm
Center 5.29000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

ANT2

802.11a-5260


802.11a-5280


802.11a-5320


802.11ac(VH20)-5260


802.11ac(VH20)-5280

802.11ac(VH20)-5320


802.11ac(VH40)-5270


802.11ac(VH40)-5310


802.11n(HT20)-5260


802.11n(HT20)-5280


802.11n(HT20)-5320


802.11n(HT40)-5270

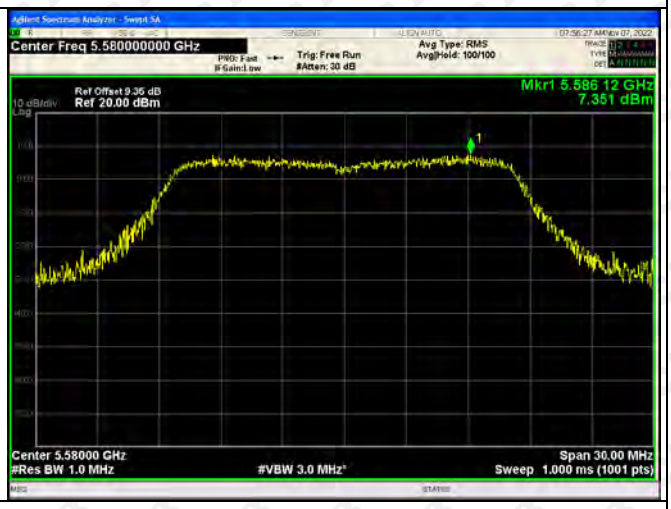
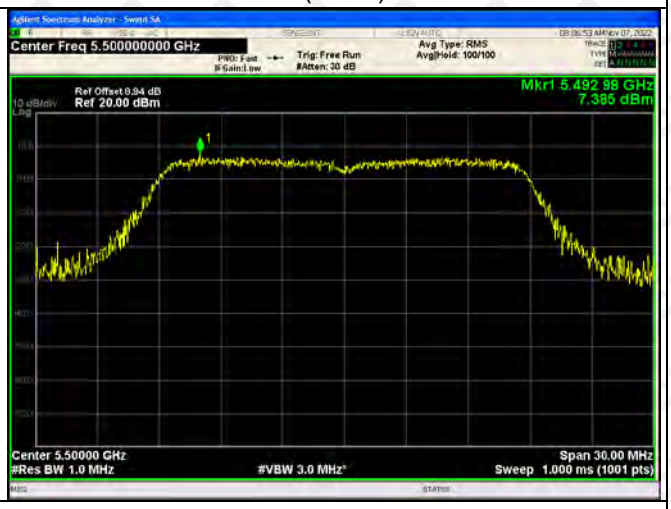

802.11n(HT40)-5310


802.11ac(HT80)-5290


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.310000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.93 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.323 98 GHz
4.672 dBm
Center 5.31000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.290000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.262 88 GHz
2.691 dBm
Center 5.29000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

5500-5700MHz
ANT1

| 802.11a-5500 | 802.11a-5580 |
|---|---|
|  |  |
| 802.11a-5700 | 802.11n(HT20)-5500 |
|  |  |
| 802.11n(HT20)-5580 | 802.11n(HT20)-5700 |
|  |  |
| 802.11n(HT40)-5510 | 802.11n(HT40)-5670 |


802.11ac(VH20)-5500


802.11ac(VH20)-5580

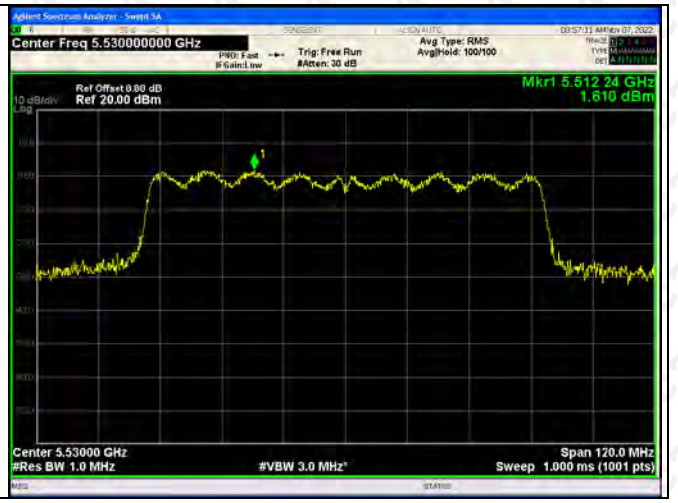

802.11ac(VH20)-5700


802.11ac(VH40)-5510


802.11ac(VH40)-5670


802.11ac(VH80)-5530


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.670000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.683 50 GHz
4.354 dBm
Center 5.67000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.530000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 8.80 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.512 24 GHz
1.610 dBm
Center 5.53000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

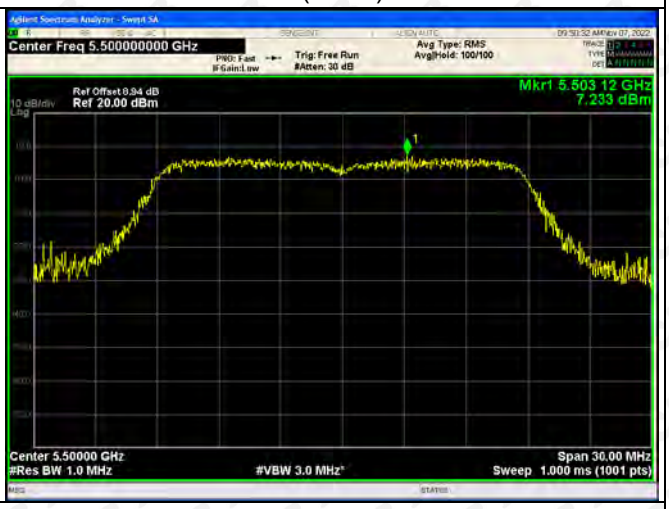
ANT2

802.11a-5500


802.11a-5580


802.11a-5700


802.11n(HT20)-5500




802.11n(HT20)-5580


802.11n(HT20)-5700


802.11n(HT40)-5510

802.11n(HT40)-5670


802.11ac(VH20)-5500


802.11ac(VH20)-5580


802.11ac(VH20)-5700


802.11ac(VH40)-5510


802.11ac(VH40)-5670


802.11ac(VH80)-5530


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.670000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.657 04 GHz
4.062 dBm
Center 5.67000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.530000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 6.88 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.502 76 GHz
3.172 dBm
Center 5.53000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

5745-5825MHz
ANT1

| 802.11a-5745 | 802.11a-5785 |
|---|---|
|  |  |
| 802.11a-5825 | 802.11n(HT20)-5745 |
|  |  |
| 802.11n(HT20)-5785 | 802.11n(HT20)-5825 |
|  |  |
| 802.11n(HT40)-5755 | 802.11n(HT40)-5795 |


802.11ac(VH20)-5745


802.11ac(VH20)-5785


802.11ac(VH20)-5825


802.11ac(VH40)-5755


802.11ac(VH40)-5795


802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.809 04 GHz
-1.212 dBm
Center 5.79500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.66 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.757 84 GHz
-2.801 dBm
Center 5.77500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

ANT2

802.11a-5745


802.11a-5785


802.11a-5825


802.11n(HT20)-5745


802.11n(HT20)-5785


802.11n(HT20)-5825


802.11n(HT40)-5755

802.11n(HT40)-5795


802.11ac(VH20)-5745


802.11ac(VH20)-5785


802.11ac(VH20)-5825


802.11ac(VH40)-5755


802.11ac(VH40)-5795

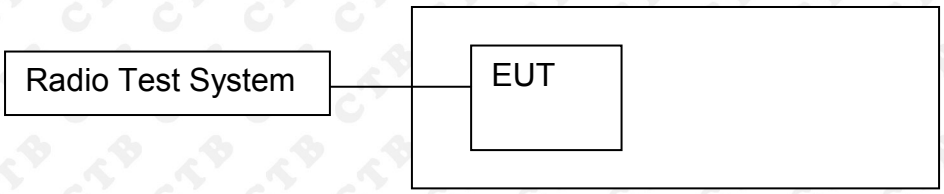

802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.806 58 GHz
-0.272 dBm
Center 5.79500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz*
Span 60.00 MHz
Sweep 1.000 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.65 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.756 76 GHz
-1.273 dBm
Center 5.77500 GHz
#Res BW 510 kHz
#VBW 1.5 MHz*
Span 120.0 MHz
Sweep 1.000 ms (1001 pts)

## 12. FREQUENCY STABILITY

12.1 Block Diagram Of Test Setup




12.2 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

12.3 Test procedure

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.

2. Set EUT as normal operation.

3. Turn the EUT on and couple its output to spectrum.

4. Turn the EUT off and set the chamber to the highest temperature specified.

5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.

6. Repeat step with the temperature chamber set to the lowest temperature.

12.4 Test Result

TX Frequency (5150-5250MHz)

ANT1

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5180.0000 | 5180 | 0.0000 | 0.0040 |
| | | V max (V) | 132 | 5180.0268 | 5180 | 0.0268 | 5.1768 |
| | | V min (V) | 108 | 5180.0719 | 5180 | 0.0719 | 13.8777 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5180.0164 | 5180 | 0.0164 | 3.1751 |
| | | T (°C) | 10 | 5180.0499 | 5180 | 0.0499 | 9.6312 |
| | | T (°C) | 20 | 5180.0130 | 5180 | 0.0130 | 2.5054 |
| | | T (°C) | 30 | 5180.0426 | 5180 | 0.0426 | 8.2295 |
| | | T (°C) | 40 | 5180.0371 | 5180 | 0.0371 | 7.1609 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5200.0174 | 5200 | 0.0174 | 3.3475 |
| | | V max (V) | 132 | 5200.0432 | 5200 | 0.0432 | 8.3059 |
| | | V min (V) | 108 | 5200.0259 | 5200 | 0.0259 | 4.9894 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5200.0143 | 5200 | 0.0143 | 2.7509 |
| | | T (°C) | 10 | 5200.0370 | 5200 | 0.0370 | 7.1245 |
| | | T (°C) | 20 | 5200.0307 | 5200 | 0.0307 | 5.9056 |
| | | T (°C) | 30 | 5200.0229 | 5200 | 0.0229 | 4.4060 |
| | | T (°C) | 40 | 5200.0227 | 5200 | 0.0227 | 4.3599 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5240.0153 | 5240 | 0.0153 | 2.9267 |
| | | V max (V) | 132 | 5240.0294 | 5240 | 0.0294 | 5.6051 |
| | | V min (V) | 108 | 5240.0310 | 5240 | 0.0310 | 5.9084 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5240.0468 | 5240 | 0.0468 | 8.9351 |
| | | T (°C) | 10 | 5240.0533 | 5240 | 0.0533 | 10.1788 |
| | | T (°C) | 20 | 5240.0118 | 5240 | 0.0118 | 2.2567 |
| | | T (°C) | 30 | 5240.0114 | 5240 | 0.0114 | 2.1661 |
| | | T (°C) | 40 | 5240.0284 | 5240 | 0.0284 | 5.4205 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5260MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5260.0422 | 5260 | 0.0422 | 8.0267 |
| | | V max (V) | 132 | 5260.0172 | 5260 | 0.0172 | 3.2763 |
| | | V min (V) | 108 | 5260.0495 | 5260 | 0.0495 | 9.4190 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5260MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5260.0001 | 5260 | 0.0001 | 0.0224 |
| | | T (°C) | 10 | 5260.0918 | 5260 | 0.0918 | 17.4536 |
| | | T (°C) | 20 | 5260.0747 | 5260 | 0.0747 | 14.2109 |
| | | T (°C) | 30 | 5260.0207 | 5260 | 0.0207 | 3.9372 |
| | | T (°C) | 40 | 5260.0116 | 5260 | 0.0116 | 2.2042 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5280MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5280.0006 | 5280 | 0.0006 | 0.1185 |
| | | V max (V) | 132 | 5280.0278 | 5280 | 0.0278 | 5.2735 |
| | | V min (V) | 108 | 5280.0453 | 5280 | 0.0453 | 8.5749 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5280MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5280.0673 | 5280 | 0.0673 | 12.7428 |
| | | T (°C) | 10 | 5280.0377 | 5280 | 0.0377 | 7.1395 |
| | | T (°C) | 20 | 5280.0311 | 5280 | 0.0311 | 5.8967 |
| | | T (°C) | 30 | 5280.0852 | 5280 | 0.0852 | 16.1343 |
| | | T (°C) | 40 | 5280.0214 | 5280 | 0.0214 | 4.0576 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5320MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5320.0177 | 5320 | 0.0177 | 3.3295 |
| | | V max (V) | 132 | 5320.0343 | 5320 | 0.0343 | 6.4418 |
| | | V min (V) | 108 | 5320.0507 | 5320 | 0.0507 | 9.5377 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5320MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5320.0288 | 5320 | 0.0288 | 5.4171 |
| | | T (°C) | 10 | 5320.0749 | 5320 | 0.0749 | 14.0794 |
| | | T (°C) | 20 | 5320.0139 | 5320 | 0.0139 | 2.6209 |
| | | T (°C) | 30 | 5320.0061 | 5320 | 0.0061 | 1.1429 |
| | | T (°C) | 40 | 5320.0660 | 5320 | 0.0660 | 12.4125 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5500MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5550.0290 | 5500 | 50.0290 | 9096.1741 |
| | | V max (V) | 132 | 5550.0191 | 5500 | 50.0191 | 9094.3833 |
| | | V min (V) | 108 | 5550.0066 | 5500 | 50.0066 | 9092.1027 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5500MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5500.0782 | 5500 | 0.0782 | 14.2168 |
| | | T (°C) | 10 | 5500.0183 | 5500 | 0.0183 | 3.3237 |
| | | T (°C) | 20 | 5500.0565 | 5500 | 0.0565 | 10.2718 |
| | | T (°C) | 30 | 5500.0464 | 5500 | 0.0464 | 8.4329 |
| | | T (°C) | 40 | 5500.0927 | 5500 | 0.0927 | 16.8586 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5580MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5580.0245 | 5580 | 0.0245 | 4.3826 |
| | | V max (V) | 132 | 5580.0487 | 5580 | 0.0487 | 8.7194 |
| | | V min (V) | 108 | 5580.0467 | 5580 | 0.0467 | 8.3615 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5580MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5580.0396 | 5580 | 0.0396 | 7.0957 |
| | | T (°C) | 10 | 5580.0354 | 5580 | 0.0354 | 6.3398 |
| | | T (°C) | 20 | 5580.0053 | 5580 | 0.0053 | 0.9446 |
| | | T (°C) | 30 | 5580.0652 | 5580 | 0.0652 | 11.6865 |
| | | T (°C) | 40 | 5580.0340 | 5580 | 0.0340 | 6.0923 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5700MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5700.0007 | 5700 | 0.0007 | 0.1211 |
| | | V max (V) | 132 | 5700.0206 | 5700 | 0.0206 | 3.6148 |
| | | V min (V) | 108 | 5700.0488 | 5700 | 0.0488 | 8.5700 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5700MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5700.0456 | 5700 | 0.0456 | 8.0038 |
| | | T (°C) | 10 | 5700.0283 | 5700 | 0.0283 | 4.9584 |
| | | T (°C) | 20 | 5700.0042 | 5700 | 0.0042 | 0.7297 |
| | | T (°C) | 30 | 5700.0807 | 5700 | 0.0807 | 14.1562 |
| | | T (°C) | 40 | 5700.0156 | 5700 | 0.0156 | 2.7339 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5745.0893 | 5745 | 0.0893 | 15.5483 |
| | | V max (V) | 132 | 5745.0500 | 5745 | 0.0500 | 8.7071 |
| | | V min (V) | 108 | 5745.0893 | 5745 | 0.0893 | 15.5483 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5745.0783 | 5745 | 0.0783 | 13.6333 |
| | | T (°C) | 10 | 5745.0144 | 5745 | 0.0144 | 2.5133 |
| | | T (°C) | 20 | 5745.0091 | 5745 | 0.0091 | 1.5896 |
| | | T (°C) | 30 | 5745.0334 | 5745 | 0.0334 | 5.8141 |
| | | T (°C) | 40 | 5745.0660 | 5745 | 0.0660 | 11.4893 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5785.0838 | 5785 | 0.0838 | 14.4899 |
| | | V max (V) | 132 | 5785.0537 | 5785 | 0.0537 | 9.2821 |
| | | V min (V) | 108 | 5785.0082 | 5785 | 0.0082 | 1.4116 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5785.0278 | 5785 | 0.0278 | 4.8119 |
| | | T (°C) | 10 | 5785.0643 | 5785 | 0.0643 | 11.1122 |
| | | T (°C) | 20 | 5785.0827 | 5785 | 0.0827 | 14.2917 |
| | | T (°C) | 30 | 5785.0383 | 5785 | 0.0383 | 6.6206 |
| | | T (°C) | 40 | 5785.0431 | 5785 | 0.0431 | 7.4471 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5825.0808 | 5825 | 0.0808 | 13.8741 |
| | | V max (V) | 132 | 5825.0698 | 5825 | 0.0698 | 11.9834 |
| | | V min (V) | 108 | 5825.0762 | 5825 | 0.0762 | 13.0788 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5825.0022 | 5825 | 0.0022 | 0.3781 |
| | | T (°C) | 10 | 5825.0680 | 5825 | 0.0680 | 11.6767 |
| | | T (°C) | 20 | 5825.0258 | 5825 | 0.0258 | 4.4215 |
| | | T (°C) | 30 | 5825.0696 | 5825 | 0.0696 | 11.9508 |
| | | T (°C) | 40 | 5825.0693 | 5825 | 0.0693 | 11.9040 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

ANT2:

TX Frequency (5150-5250MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5180.0445 | 5180 | 0.0445 | 8.5850 |
| | | V max (V) | 132 | 5180.0700 | 5180 | 0.0700 | 13.5095 |
| | | V min (V) | 108 | 5180.0915 | 5180 | 0.0915 | 17.6717 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5180MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5180.0170 | 5180 | 0.0170 | 3.2777 |
| | | T (°C) | 10 | 5180.0208 | 5180 | 0.0208 | 4.0151 |
| | | T (°C) | 20 | 5180.0112 | 5180 | 0.0112 | 2.1621 |
| | | T (°C) | 30 | 5180.0079 | 5180 | 0.0079 | 1.5325 |
| | | T (°C) | 40 | 5180.0709 | 5180 | 0.0709 | 13.6896 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5200.0430 | 5200 | 0.0430 | 8.2761 |
| | | V max (V) | 132 | 5200.0325 | 5200 | 0.0325 | 6.2499 |
| | | V min (V) | 108 | 5200.0105 | 5200 | 0.0105 | 2.0160 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5200MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5200.0628 | 5200 | 0.0628 | 12.0751 |
| | | T (°C) | 10 | 5200.0209 | 5200 | 0.0209 | 4.0208 |
| | | T (°C) | 20 | 5200.0663 | 5200 | 0.0663 | 12.7535 |
| | | T (°C) | 30 | 5200.0029 | 5200 | 0.0029 | 0.5663 |
| | | T (°C) | 40 | 5200.0318 | 5200 | 0.0318 | 6.1211 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5240.0180 | 5240 | 0.0180 | 3.4310 |
| | | V max (V) | 132 | 5240.0310 | 5240 | 0.0310 | 5.9067 |
| | | V min (V) | 108 | 5240.0197 | 5240 | 0.0197 | 3.7573 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5240MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5240.0284 | 5240 | 0.0284 | 5.4192 |
| | | T (°C) | 10 | 5240.0686 | 5240 | 0.0686 | 13.0923 |
| | | T (°C) | 20 | 5240.0106 | 5240 | 0.0106 | 2.0258 |
| | | T (°C) | 30 | 5240.0304 | 5240 | 0.0304 | 5.8069 |
| | | T (°C) | 40 | 5240.0697 | 5240 | 0.0697 | 13.3059 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5260MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5260.0714 | 5260 | 0.0714 | 13.5767 |
| | | V max (V) | 132 | 5260.0046 | 5260 | 0.0046 | 0.8799 |
| | | V min (V) | 108 | 5260.0331 | 5260 | 0.0331 | 6.3015 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5260MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5260.0932 | 5260 | 0.0932 | 17.7177 |
| | | T (°C) | 10 | 5260.0295 | 5260 | 0.0295 | 5.6110 |
| | | T (°C) | 20 | 5260.0325 | 5260 | 0.0325 | 6.1875 |
| | | T (°C) | 30 | 5260.0355 | 5260 | 0.0355 | 6.7467 |
| | | T (°C) | 40 | 5260.0327 | 5260 | 0.0327 | 6.2135 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5280MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5280.0845 | 5280 | 0.0845 | 16.0012 |
| | | V max (V) | 132 | 5280.0190 | 5280 | 0.0190 | 3.6063 |
| | | V min (V) | 108 | 5280.0631 | 5280 | 0.0631 | 11.9495 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5280MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5280.0580 | 5280 | 0.0580 | 10.9814 |
| | | T (°C) | 10 | 5280.0175 | 5280 | 0.0175 | 3.3229 |
| | | T (°C) | 20 | 5280.0312 | 5280 | 0.0312 | 5.9172 |
| | | T (°C) | 30 | 5280.0505 | 5280 | 0.0505 | 9.5593 |
| | | T (°C) | 40 | 5280.0199 | 5280 | 0.0199 | 3.7672 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5320MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5320.0506 | 5320 | 0.0506 | 9.5179 |
| | | V max (V) | 132 | 5320.0370 | 5320 | 0.0370 | 6.9507 |
| | | V min (V) | 108 | 5320.0261 | 5320 | 0.0261 | 4.9119 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5320MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | -20 | 5320.0665 | 5320 | 0.0665 | 12.4947 |
| | | T (°C) | -10 | 5320.0106 | 5320 | 0.0106 | 1.9991 |
| | | T (°C) | 0 | 5320.0786 | 5320 | 0.0786 | 14.7794 |
| | | T (°C) | 10 | 5320.0264 | 5320 | 0.0264 | 4.9660 |
| | | T (°C) | 20 | 5320.0548 | 5320 | 0.0548 | 10.3031 |
| | | T (°C) | 30 | 5320.0897 | 5320 | 0.0897 | 16.8647 |
| | | T (°C) | 40 | 5320.0843 | 5320 | 0.0843 | 15.8492 |
| | | T (°C) | 50 | 5320.0215 | 5320 | 0.0215 | 4.0429 |
| | | T (°C) | 60 | 5320.0660 | 5320 | 0.0660 | 12.4067 |
| | | T (°C) | 70 | 5320.0423 | 5320 | 0.0423 | 7.9581 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5500MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5500.0280 | 5500 | 0.0280 | 5.0902 |
| | | V max (V) | 132 | 5500.0126 | 5500 | 0.0126 | 2.2976 |
| | | V min (V) | 108 | 5500.0136 | 5500 | 0.0136 | 2.4795 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5500MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5500.0286 | 5500 | 0.0286 | 5.1987 |
| | | T (°C) | 10 | 5500.0650 | 5500 | 0.0650 | 11.8257 |
| | | T (°C) | 20 | 5500.0252 | 5500 | 0.0252 | 4.5891 |
| | | T (°C) | 30 | 5500.0791 | 5500 | 0.0791 | 14.3898 |
| | | T (°C) | 40 | 5500.0827 | 5500 | 0.0827 | 15.0400 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5580MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5580.0907 | 5580 | 0.0907 | 16.2565 |
| | | V max (V) | 132 | 5580.0241 | 5580 | 0.0241 | 4.3209 |
| | | V min (V) | 108 | 5580.0859 | 5580 | 0.0859 | 15.3894 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5580MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5580.0063 | 5580 | 0.0063 | 1.1347 |
| | | T (°C) | 10 | 5580.0382 | 5580 | 0.0382 | 6.8431 |
| | | T (°C) | 20 | 5580.0676 | 5580 | 0.0676 | 12.1096 |
| | | T (°C) | 30 | 5580.0232 | 5580 | 0.0232 | 4.1499 |
| | | T (°C) | 40 | 5580.0894 | 5580 | 0.0894 | 16.0296 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5700MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5700.0705 | 5700 | 0.0705 | 12.3734 |
| | | V max (V) | 132 | 5700.0095 | 5700 | 0.0095 | 1.6730 |
| | | V min (V) | 108 | 5700.0106 | 5700 | 0.0106 | 1.8565 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5700MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5700.0598 | 5700 | 0.0598 | 10.4840 |
| | | T (°C) | 10 | 5700.0624 | 5700 | 0.0624 | 10.9494 |
| | | T (°C) | 20 | 5700.0888 | 5700 | 0.0888 | 15.5821 |
| | | T (°C) | 30 | 5700.0592 | 5700 | 0.0592 | 10.3886 |
| | | T (°C) | 40 | 5700.0306 | 5700 | 0.0306 | 5.3718 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5745.0695 | 5745 | 0.0695 | 12.0924 |
| | | V max (V) | 132 | 5745.0259 | 5745 | 0.0259 | 4.5005 |
| | | V min (V) | 108 | 5745.0720 | 5745 | 0.0720 | 12.5256 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5745MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5745.0590 | 5745 | 0.0590 | 10.2643 |
| | | T (°C) | 10 | 5745.0816 | 5745 | 0.0816 | 14.1966 |
| | | T (°C) | 20 | 5745.0176 | 5745 | 0.0176 | 3.0564 |
| | | T (°C) | 30 | 5745.0112 | 5745 | 0.0112 | 1.9459 |
| | | T (°C) | 40 | 5745.0812 | 5745 | 0.0812 | 14.1335 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5785.0379 | 5785 | 0.0379 | 6.5476 |
| | | V max (V) | 132 | 5785.0744 | 5785 | 0.0744 | 12.8684 |
| | | V min (V) | 108 | 5785.0760 | 5785 | 0.0760 | 13.1444 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5785MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5785.0642 | 5785 | 0.0642 | 11.1030 |
| | | T (°C) | 10 | 5785.0876 | 5785 | 0.0876 | 15.1400 |
| | | T (°C) | 20 | 5785.0718 | 5785 | 0.0718 | 12.4069 |
| | | T (°C) | 30 | 5785.0640 | 5785 | 0.0640 | 11.0703 |
| | | T (°C) | 40 | 5785.0440 | 5785 | 0.0440 | 7.6095 |
| | | T (°C) | 50 | 5785.0035 | 5785 | 0.0035 | 0.6053 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Voltage vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C) | 20 | V nom (V) | 120 | 5825.0179 | 5825 | 0.0179 | 3.0726 |
| | | V max (V) | 132 | 5825.0137 | 5825 | 0.0137 | 2.3488 |
| | | V min (V) | 108 | 5825.0053 | 5825 | 0.0053 | 0.9178 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

Temperature vs. Frequency Stability

| TEST CONDITIONS | | | | Reference Frequency：5825MHz | | | |
|---|---|---|---|---|---|---|---|
| | | | | f | fc | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V) | 120 | T (°C) | 0 | 5825.0555 | 5825 | 0.0555 | 9.5247 |
| | | T (°C) | 10 | 5825.0557 | 5825 | 0.0557 | 9.5547 |
| | | T (°C) | 20 | 5825.0086 | 5825 | 0.0086 | 1.4824 |
| | | T (°C) | 30 | 5825.0612 | 5825 | 0.0612 | 10.5099 |
| | | T (°C) | 40 | 5825.0053 | 5825 | 0.0053 | 0.9124 |
| Limits | | | | ±20ppm | | | |
| Result | | | | Complies | | | |

## 13. OPERATION IN THE ABSENCE OF INFORMATION TO THE TRANSMIT

13.1 Requirement

15.407(c) requirement:
The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

13.2 Test Results

Operation in the absence of information to the transmit:

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling
signal of ASK message transmitting from remote device and verify whether it shall resend or
discontinue transmission. (manufacturer declare )

## 14. ANTENNA REQUIREMENT

15.203 requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
15.247(b) (4) requirement:
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

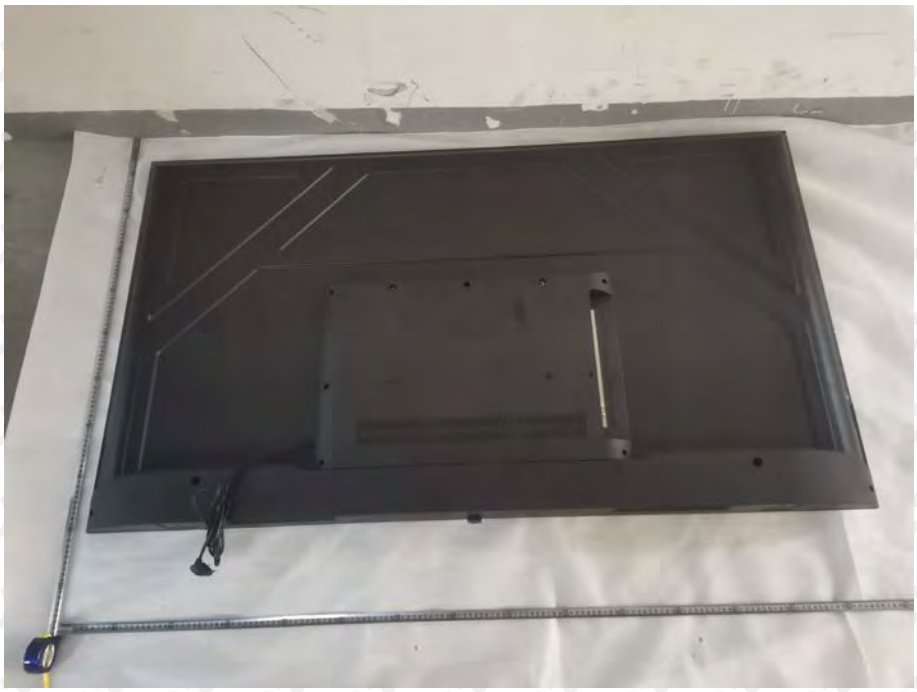
**EUT Antenna:**

The antenna is PIFA antenna and no consideration of replacement. The best case gain of the antenna is 5.2G:2.88dBi, 5.3G:3.13dBi, 5.6G:3.36dBi, 5.8G:3.14dBi.

## 15. EUT PHOTOGRAPHS

**EUT Photo 1**

**EUT Photo 2**



## 16. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz

Above 1GHz

Conducted Emission

**※※※※※ END OF REPORT ※※※※※**