

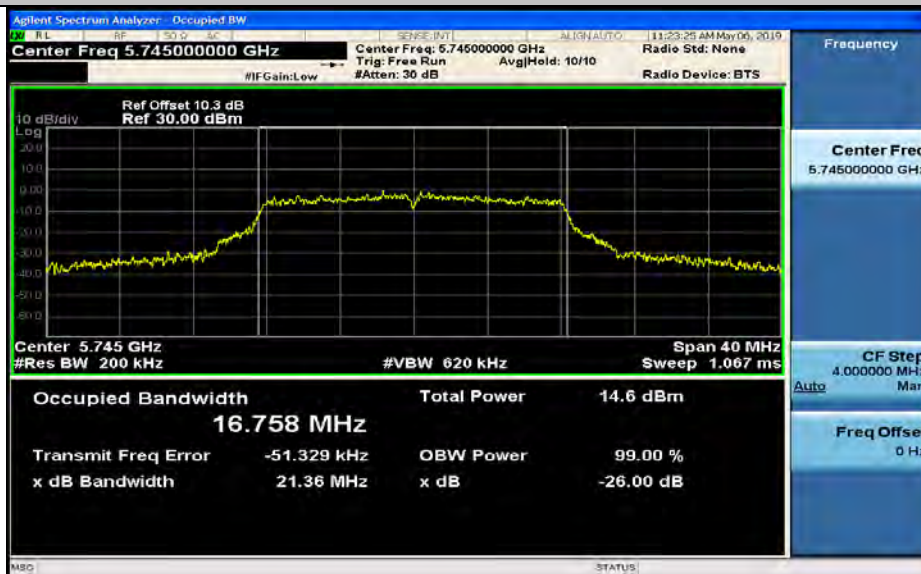


Appendix B SHEM190401242302

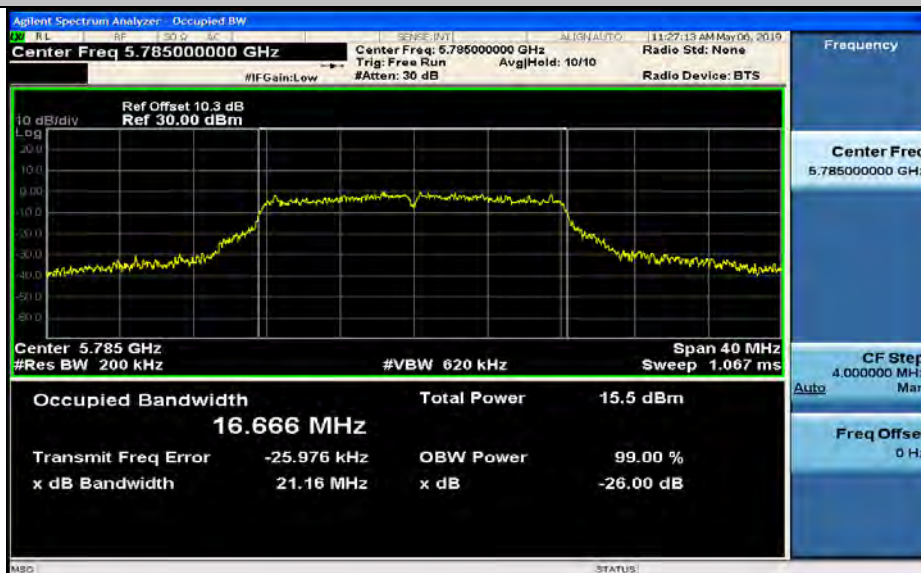
1.(26dB)Emission Bandwidth Measurement

| Test Mode | Test Channel | Ant | (26dB)EBW[MHz] | Limit[MHz] | Verdict |
|-----------|--------------|------|----------------|------------|---------|
| 11A | 5745 | Ant1 | 21.36 | --- | PASS |
| 11A | 5785 | Ant1 | 21.16 | --- | PASS |
| 11A | 5825 | Ant1 | 21.51 | --- | PASS |
| 11N20 | 5745 | Ant1 | 21.58 | --- | PASS |
| 11N20 | 5785 | Ant1 | 21.40 | --- | PASS |
| 11N20 | 5825 | Ant1 | 21.73 | --- | PASS |
| 11N40 | 5755 | Ant1 | 39.40 | --- | PASS |
| 11N40 | 5795 | Ant1 | 39.35 | --- | PASS |
| 11AC20 | 5745 | Ant1 | 21.43 | --- | PASS |
| 11AC20 | 5785 | Ant1 | 21.31 | --- | PASS |
| 11AC20 | 5825 | Ant1 | 21.22 | --- | PASS |
| 11AC40 | 5755 | Ant1 | 39.71 | --- | PASS |
| 11AC40 | 5795 | Ant1 | 39.36 | --- | PASS |
| 11AC80 | 5775 | Ant1 | 80.94 | --- | PASS |

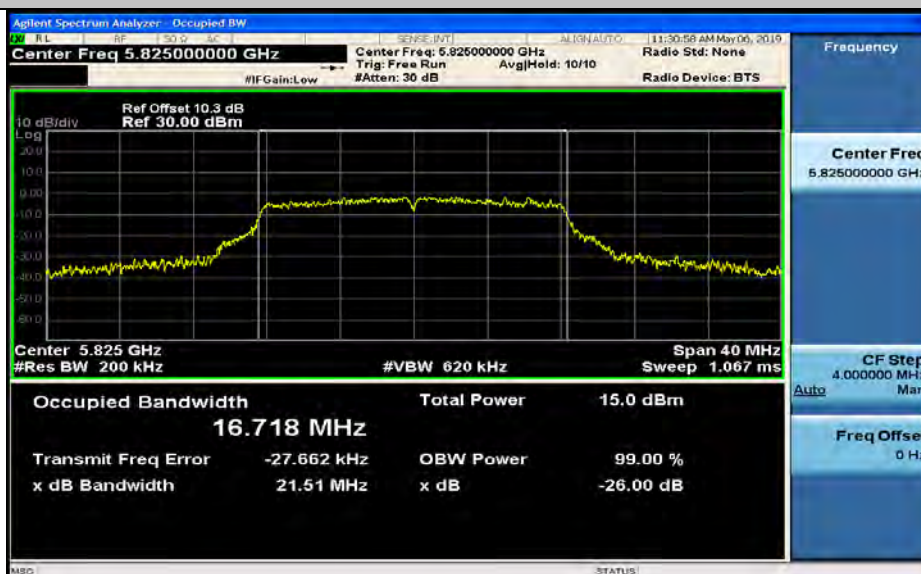
(26dB)Emission Bandwidth Measurement_11A_5745_Ant1



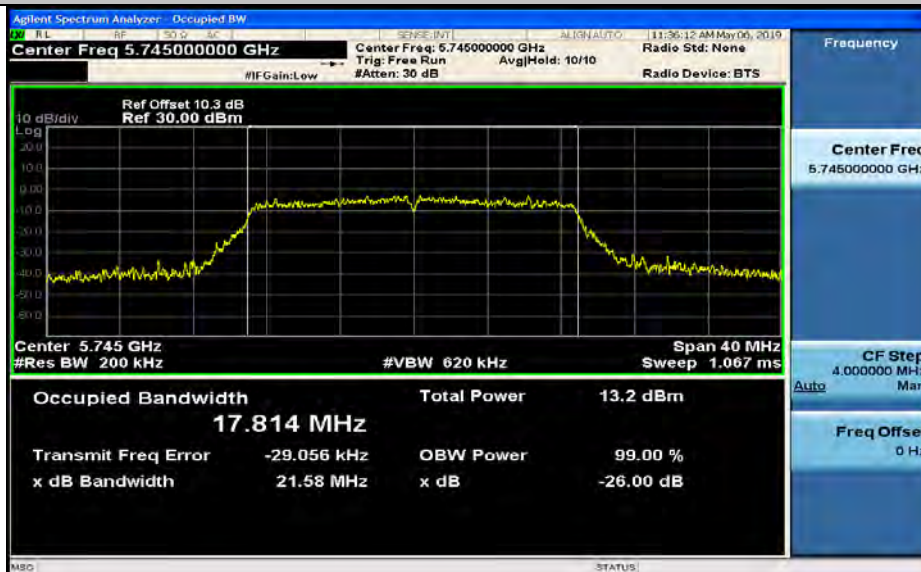
(26dB)Emission Bandwidth Measurement_11A_5785_Ant1



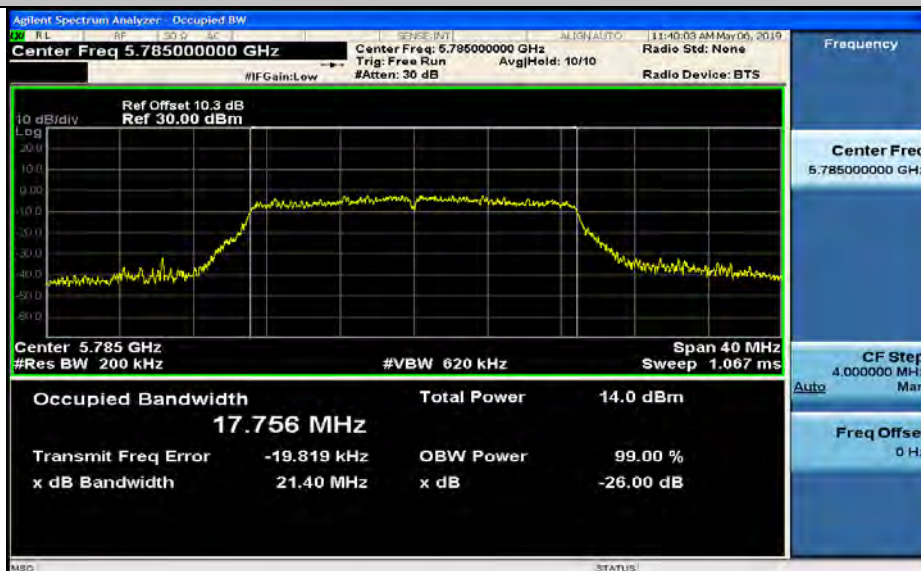
(26dB)Emission Bandwidth Measurement_11A_5825_Ant1



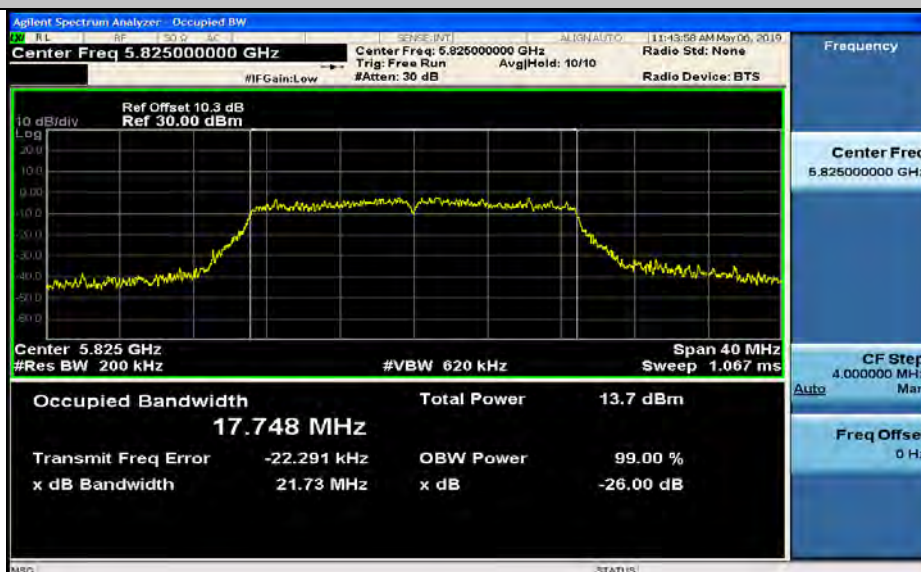
(26dB)Emission Bandwidth Measurement_11N20_5745_Ant1



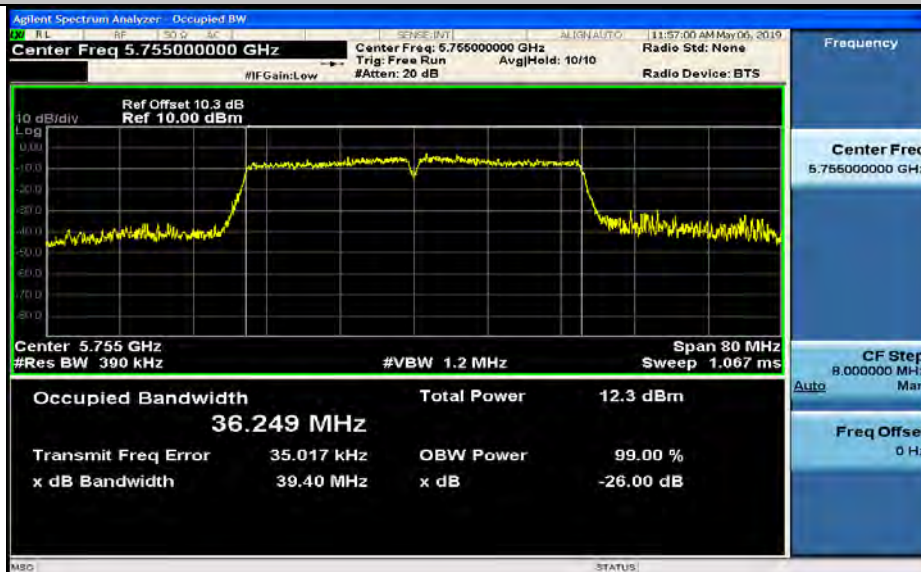
(26dB)Emission Bandwidth Measurement_11N20_5785_Ant1



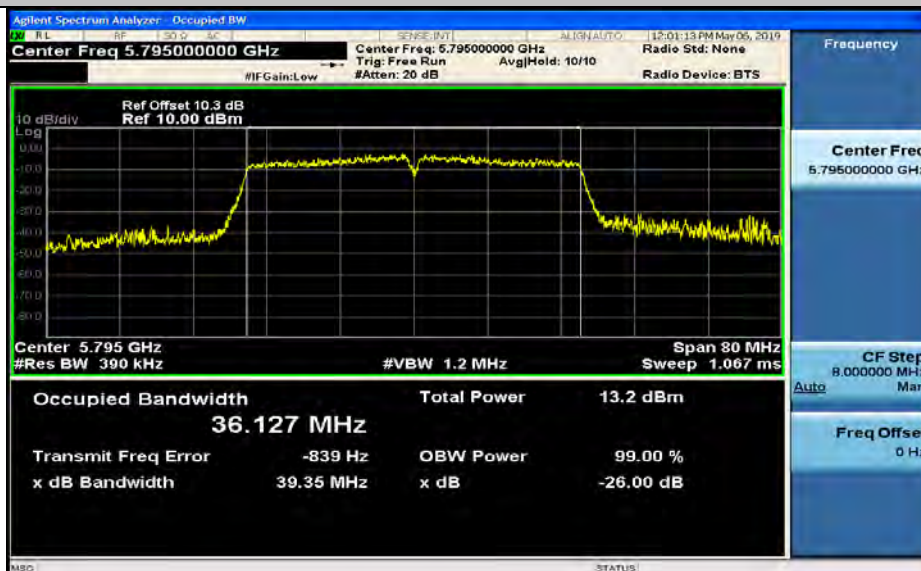
(26dB)Emission Bandwidth Measurement_11N20_5825_Ant1



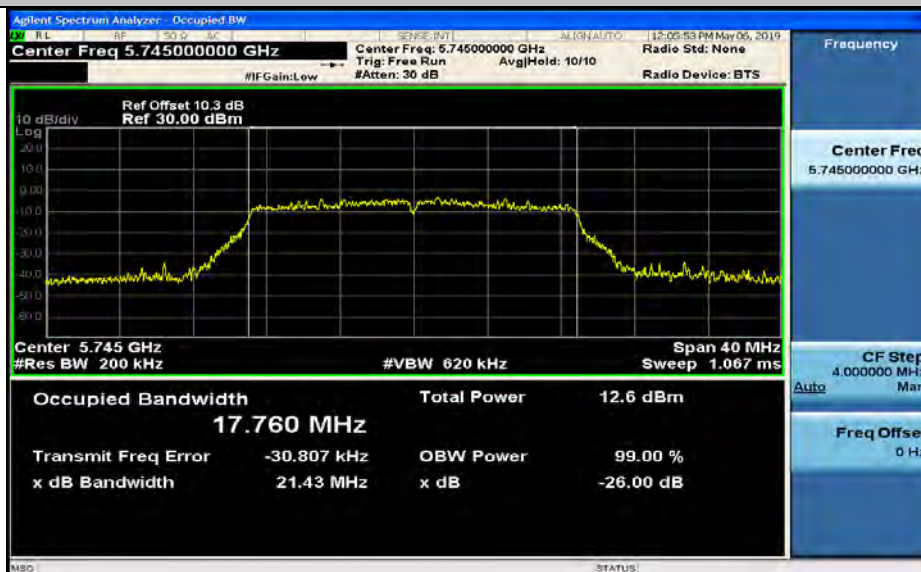
(26dB)Emission Bandwidth Measurement_11N40_5755_Ant1



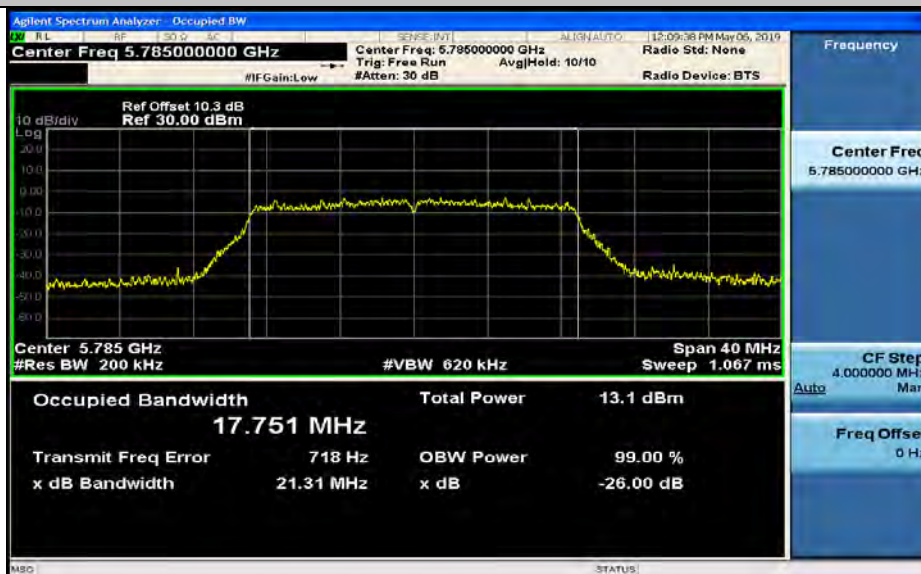
(26dB)Emission Bandwidth Measurement_11N40_5795_Ant1



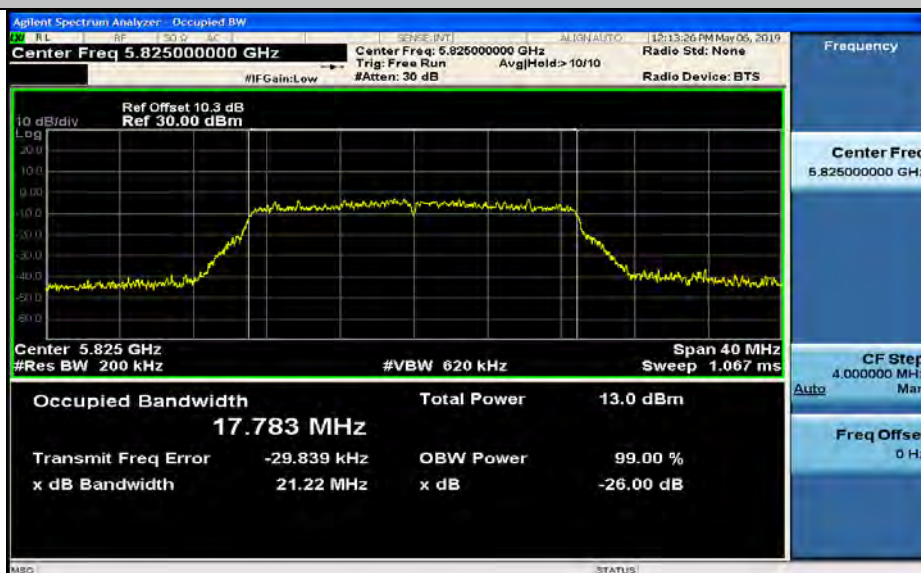
(26dB)Emission Bandwidth Measurement_11AC20_5745_Ant1



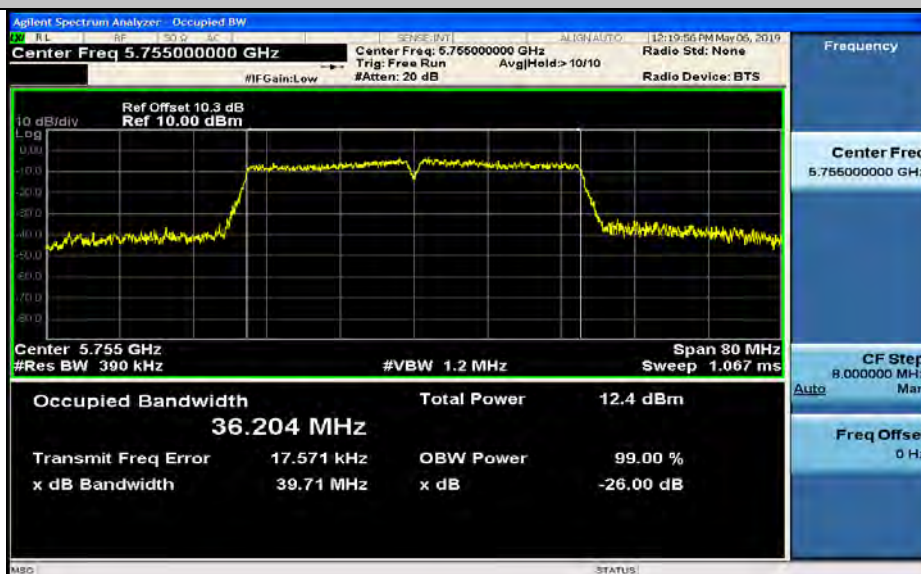
(26dB)Emission Bandwidth Measurement_11AC20_5785_Ant1



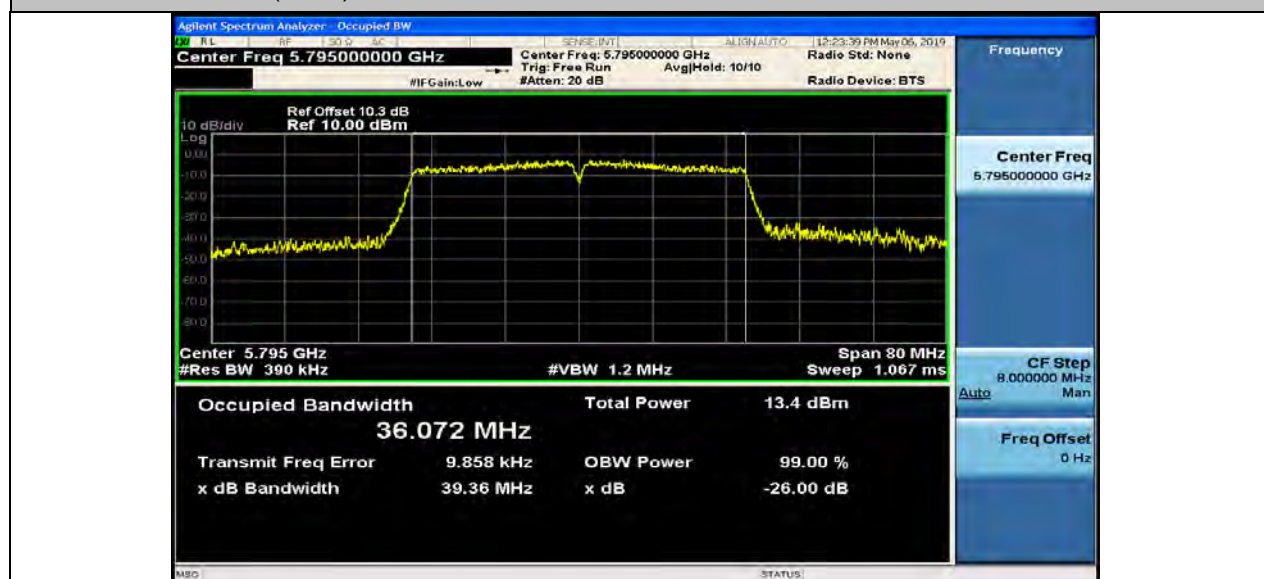
(26dB)Emission Bandwidth Measurement_11AC20_5825_Ant1



(26dB)Emission Bandwidth Measurement_11AC40_5755_Ant1



(26dB)Emission Bandwidth Measurement_11AC40_5795_Ant1



(26dB)Emission Bandwidth Measurement_11AC80_5775_Ant1

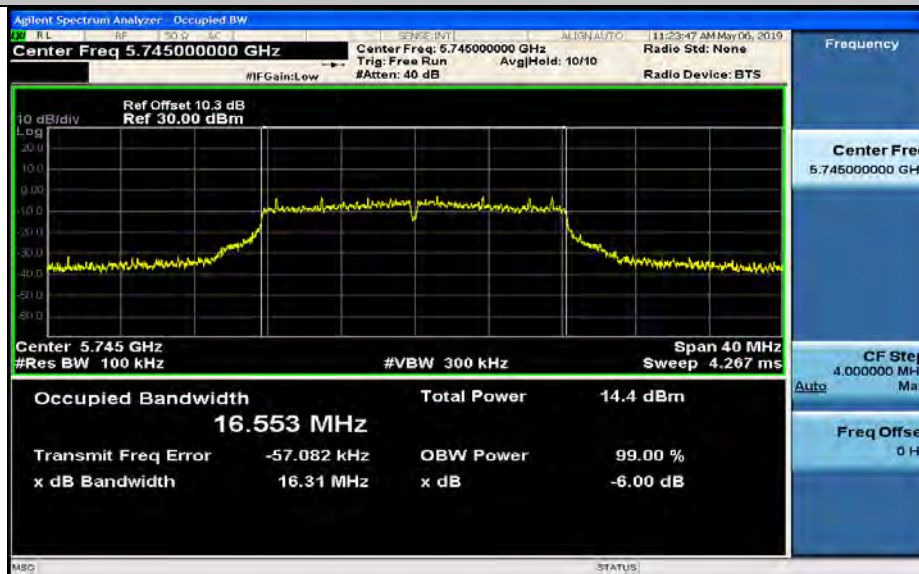




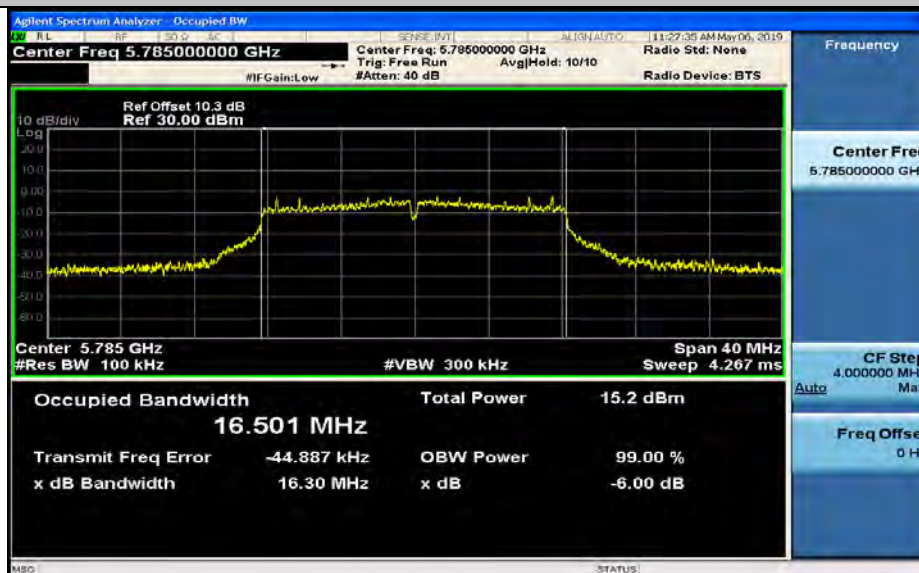
2.(6dB)Minimum Emission Bandwidth Measurement

| Test Mode | Test Channel | Ant | (6dB)EBW[MHz] | Limit[MHz] | Verdict |
|-----------|--------------|------|---------------|------------|---------|
| 11A | 5745 | Ant1 | 16.31 | 0.5 | PASS |
| 11A | 5785 | Ant1 | 16.30 | 0.5 | PASS |
| 11A | 5825 | Ant1 | 16.32 | 0.5 | PASS |
| 11N20 | 5745 | Ant1 | 16.96 | 0.5 | PASS |
| 11N20 | 5785 | Ant1 | 16.36 | 0.5 | PASS |
| 11N20 | 5825 | Ant1 | 17.54 | 0.5 | PASS |
| 11N40 | 5755 | Ant1 | 35.60 | 0.5 | PASS |
| 11N40 | 5795 | Ant1 | 35.46 | 0.5 | PASS |
| 11AC20 | 5745 | Ant1 | 17.56 | 0.5 | PASS |
| 11AC20 | 5785 | Ant1 | 16.40 | 0.5 | PASS |
| 11AC20 | 5825 | Ant1 | 17.30 | 0.5 | PASS |
| 11AC40 | 5755 | Ant1 | 35.75 | 0.5 | PASS |
| 11AC40 | 5795 | Ant1 | 35.48 | 0.5 | PASS |
| 11AC80 | 5775 | Ant1 | 75.16 | 0.5 | PASS |

(6dB)Minimum Emission Bandwidth Measurement_11A_5745_Ant1



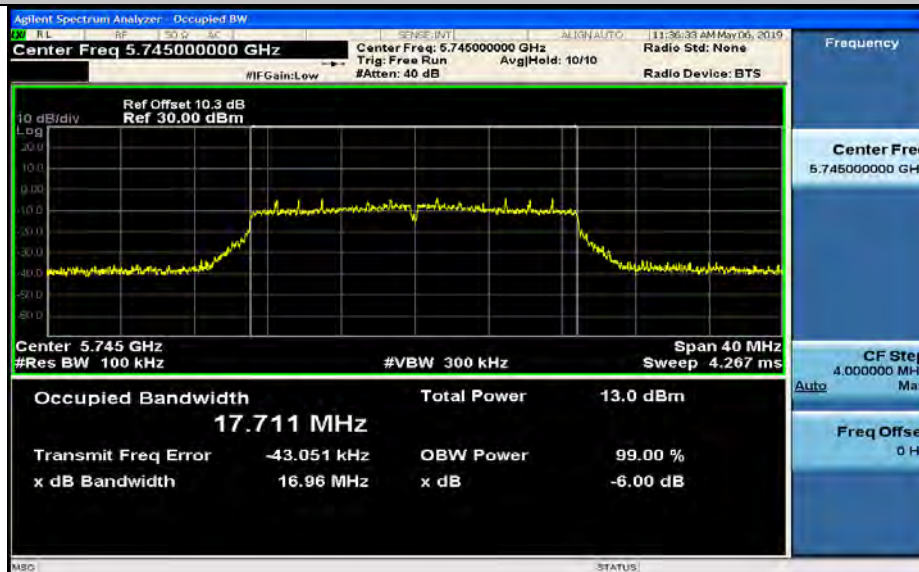
(6dB)Minimum Emission Bandwidth Measurement_11A_5785_Ant1



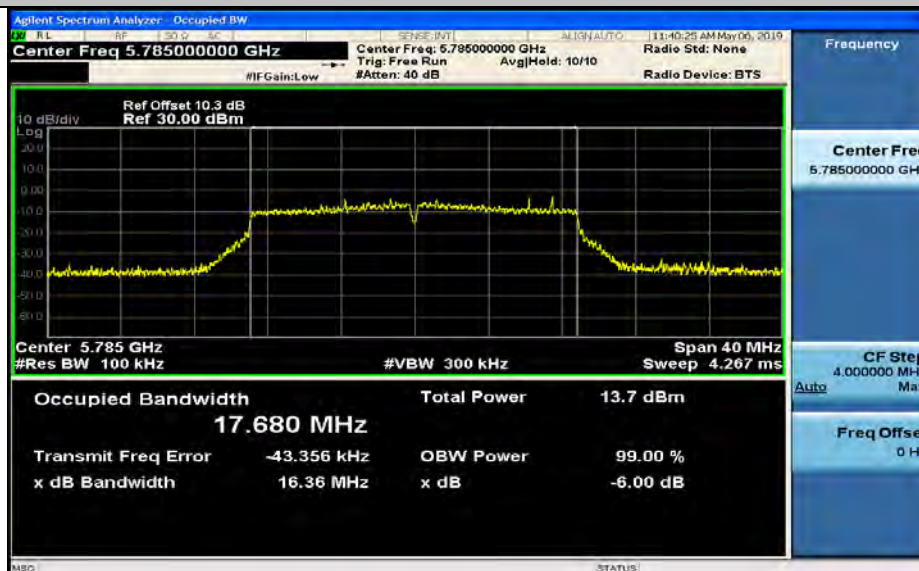
(6dB)Minimum Emission Bandwidth Measurement_11A_5825_Ant1



(6dB)Minimum Emission Bandwidth Measurement_11N20_5745_Ant1



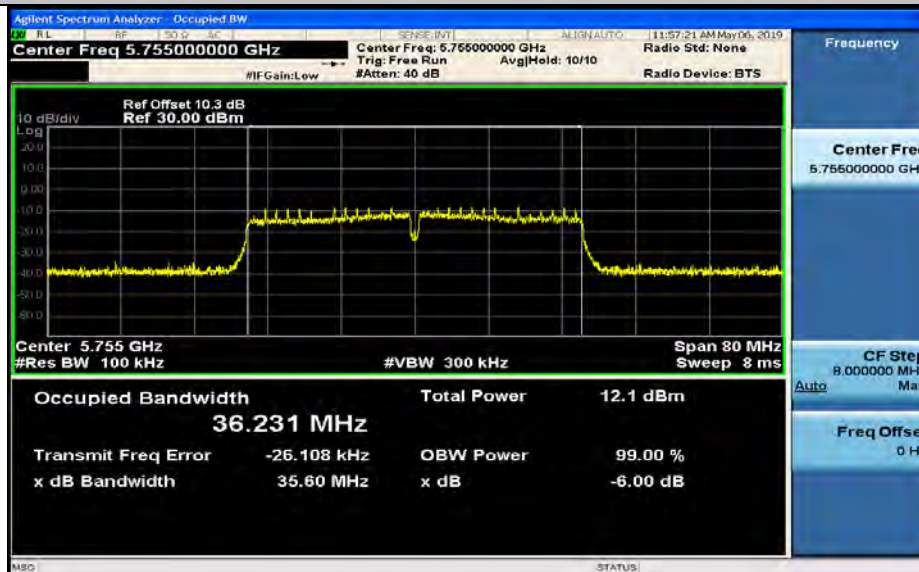
(6dB)Minimum Emission Bandwidth Measurement_11N20_5785_Ant1



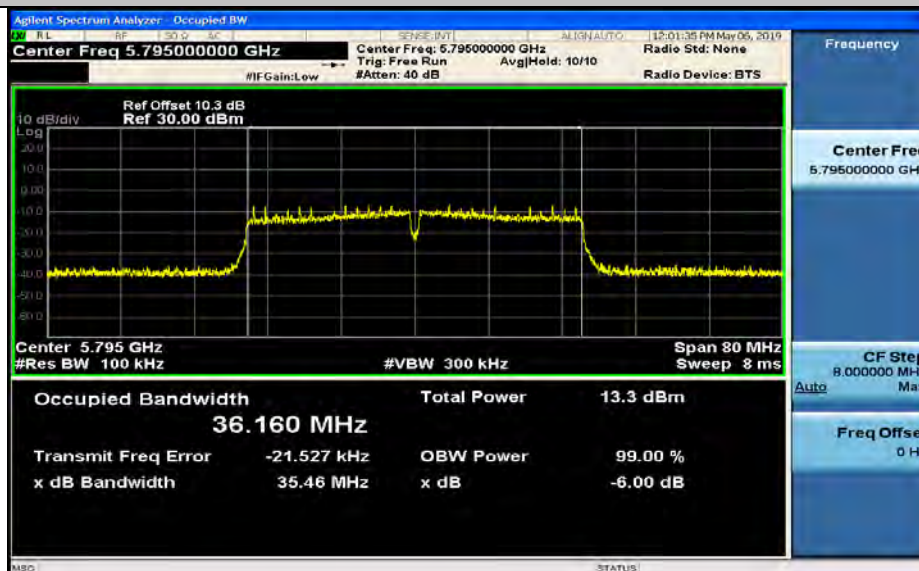
(6dB)Minimum Emission Bandwidth Measurement_11N20_5825_Ant1



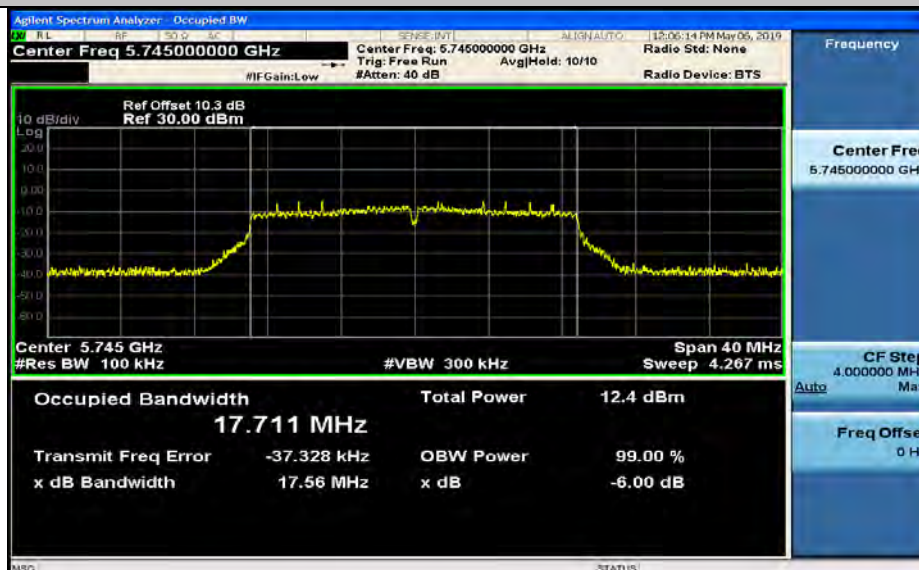
(6dB)Minimum Emission Bandwidth Measurement_11N40_5755_Ant1



(6dB)Minimum Emission Bandwidth Measurement_11N40_5795_Ant1



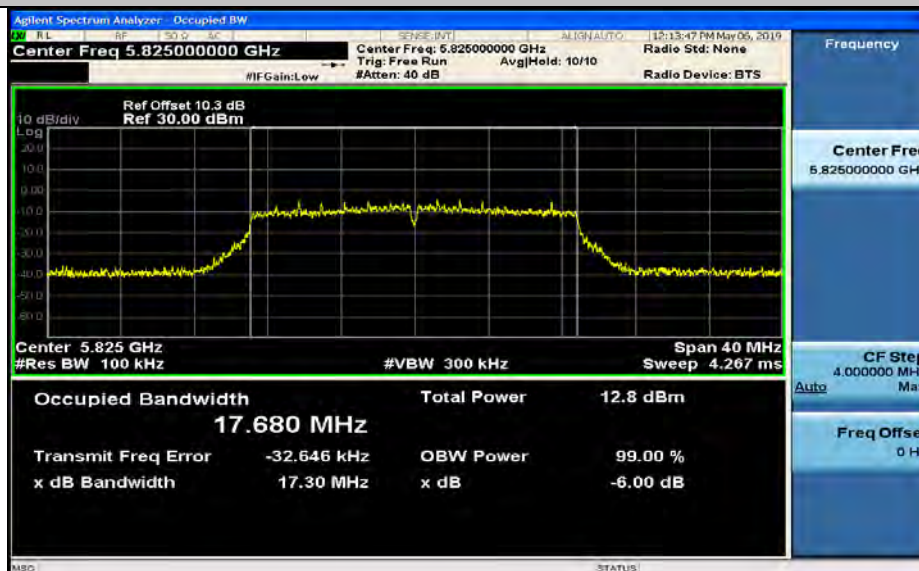
(6dB)Minimum Emission Bandwidth Measurement_11AC20_5745_Ant1



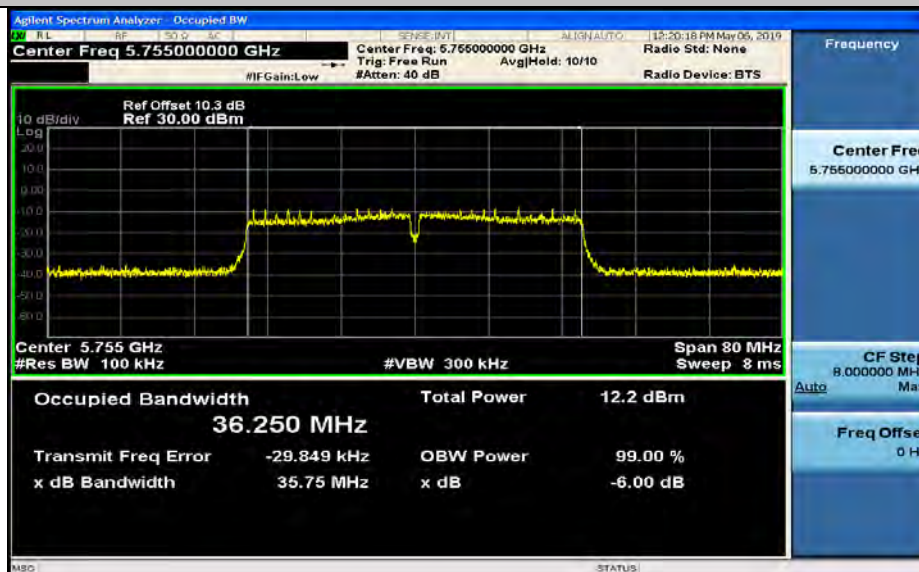
(6dB)Minimum Emission Bandwidth Measurement_11AC20_5785_Ant1



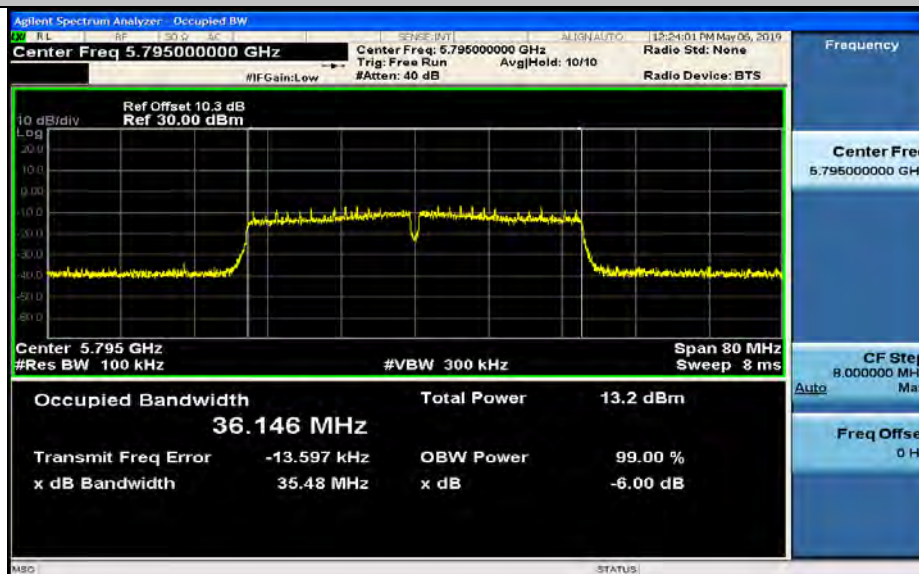
(6dB)Minimum Emission Bandwidth Measurement_11AC20_5825_Ant1



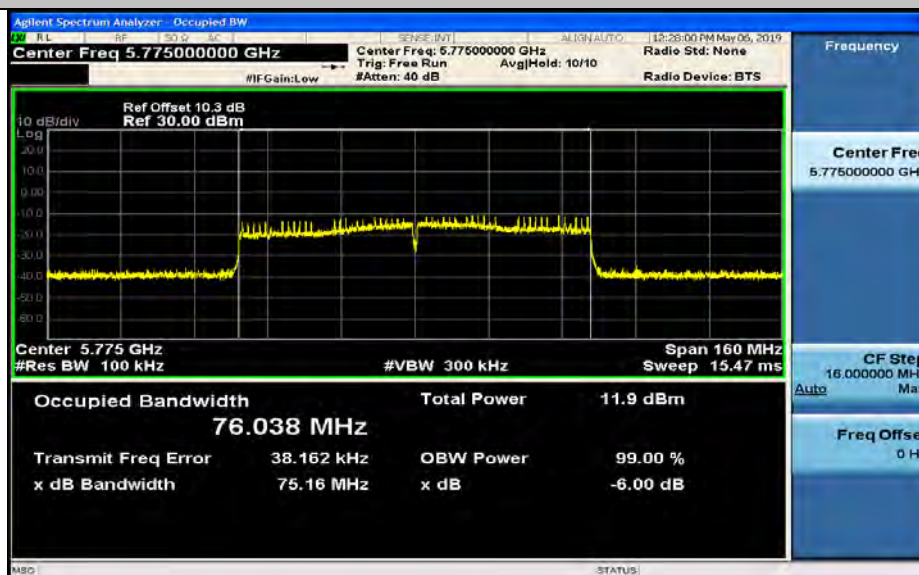
(6dB)Minimum Emission Bandwidth Measurement_11AC40_5755_Ant1



(6dB)Minimum Emission Bandwidth Measurement_11AC40_5795_Ant1



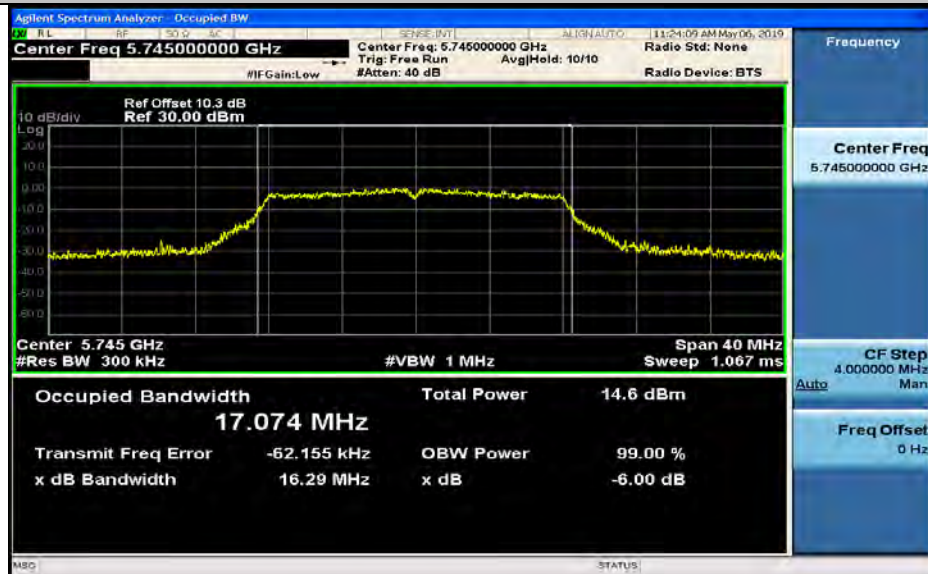
(6dB)Minimum Emission Bandwidth Measurement_11AC80_5775_Ant1



3.Occupied Bandwidth Measurement

| Test Mode | Test Channel | Ant | OBW[MHz] | Limit[MHz] | Verdict |
|-----------|--------------|------|----------|------------|---------|
| 11A | 5745 | Ant1 | 17.07 | --- | PASS |
| 11A | 5785 | Ant1 | 17.01 | --- | PASS |
| 11A | 5825 | Ant1 | 17.07 | --- | PASS |
| 11N20 | 5745 | Ant1 | 18.05 | --- | PASS |
| 11N20 | 5785 | Ant1 | 18.02 | --- | PASS |
| 11N20 | 5825 | Ant1 | 18.04 | --- | PASS |
| 11N40 | 5755 | Ant1 | 36.78 | --- | PASS |
| 11N40 | 5795 | Ant1 | 36.52 | --- | PASS |
| 11AC20 | 5745 | Ant1 | 18.05 | --- | PASS |
| 11AC20 | 5785 | Ant1 | 17.98 | --- | PASS |
| 11AC20 | 5825 | Ant1 | 18.05 | --- | PASS |
| 11AC40 | 5755 | Ant1 | 36.72 | --- | PASS |
| 11AC40 | 5795 | Ant1 | 36.61 | --- | PASS |
| 11AC80 | 5775 | Ant1 | 76.14 | --- | PASS |

Occupied Bandwidth Measurement_11A_5745_Ant1



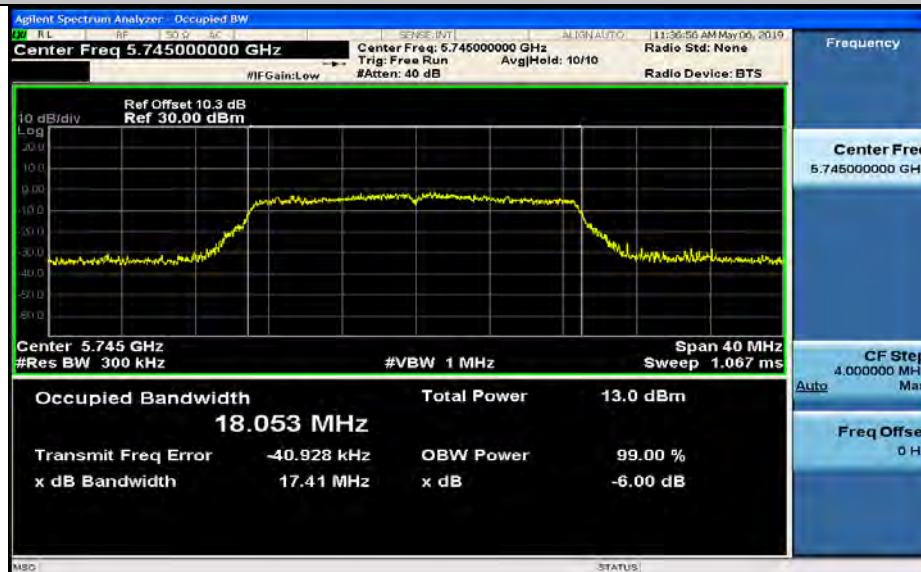
Occupied Bandwidth Measurement_11A_5785_Ant1



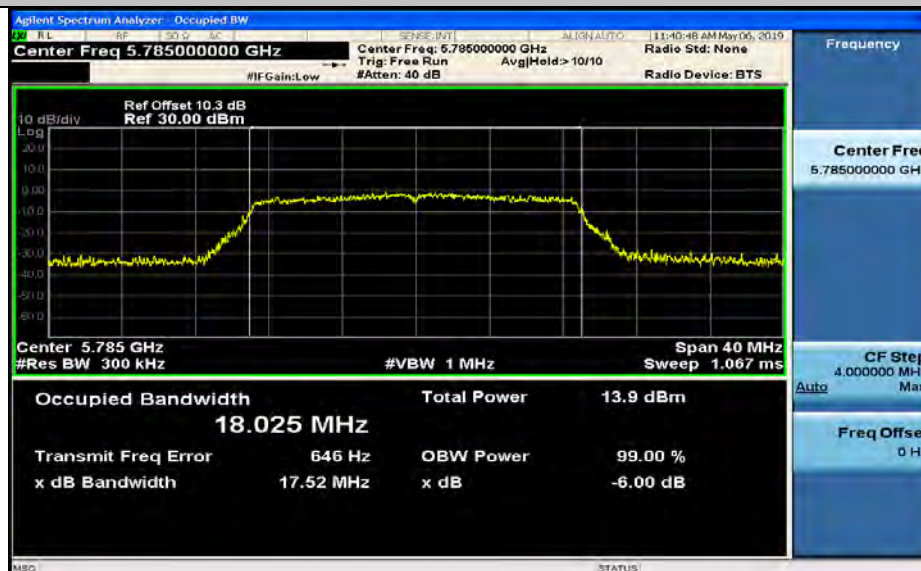
Occupied Bandwidth Measurement_11A_5825_Ant1



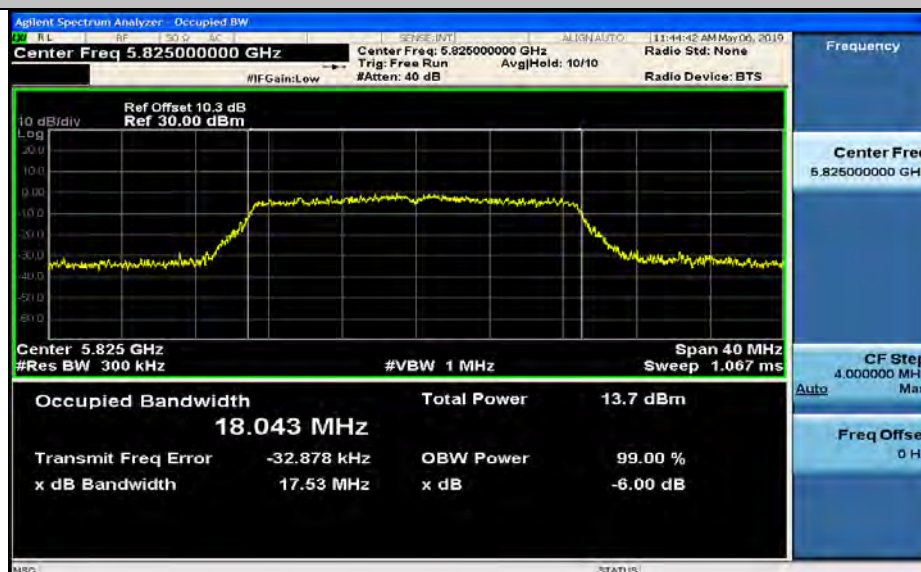
Occupied Bandwidth Measurement_11N20_5745_Ant1



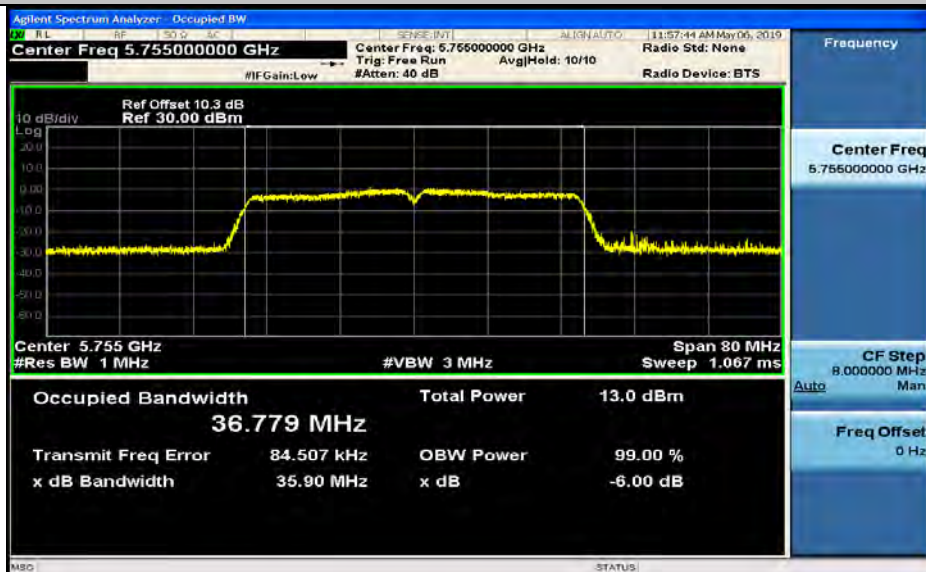
Occupied Bandwidth Measurement_11N20_5785_Ant1



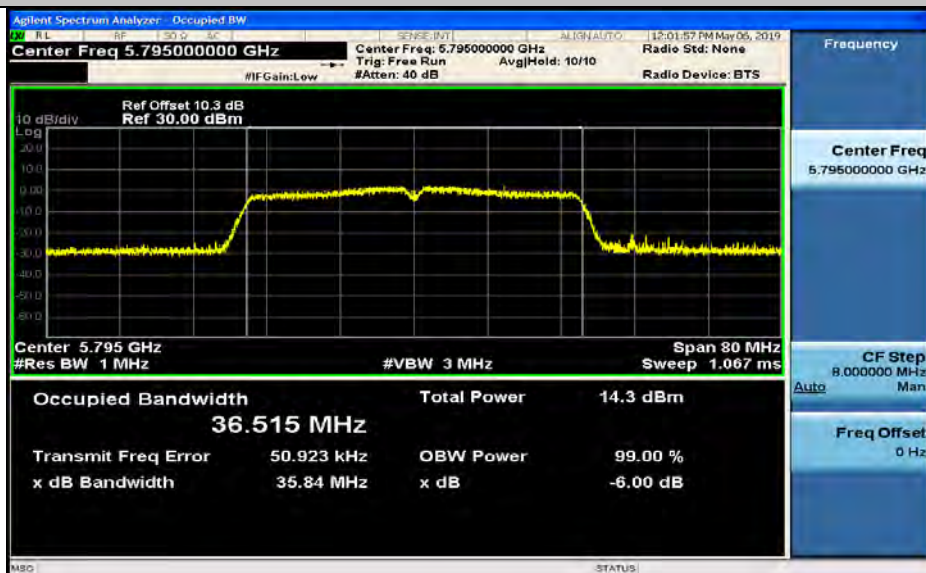
Occupied Bandwidth Measurement_11N20_5825_Ant1



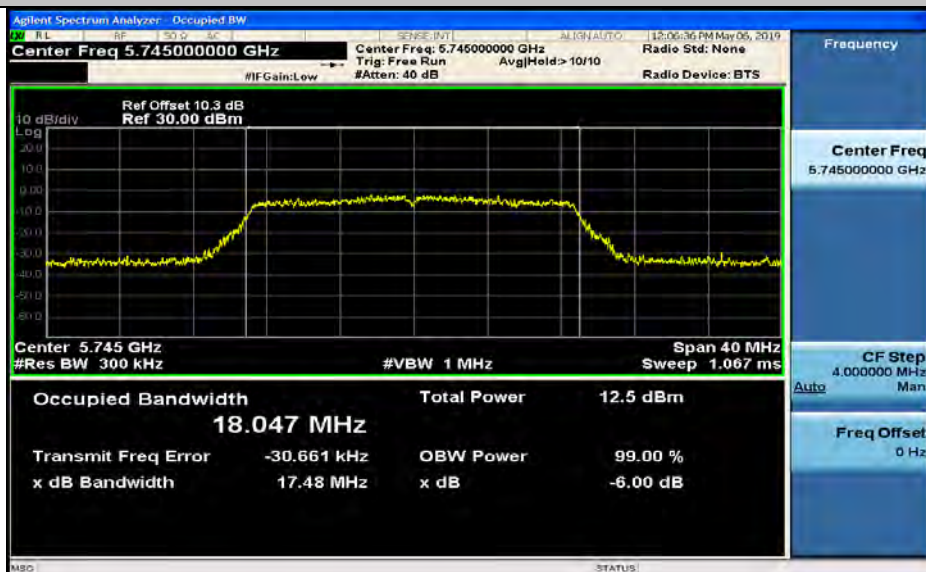
Occupied Bandwidth Measurement_11N40_5755_Ant1



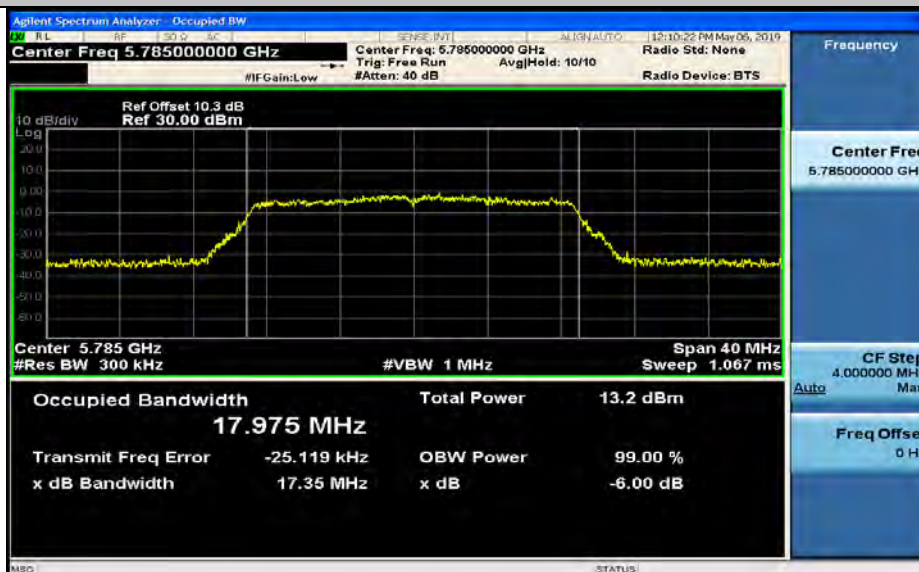
Occupied Bandwidth Measurement_11N40_5795_Ant1



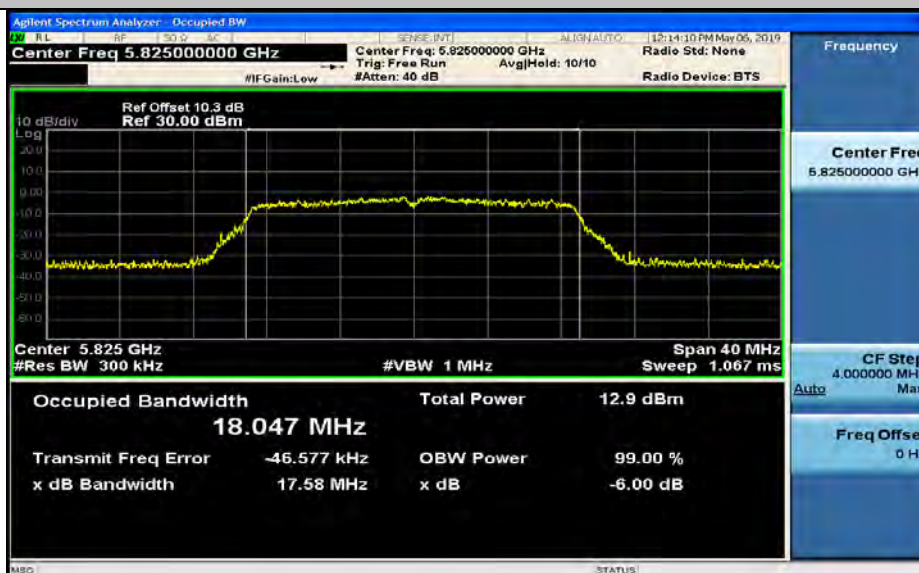
Occupied Bandwidth Measurement_11AC20_5745_Ant1



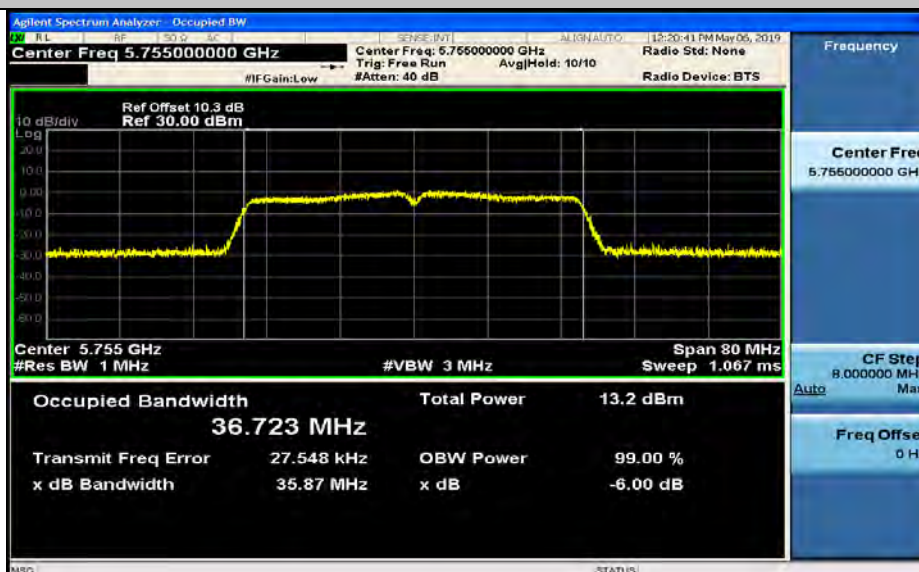
Occupied Bandwidth Measurement_11AC20_5785_Ant1



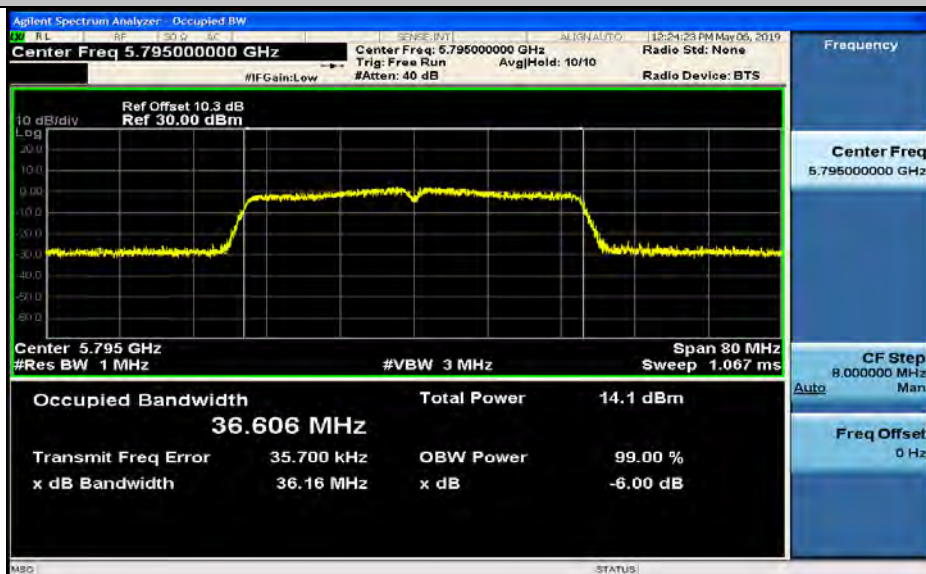
Occupied Bandwidth Measurement_11AC20_5825_Ant1



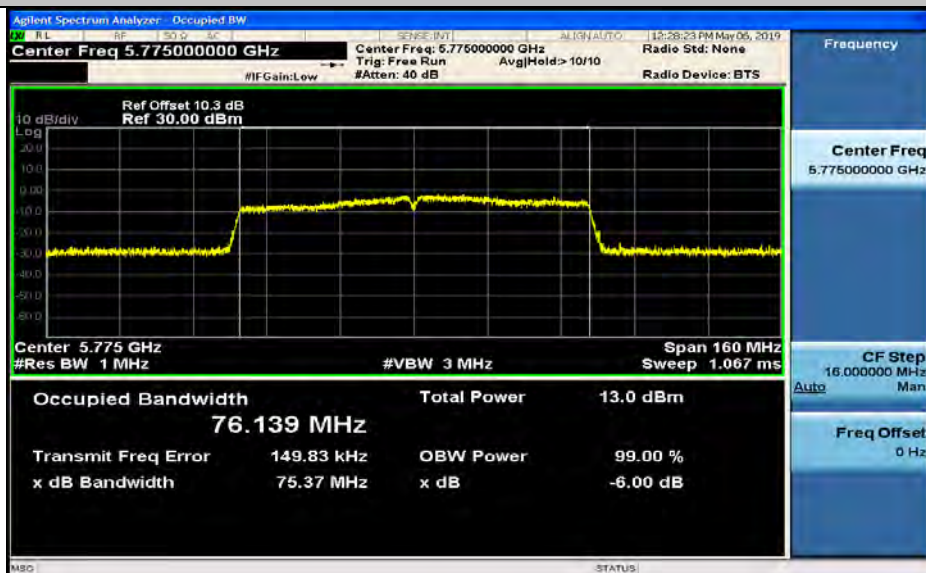
Occupied Bandwidth Measurement_11AC40_5755_Ant1



Occupied Bandwidth Measurement_11AC40_5795_Ant1



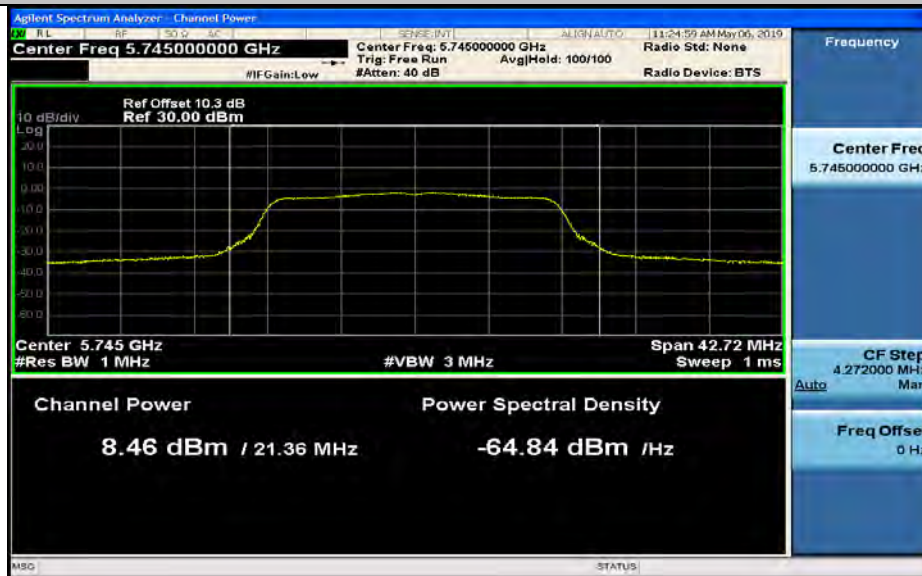
Occupied Bandwidth Measurement_11AC80_5775_Ant1



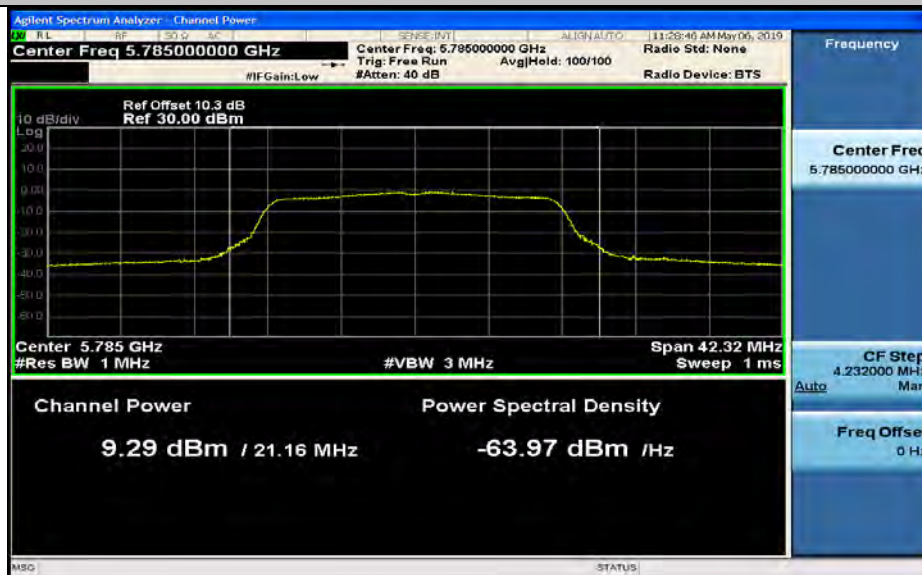
4.Maximum Conduct Output Power

| Test Mode | Test Channel | Ant | Level [dBm] | 10log(1/x) Factor [dB] | Power [dBm] | Limit [dBm] | Verdict |
|-----------|--------------|------|-------------|------------------------|-------------|-------------|---------|
| 11A | 5745 | Ant1 | 8.46 | 0.08 | 8.54 | 30.00 | PASS |
| 11A | 5785 | Ant1 | 9.29 | 0.08 | 9.37 | 30.00 | PASS |
| 11A | 5825 | Ant1 | 8.95 | 0.08 | 9.03 | 30.00 | PASS |
| 11N20 | 5745 | Ant1 | 7.03 | 0.08 | 7.11 | 30.00 | PASS |
| 11N20 | 5785 | Ant1 | 7.82 | 0.08 | 7.9 | 30.00 | PASS |
| 11N20 | 5825 | Ant1 | 7.63 | 0.08 | 7.71 | 30.00 | PASS |
| 11N40 | 5755 | Ant1 | 6.12 | 0.18 | 6.3 | 30.00 | PASS |
| 11N40 | 5795 | Ant1 | 7.15 | 0.16 | 7.31 | 30.00 | PASS |
| 11AC20 | 5745 | Ant1 | 6.31 | 0.08 | 6.39 | 30.00 | PASS |
| 11AC20 | 5785 | Ant1 | 7.01 | 0.09 | 7.1 | 30.00 | PASS |
| 11AC20 | 5825 | Ant1 | 6.8 | 0.08 | 6.88 | 30.00 | PASS |
| 11AC40 | 5755 | Ant1 | 6.23 | 0.18 | 6.41 | 30.00 | PASS |
| 11AC40 | 5795 | Ant1 | 7.11 | 0.18 | 7.29 | 30.00 | PASS |
| 11AC80 | 5775 | Ant1 | 5.95 | 0.32 | 6.27 | 30.00 | PASS |

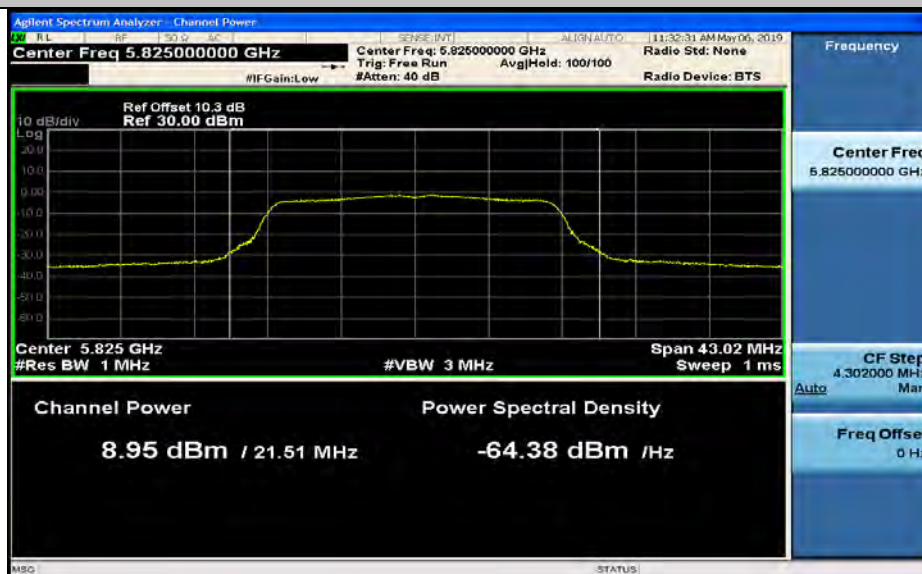
Maximum Conduct Output Power_11A_5745_Ant1



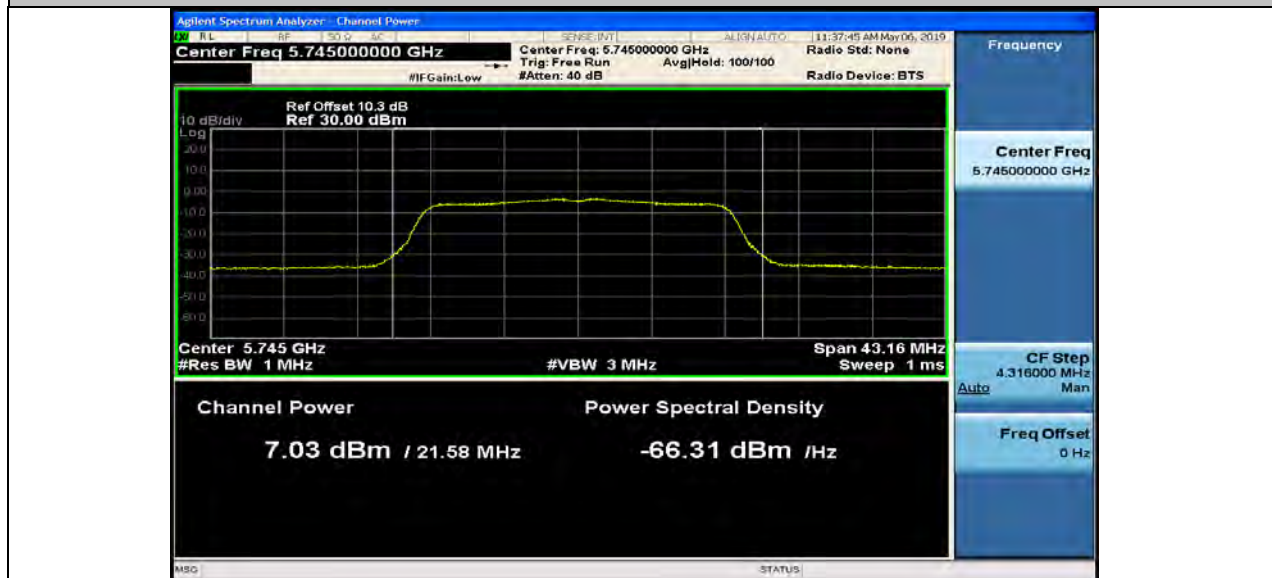
Maximum Conduct Output Power_11A_5785_Ant1



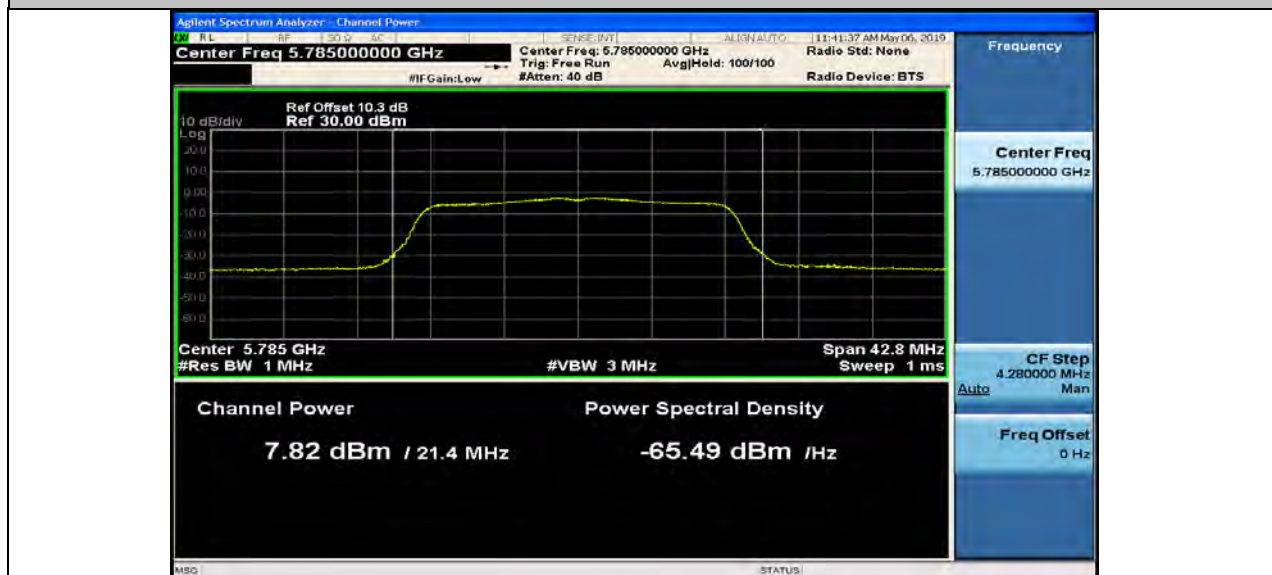
Maximum Conduct Output Power_11A_5825_Ant1



Maximum Conduct Output Power_11N20_5745_Ant1



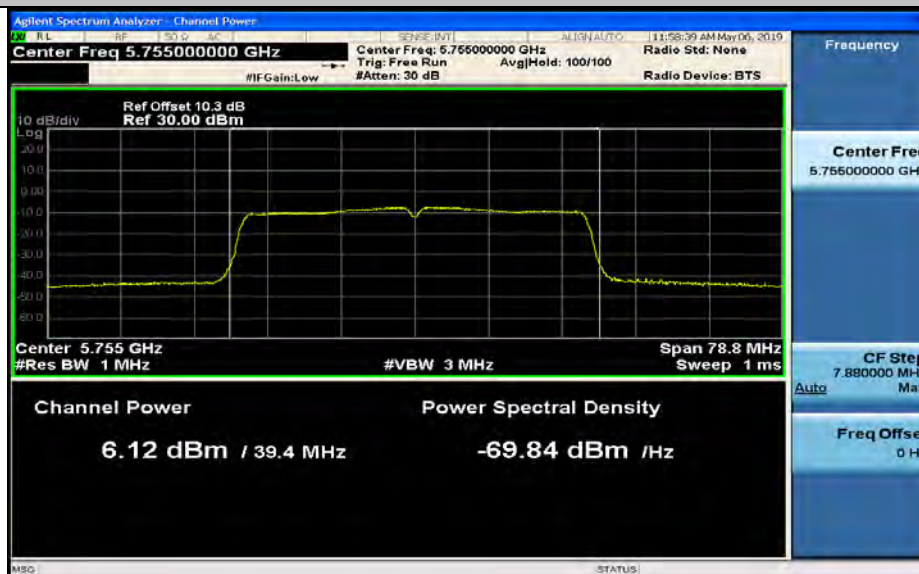
Maximum Conduct Output Power_11N20_5785_Ant1



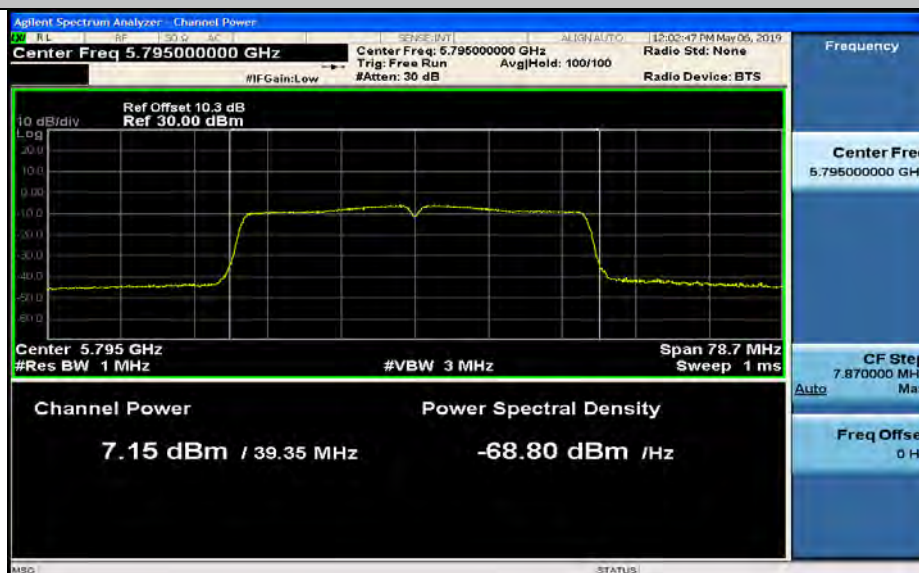
Maximum Conduct Output Power_11N20_5825_Ant1



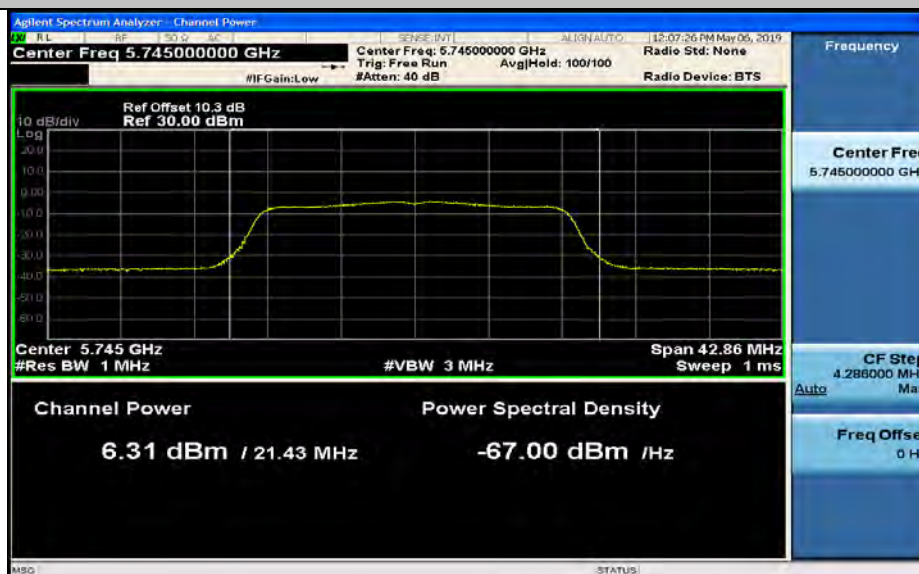
Maximum Conduct Output Power_11N40_5755_Ant1



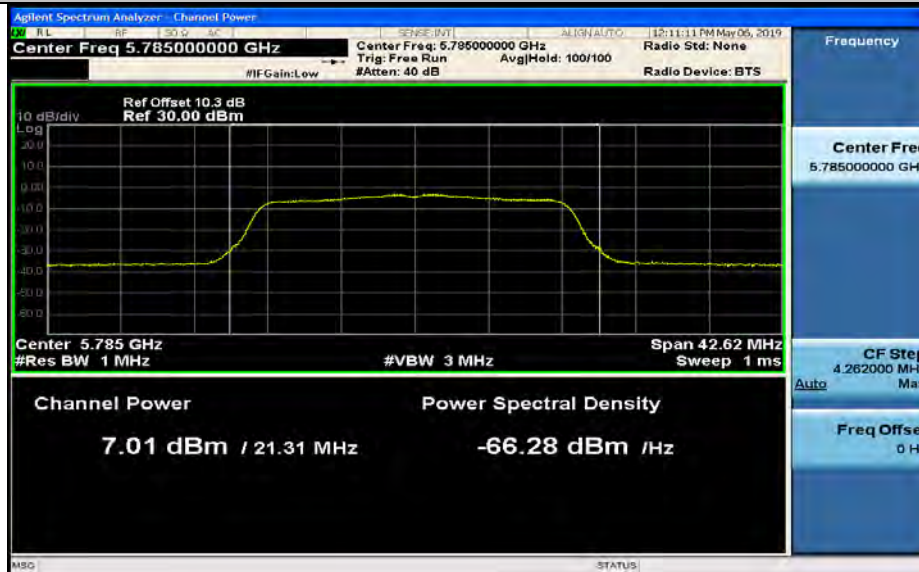
Maximum Conduct Output Power_11N40_5795_Ant1



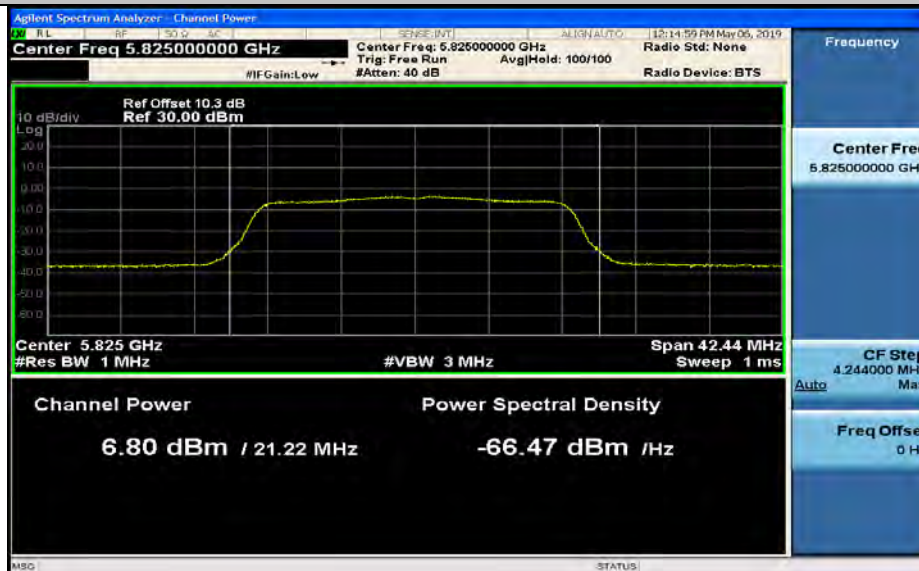
Maximum Conduct Output Power_11AC20_5745_Ant1



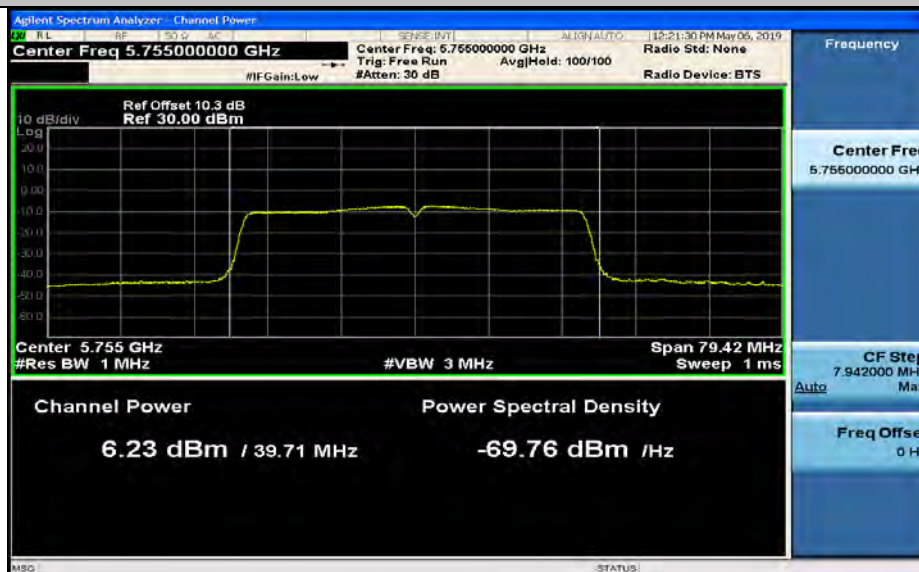
Maximum Conduct Output Power_11AC20_5785_Ant1



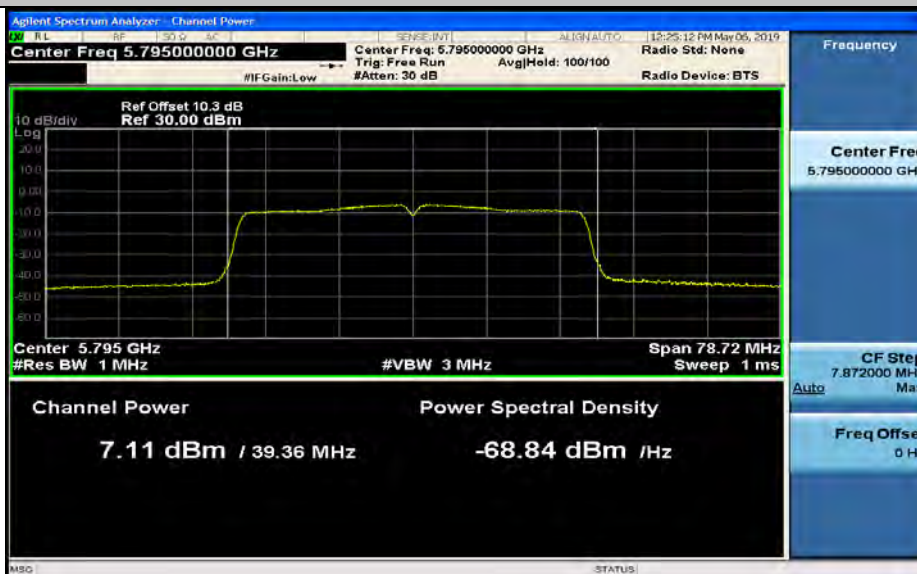
Maximum Conduct Output Power_11AC20_5825_Ant1



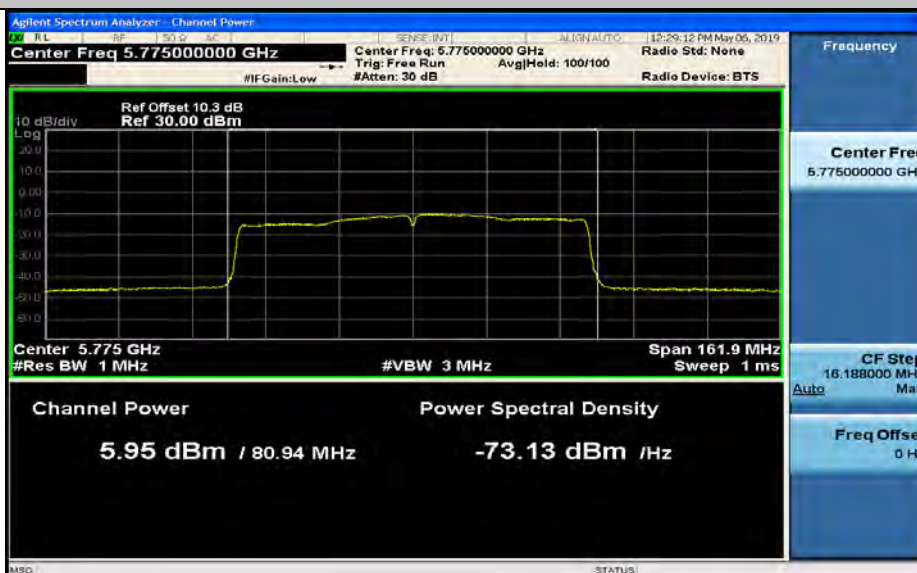
Maximum Conduct Output Power_11AC40_5755_Ant1



Maximum Conduct Output Power_11AC40_5795_Ant1



Maximum Conduct Output Power_11AC80_5775_Ant1



5.Maximum Power Spectral Density

| Test Mode | Test Channel | Ant | Level [dBm/500kHz] | 10log(1/x) Factor[dB] | 10log(500kHz/RBW) Factor [dB] | PSD [dBm/500kHz] | Limit [dBm/500kHz] | Verdict |
|-----------|--------------|------|--------------------|-----------------------|-------------------------------|------------------|--------------------|---------|
| 11A | 5745 | Ant1 | -6.5 | 0.08 | 2.22 | -4.2 | 30.00 | PASS |
| 11A | 5785 | Ant1 | -5.83 | 0.08 | 2.22 | -3.53 | 30.00 | PASS |
| 11A | 5825 | Ant1 | -6.15 | 0.08 | 2.22 | -3.85 | 30.00 | PASS |
| 11N20 | 5745 | Ant1 | -8.23 | 0.08 | 2.22 | -5.93 | 30.00 | PASS |
| 11N20 | 5785 | Ant1 | -7.2 | 0.08 | 2.22 | -4.9 | 30.00 | PASS |
| 11N20 | 5825 | Ant1 | -7.51 | 0.08 | 2.22 | -5.21 | 30.00 | PASS |
| 11N40 | 5755 | Ant1 | -12.45 | 0.18 | 2.22 | -10.05 | 30.00 | PASS |
| 11N40 | 5795 | Ant1 | -11.41 | 0.16 | 2.22 | -9.03 | 30.00 | PASS |
| 11AC20 | 5745 | Ant1 | -8.94 | 0.08 | 2.22 | -6.64 | 30.00 | PASS |
| 11AC20 | 5785 | Ant1 | -8.2 | 0.09 | 2.22 | -5.89 | 30.00 | PASS |
| 11AC20 | 5825 | Ant1 | -8.48 | 0.08 | 2.22 | -6.18 | 30.00 | PASS |
| 11AC40 | 5755 | Ant1 | -12.38 | 0.18 | 2.22 | -9.98 | 30.00 | PASS |
| 11AC40 | 5795 | Ant1 | -11.18 | 0.18 | 2.22 | -8.78 | 30.00 | PASS |
| 11AC80 | 5775 | Ant1 | -15.54 | 0.32 | 2.22 | -13 | 30.00 | PASS |

Maximum Power Spectral Density_TNVN_11A_5745_Ant1



Maximum Power Spectral Density_TNVN_11A_5785_Ant1



Maximum Power Spectral Density_TNVN_11A_5825_Ant1



Maximum Power Spectral Density_TNVN_11N20_5745_Ant1



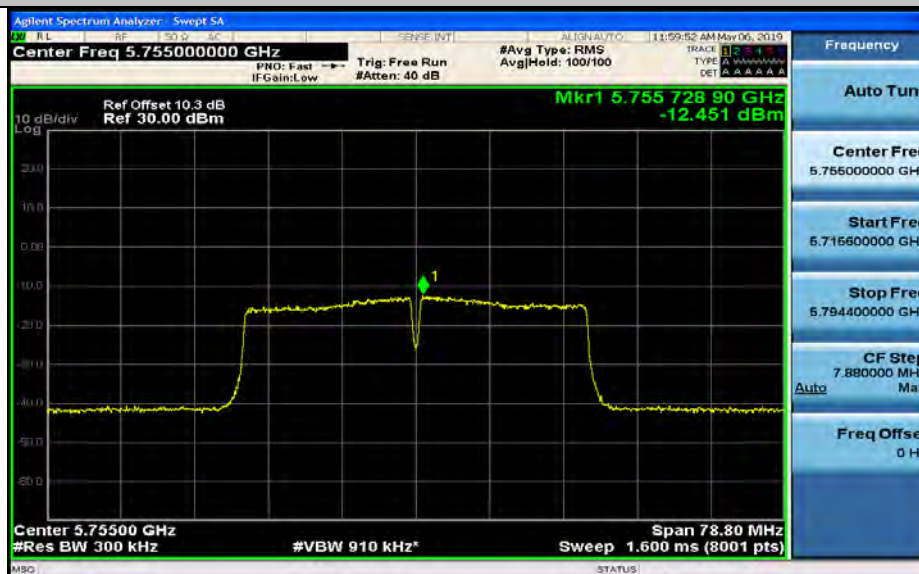
Maximum Power Spectral Density_TNVN_11N20_5785_Ant1



Maximum Power Spectral Density_TNVN_11N20_5825_Ant1



Maximum Power Spectral Density_TNVN_11N40_5755_Ant1



Maximum Power Spectral Density_TNVN_11N40_5795_Ant1



Maximum Power Spectral Density_TNVN_11AC20_5745_Ant1



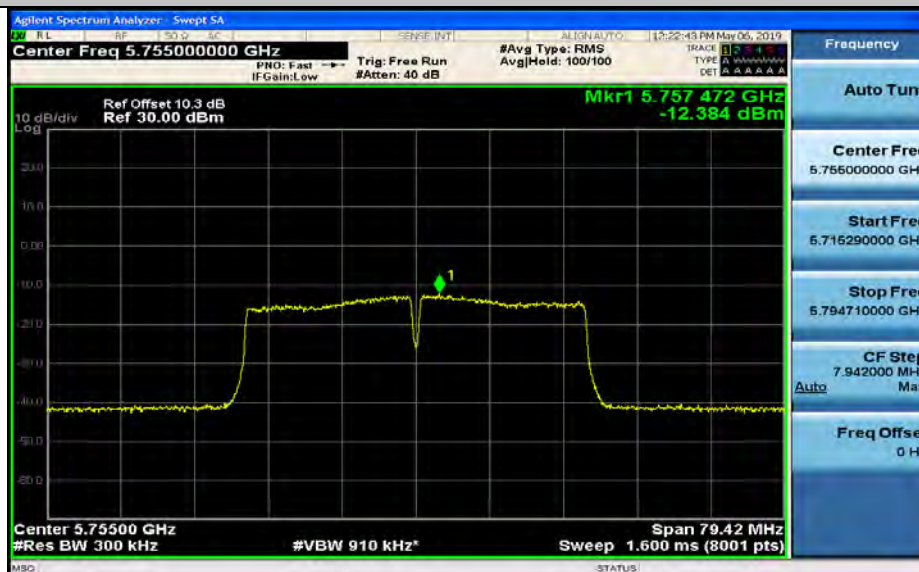
Maximum Power Spectral Density_TNVN_11AC20_5785_Ant1



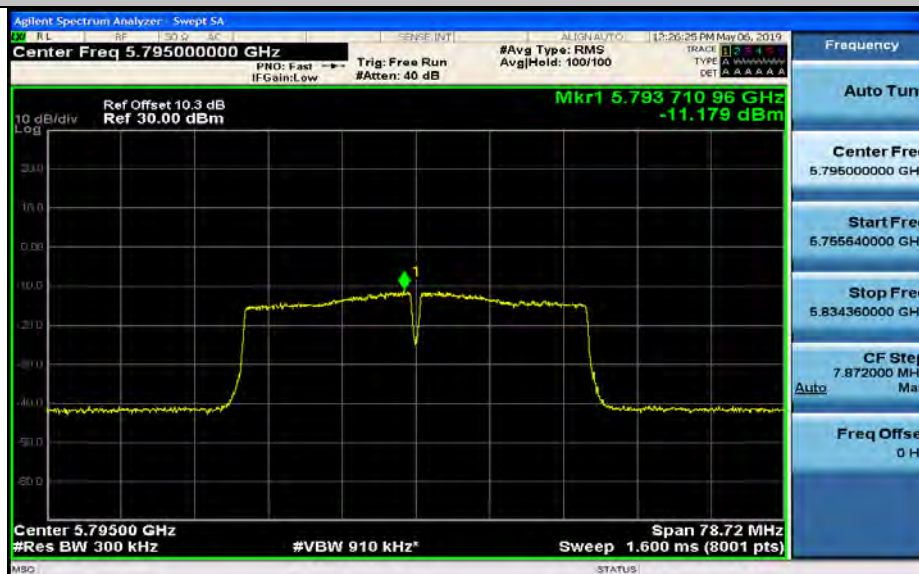
Maximum Power Spectral Density_TNVN_11AC20_5825_Ant1



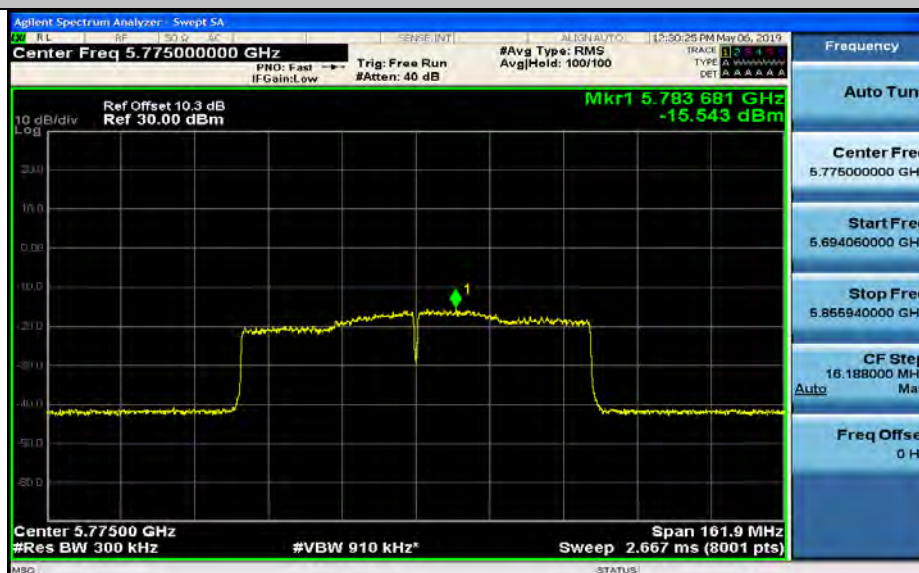
Maximum Power Spectral Density_TNVN_11AC40_5755_Ant1



Maximum Power Spectral Density_TNVN_11AC40_5795_Ant1



Maximum Power Spectral Density_TNVN_11AC80_5775_Ant1



6.Frequency Stability

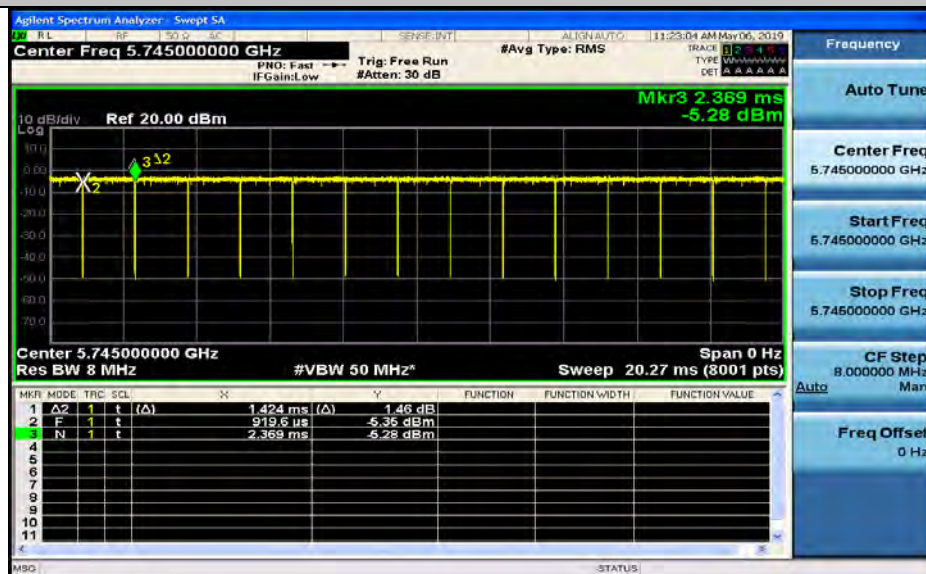
| Band | Test Conditions | | Operation Frequency (MHz) | Test Frequency (MHz) | Freq. Dev. (MHz) | Limit (GHz) | Result |
|--------------|-----------------|--------------|---------------------------|----------------------|------------------|-------------|--------|
| | Volt (V AC) | Temp (°C) | | ANT1 | ANT1 | | |
| Band U-NII 3 | Normal(120) | Extreme(-20) | 5745 | 5745.0468 | 0.0468 | 5.725-5.85 | Pass |
| | | Extreme(-10) | | 5745.0372 | 0.0372 | | Pass |
| | | Extreme(0) | | 5745.0262 | 0.0262 | | Pass |
| | | Extreme(+10) | | 5745.0158 | 0.0158 | | Pass |
| | | Extreme(+20) | | 5745.0295 | 0.0295 | | Pass |
| | | Extreme(+30) | | 5745.0414 | 0.0414 | | Pass |
| | | Extreme(+40) | | 5745.0326 | 0.0326 | | Pass |
| | | Extreme(+55) | | 5745.0285 | 0.0285 | | Pass |
| | Extreme(108) | Norma(+20) | | 5745.0387 | 0.0387 | | Pass |
| | Extreme(132) | | | 5745.0446 | 0.0446 | | Pass |
| | Normal(120) | Extreme(-20) | 5825 | 5825.0424 | 0.0424 | | Pass |
| | | Extreme(-10) | | 5825.0436 | 0.0436 | | Pass |
| | | Extreme(0) | | 5825.0275 | 0.0275 | | Pass |
| | | Extreme(+10) | | 5825.0225 | 0.0225 | | Pass |
| | | Extreme(+20) | | 5825.0187 | 0.0187 | | Pass |
| | | Extreme(+30) | | 5825.0326 | 0.0326 | | Pass |
| | | Extreme(+40) | | 5825.0178 | 0.0178 | | Pass |
| | | Extreme(+55) | | 5825.0248 | 0.0248 | | Pass |
| | Extreme(108) | Norma(20) | | 5825.0412 | 0.0412 | | Pass |
| | Extreme(132) | | | 5825.0147 | 0.0147 | | Pass |

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

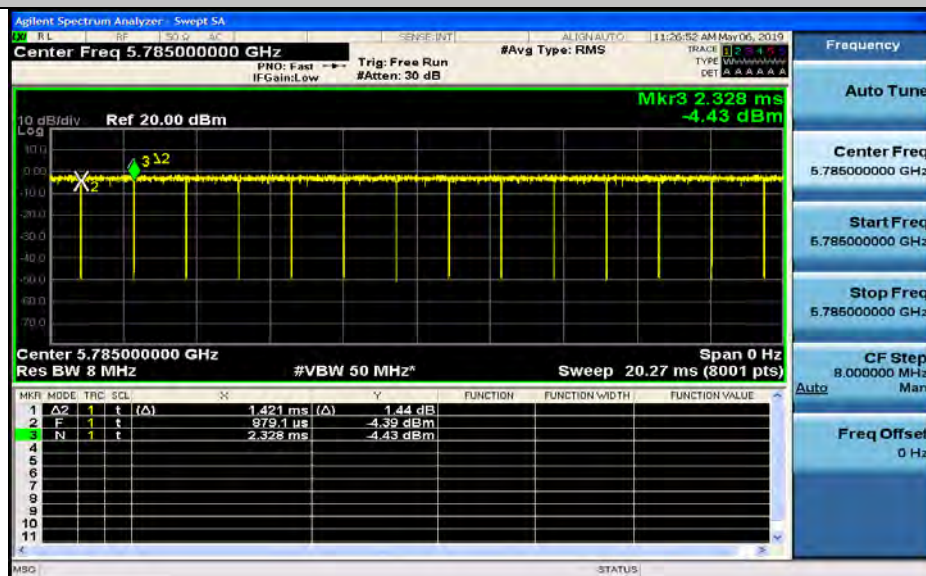
7.Duty Cycle

| Test Mode | Test Channel | Ant | Duty Cycle[%] | 10log(1/x) Factor[dB] |
|-----------|--------------|------|---------------|-----------------------|
| 11A | 5745 | Ant1 | 98.25 | 0.08 |
| 11A | 5785 | Ant1 | 98.08 | 0.08 |
| 11A | 5825 | Ant1 | 98.25 | 0.08 |
| 11N20 | 5745 | Ant1 | 98.13 | 0.08 |
| 11N20 | 5785 | Ant1 | 98.13 | 0.08 |
| 11N20 | 5825 | Ant1 | 98.13 | 0.08 |
| 11N40 | 5755 | Ant1 | 95.94 | 0.18 |
| 11N40 | 5795 | Ant1 | 96.30 | 0.16 |
| 11AC20 | 5745 | Ant1 | 98.14 | 0.08 |
| 11AC20 | 5785 | Ant1 | 97.96 | 0.09 |
| 11AC20 | 5825 | Ant1 | 98.14 | 0.08 |
| 11AC40 | 5755 | Ant1 | 95.97 | 0.18 |
| 11AC40 | 5795 | Ant1 | 95.96 | 0.18 |
| 11AC80 | 5775 | Ant1 | 92.81 | 0.32 |

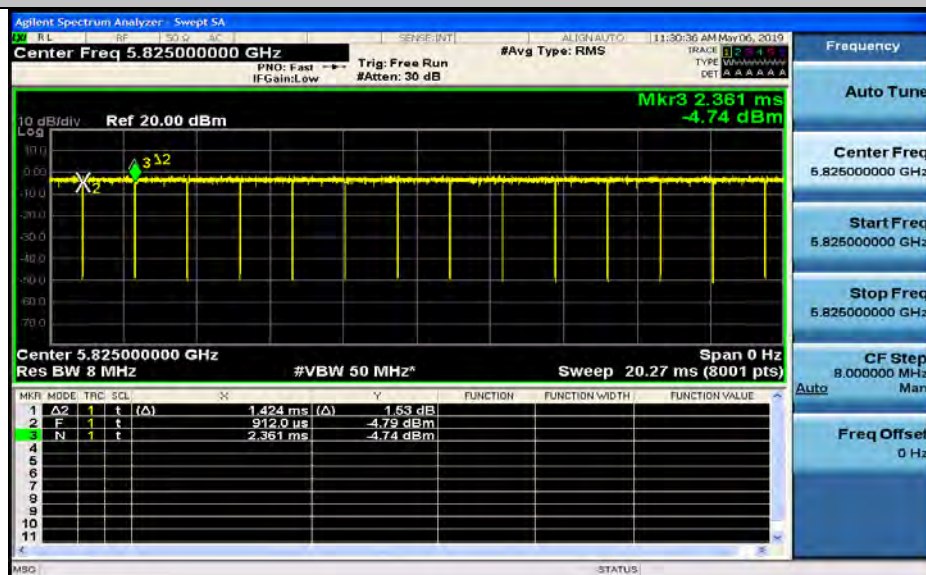
Duty Cycle_11A_5745_Ant1



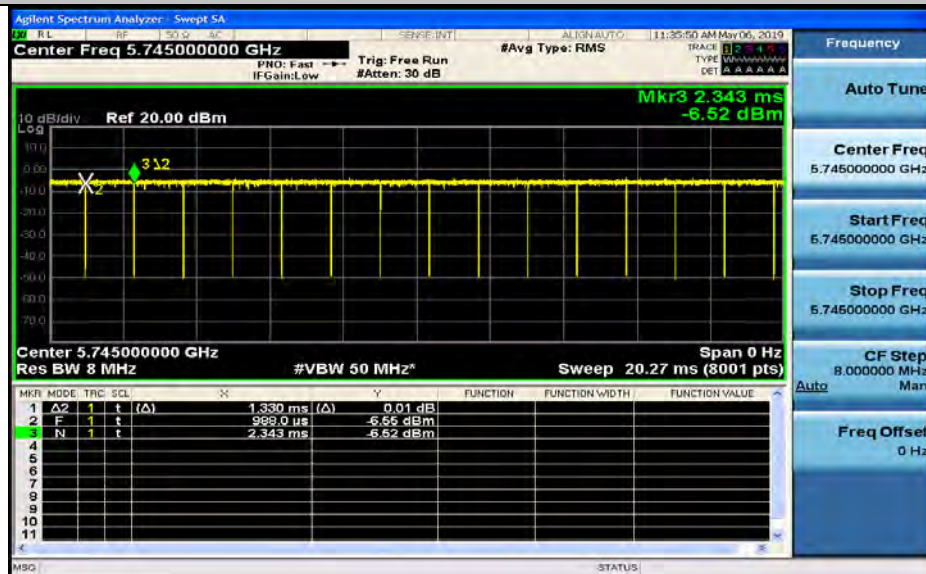
Duty Cycle_11A_5785_Ant1



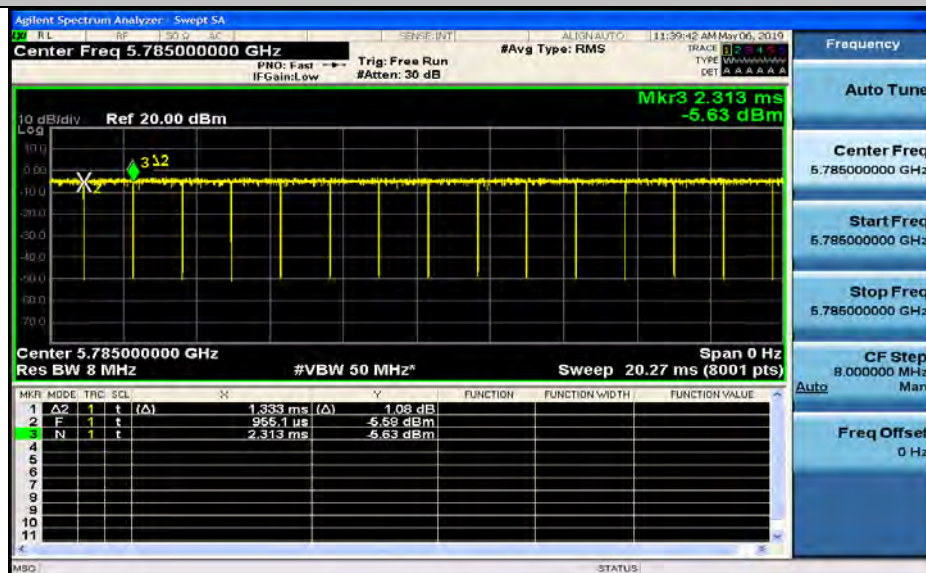
Duty Cycle_11A_5825_Ant1



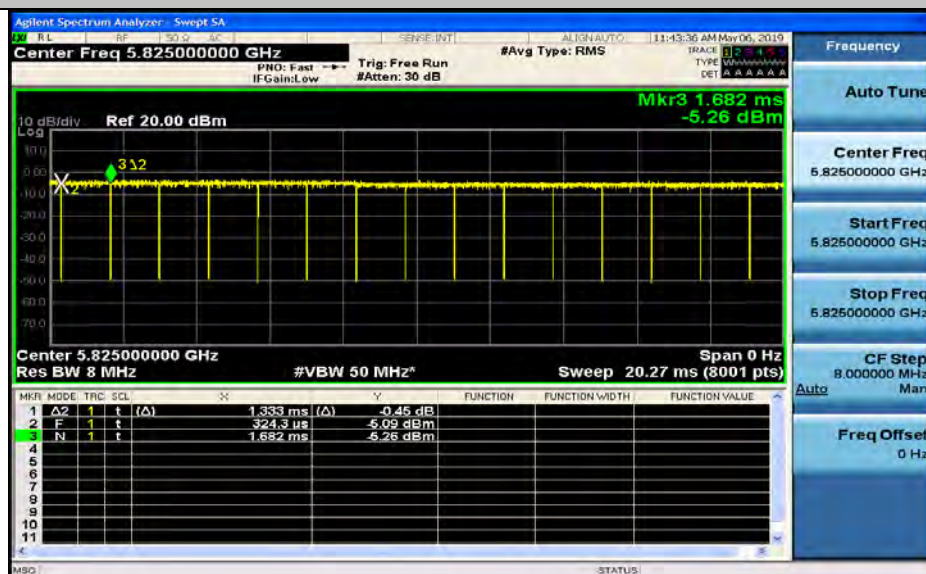
Duty Cycle_11N20_5745_Ant1



Duty Cycle_11N20_5785_Ant1



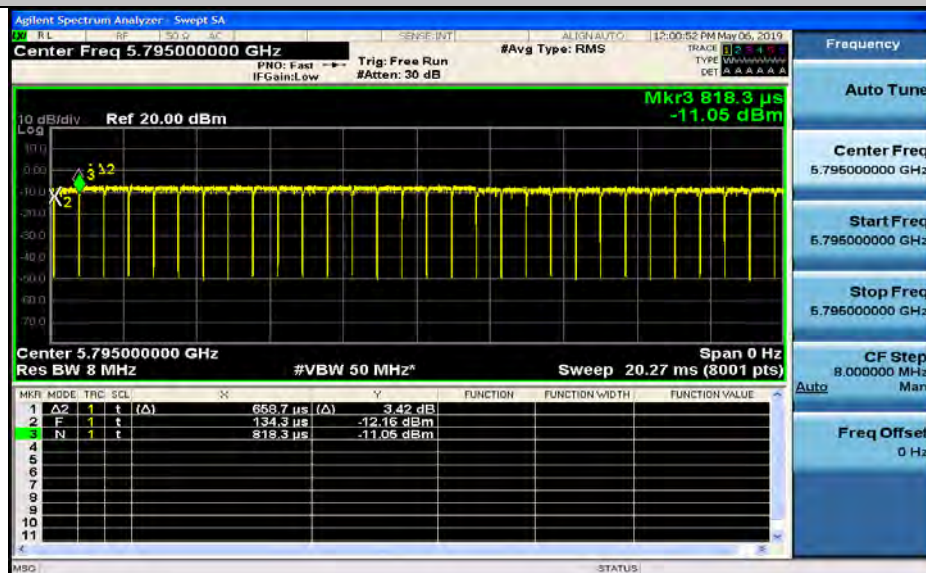
Duty Cycle_11N20_5825_Ant1



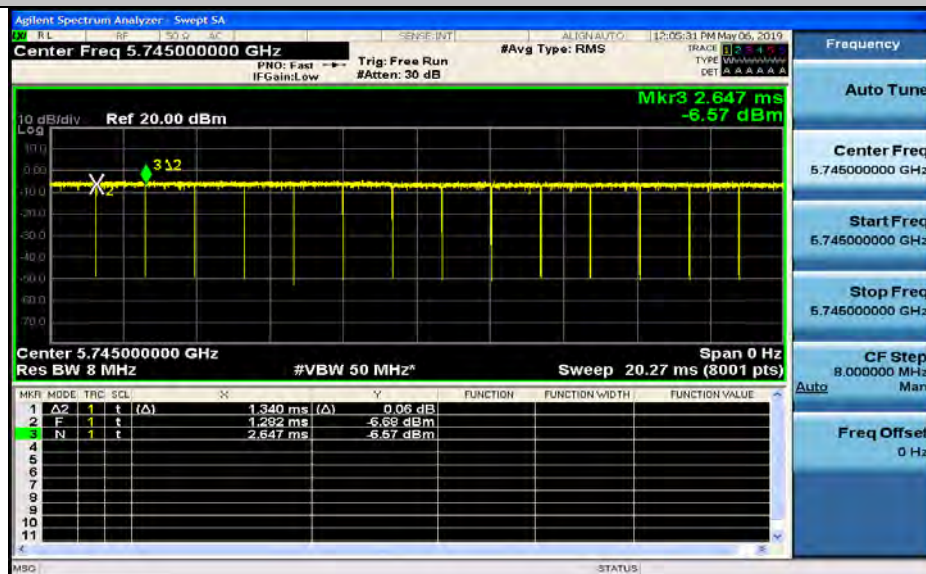
Duty Cycle_11N40_5755_Ant1



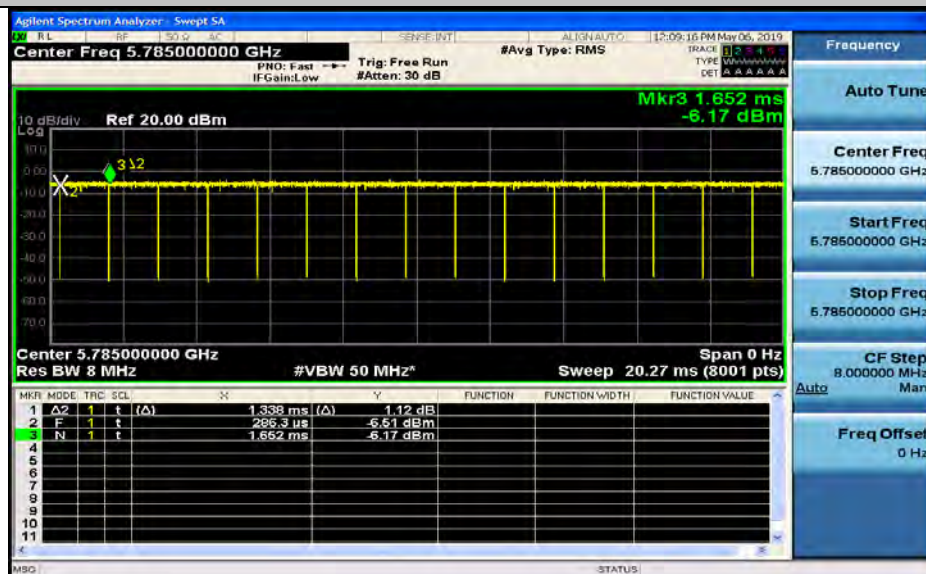
Duty Cycle_11N40_5795_Ant1



Duty Cycle_11AC20_5745_Ant1



Duty Cycle_11AC20_5785_Ant1



Duty Cycle_11AC20_5825_Ant1



Duty Cycle_11AC40_5755_Ant1



Duty Cycle_11AC40_5795_Ant1



Duty Cycle_11AC80_5775_Ant1

