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Appendix for 5GHz WIFI

Applicant: Fanvil Link Technology Co.,LTD

**Address: Room 1517, Building G, Hualian City Panorama.27
Region, Bao'an District, Shenzhen, China**

Product Name: Android IP Video Phone

Model: A308i, J308, J308i, J308P, i508, A308, J308P-i

FCC ID: 2BCUQ-308

TABLE OF CONTENTS

| | |
|--|----|
| Appendix A1: Emission Bandwidth..... | 3 |
| Appendix A2: Occupied channel bandwidth | 10 |
| Appendix A3: Min emission bandwidth | 17 |
| Appendix B: Maximum conducted output power | 21 |
| Appendix C: Maximum power spectral density..... | 22 |
| Appendix D: Frequency Stability | 29 |
| Appendix E: Duty Cycle | 32 |

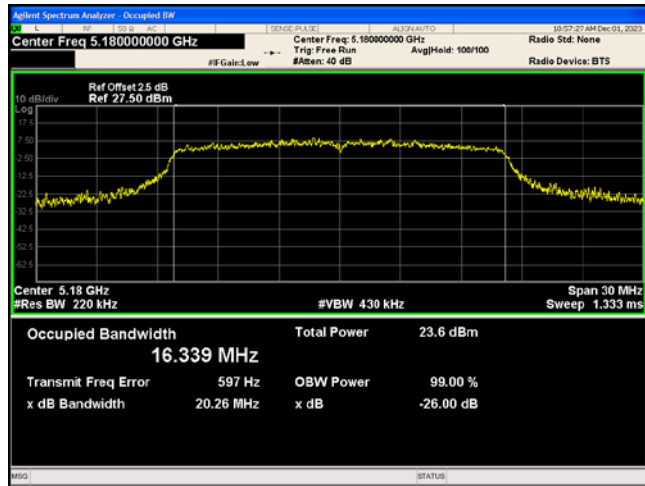
Appendix A1: Emission Bandwidth

Test Result

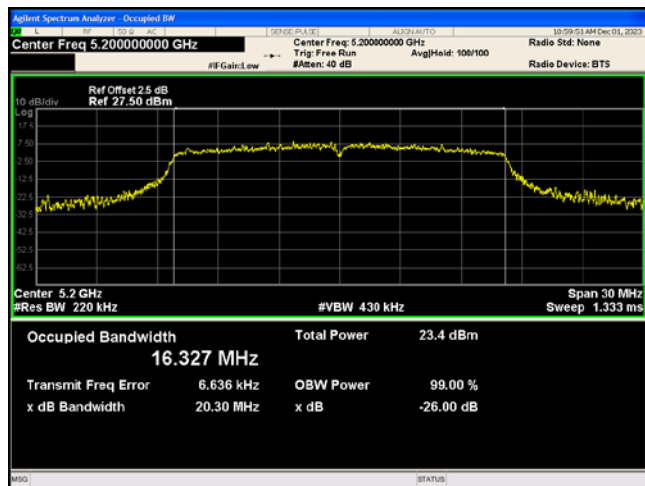
| Test Mode | Channel | 26db EBW [MHz] | Verdict |
|---------------|---------|----------------|---------|
| 802.11a | 5180 | 20.26 | PASS |
| | 5200 | 20.30 | PASS |
| | 5240 | 19.25 | PASS |
| | 5745 | 29.64 | PASS |
| | 5785 | 29.23 | PASS |
| | 5825 | 29.38 | PASS |
| 802.11n(HT20) | 5180 | 20.26 | PASS |
| | 5200 | 20.48 | PASS |
| | 5240 | 20.06 | PASS |
| | 5745 | 29.41 | PASS |
| | 5785 | 29.27 | PASS |
| | 5825 | 28.55 | PASS |
| 802.11n(HT40) | 5190 | 46.01 | PASS |
| | 5230 | 37.99 | PASS |
| | 5755 | 56.89 | PASS |
| | 5795 | 58.81 | PASS |

Test Graphs

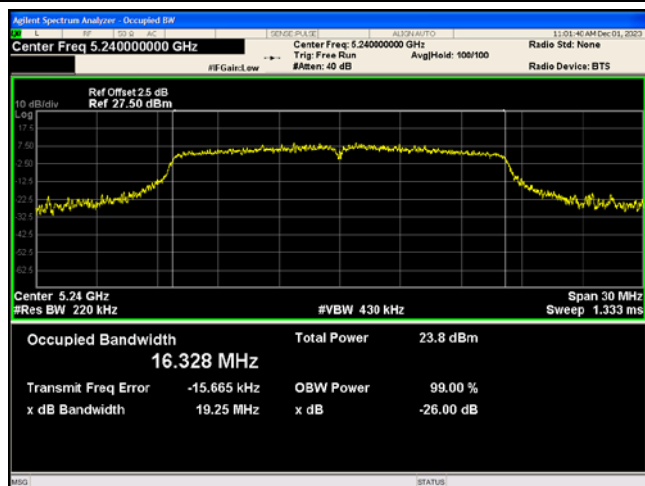
802.11a_5180



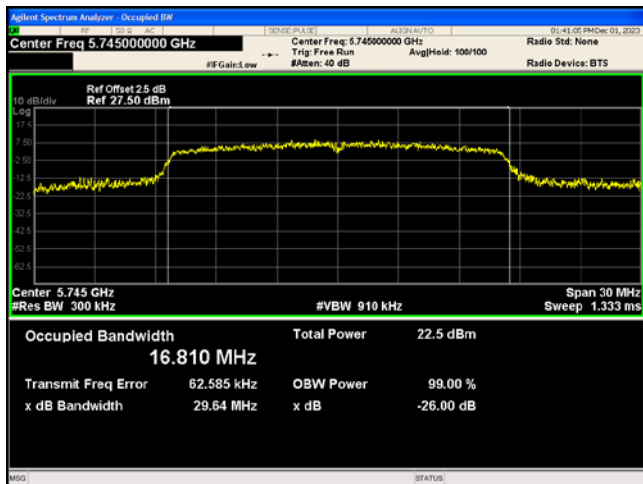
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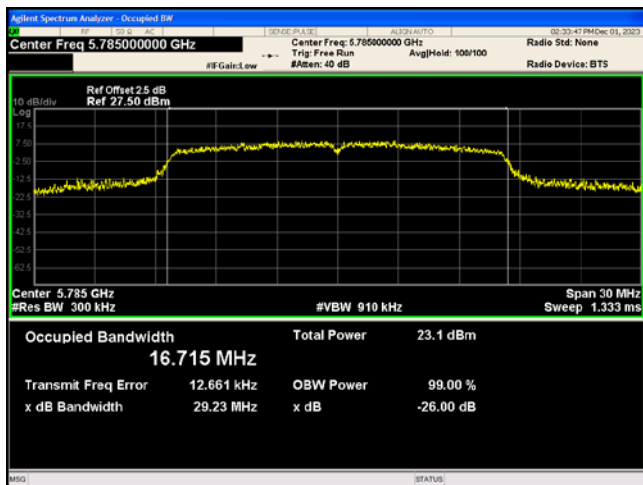
802.11a_5240



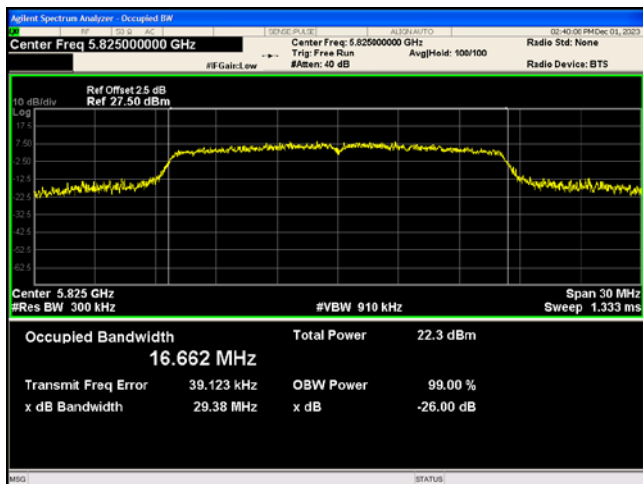
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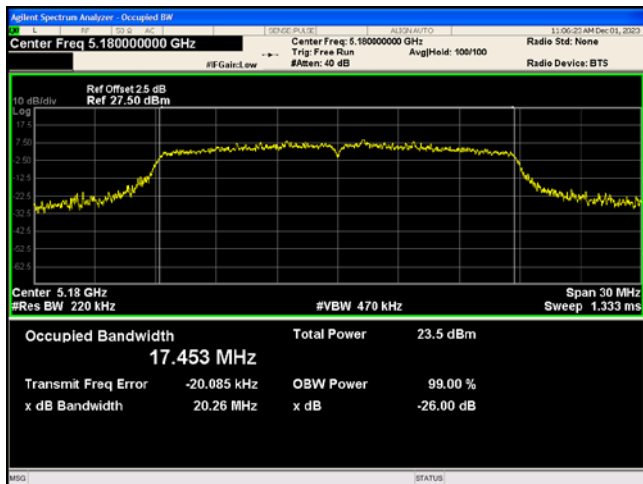
802.11a_5785



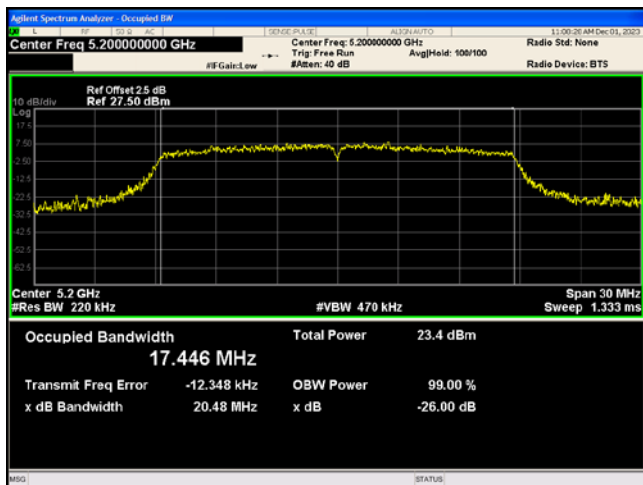
802.11a_5825



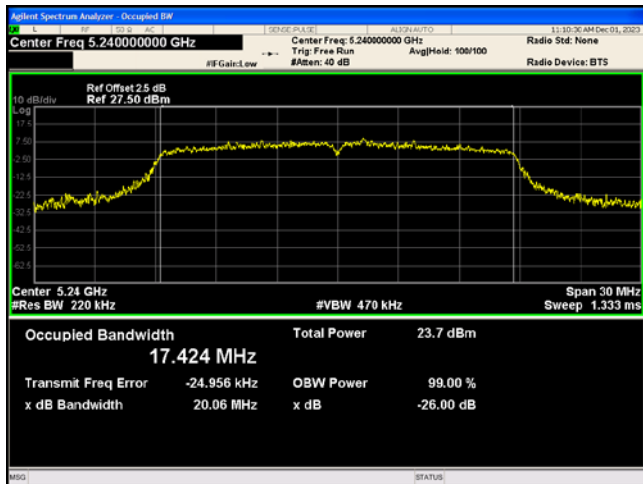
802.11n(HT20)_5180



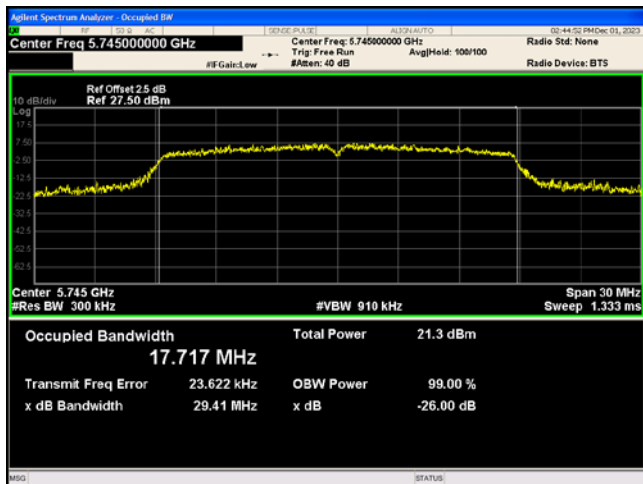
802.11n(HT20)_5200



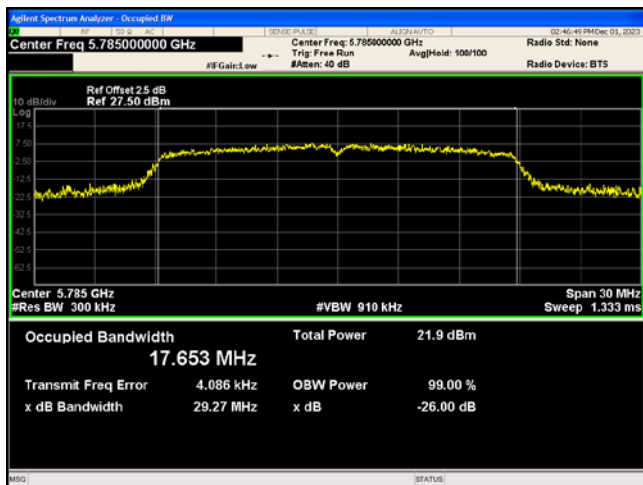
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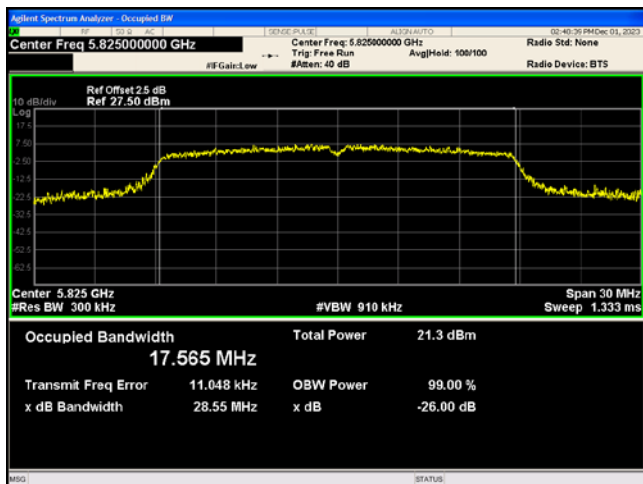
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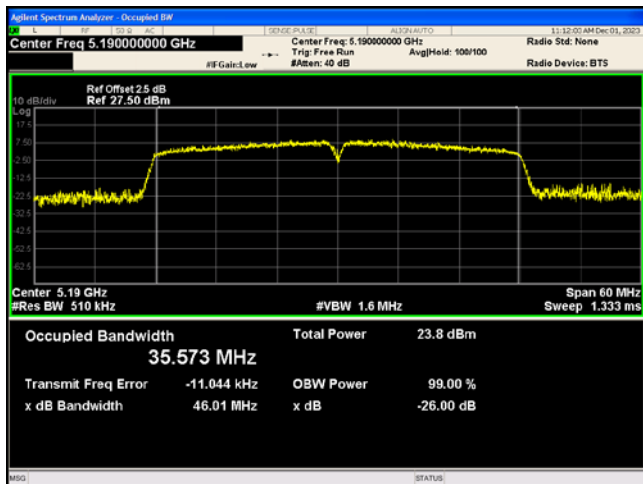
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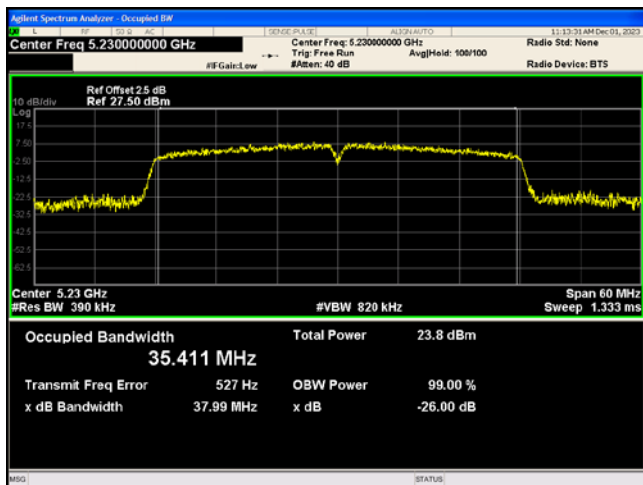
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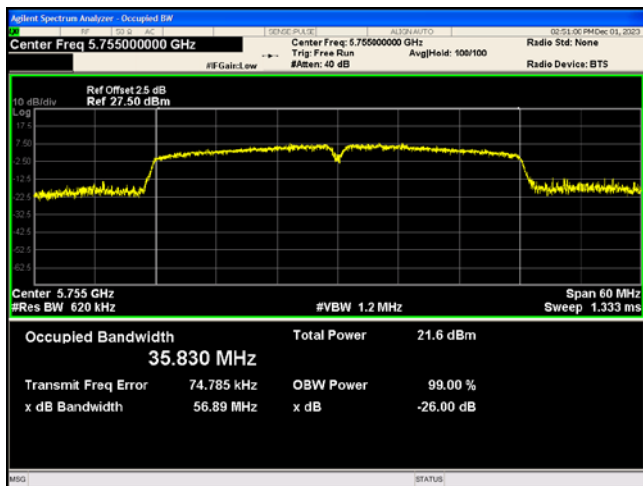
802.11n(HT40)_5190



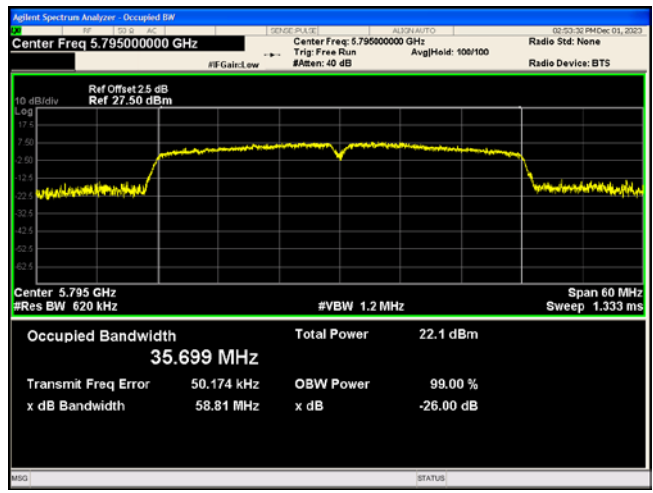
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



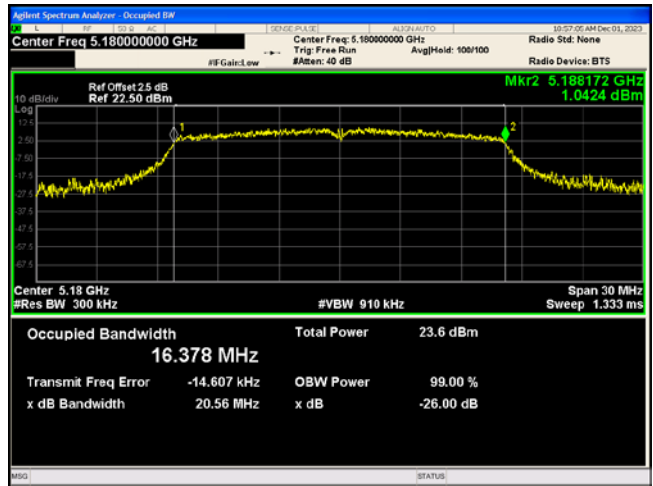
Appendix A2: Occupied channel bandwidth

Test Result

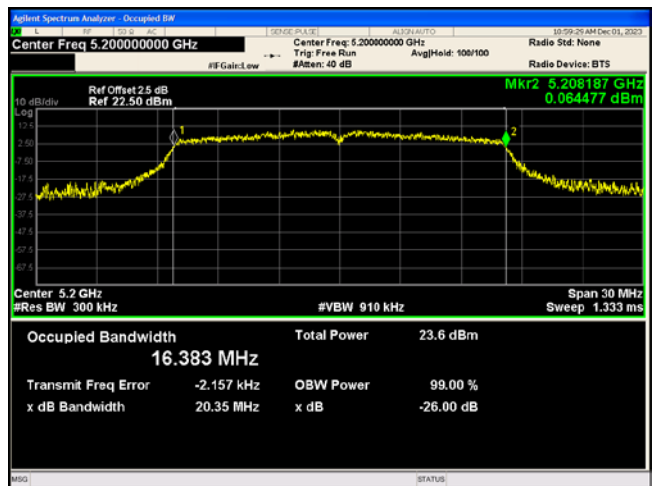
| Test Mode | Channel | OCB [MHz] | Verdict |
|---------------|---------|-----------|---------|
| 802.11a | 5180 | 16.378 | PASS |
| | 5200 | 16.383 | PASS |
| | 5240 | 16.385 | PASS |
| | 5745 | 16.769 | PASS |
| | 5785 | 16.726 | PASS |
| | 5825 | 16.623 | PASS |
| 802.11n(HT20) | 5180 | 17.467 | PASS |
| | 5200 | 17.494 | PASS |
| | 5240 | 17.524 | PASS |
| | 5745 | 17.717 | PASS |
| | 5785 | 17.636 | PASS |
| | 5825 | 17.578 | PASS |
| 802.11n(HT40) | 5190 | 35.545 | PASS |
| | 5230 | 35.444 | PASS |
| | 5755 | 35.719 | PASS |
| | 5795 | 35.753 | PASS |

Test Graphs

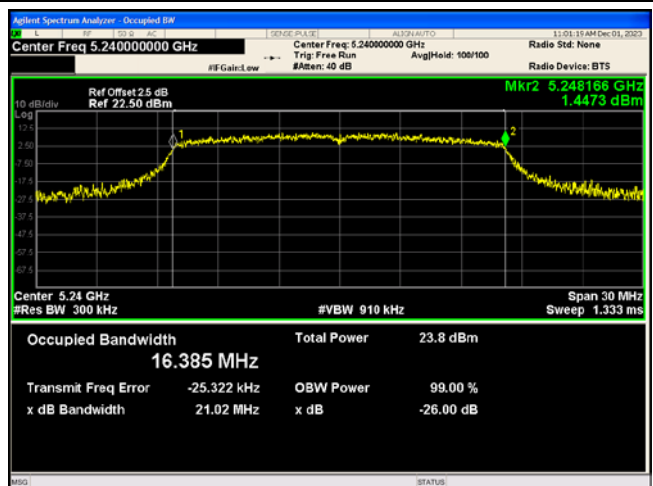
802.11a_5180



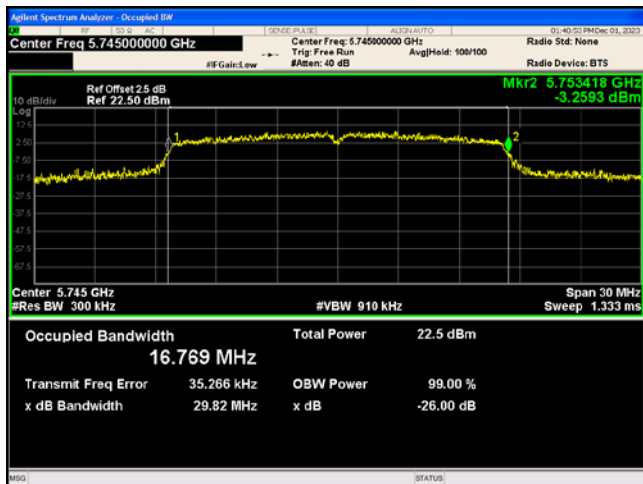
802.11a_5200



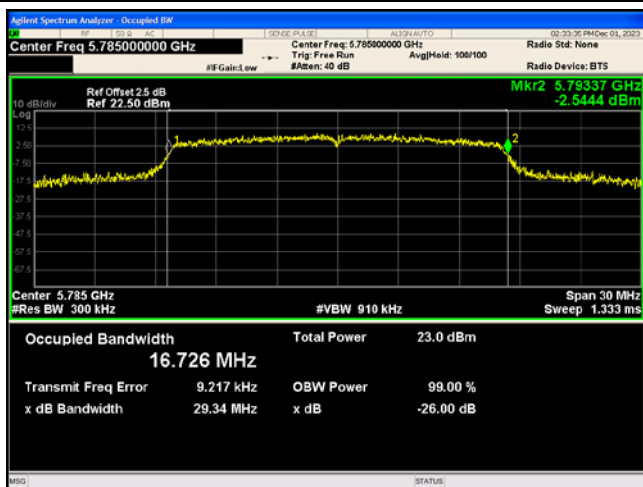
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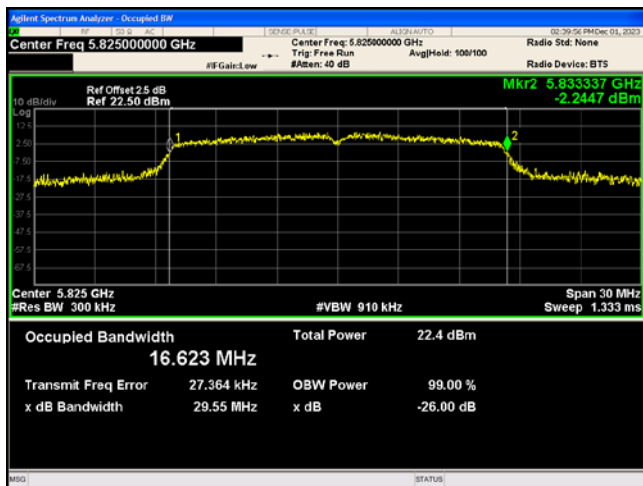
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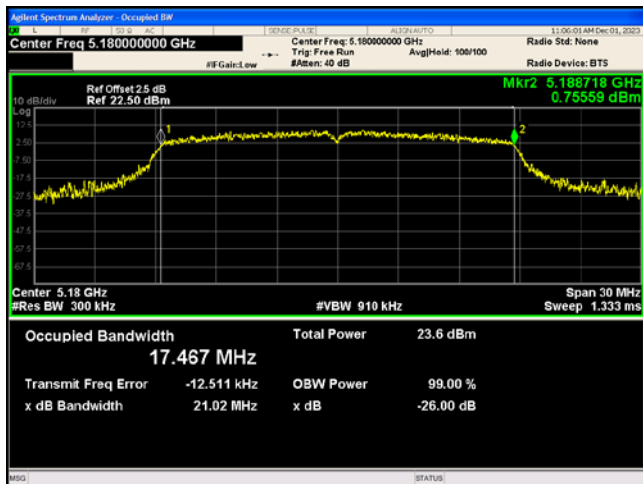
802.11a_5785



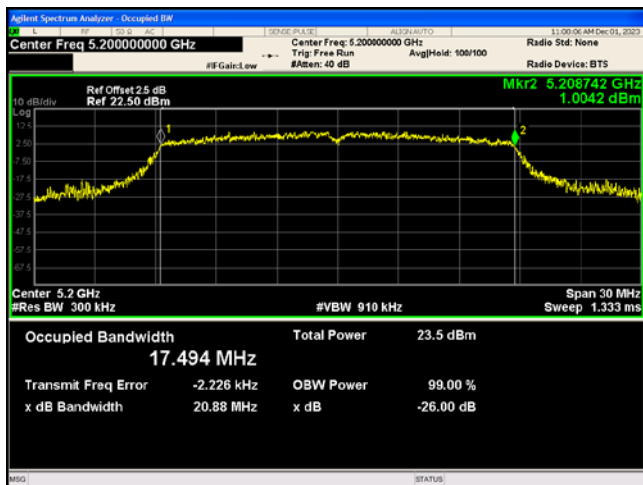
802.11a_5825



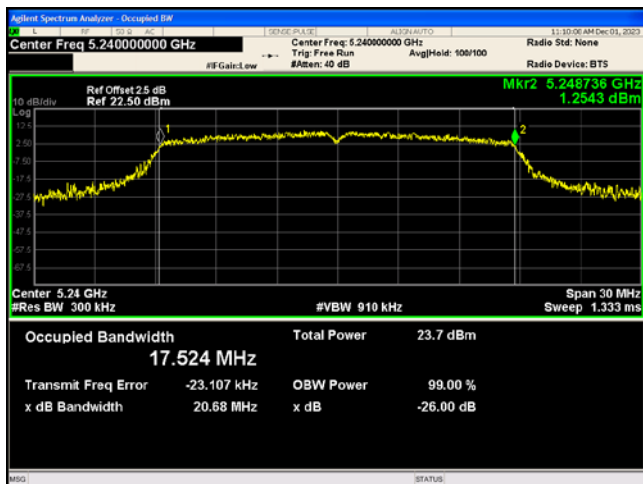
802.11n(HT20)_5180



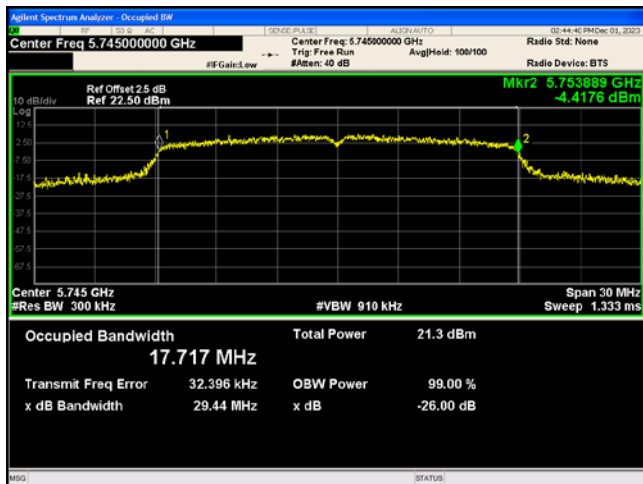
802.11n(HT20)_5200



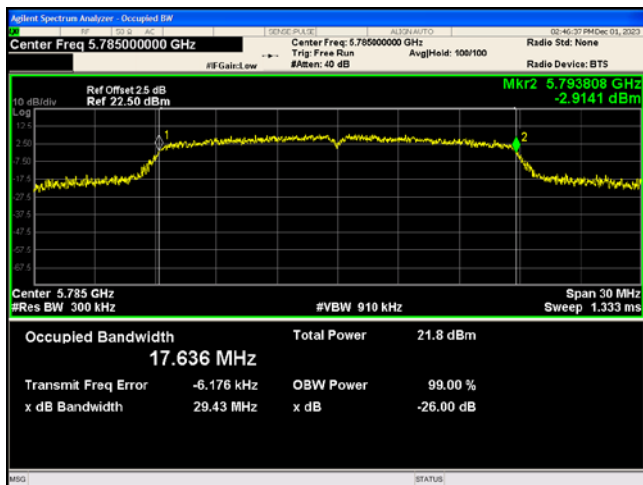
802.11n(HT20)_5240



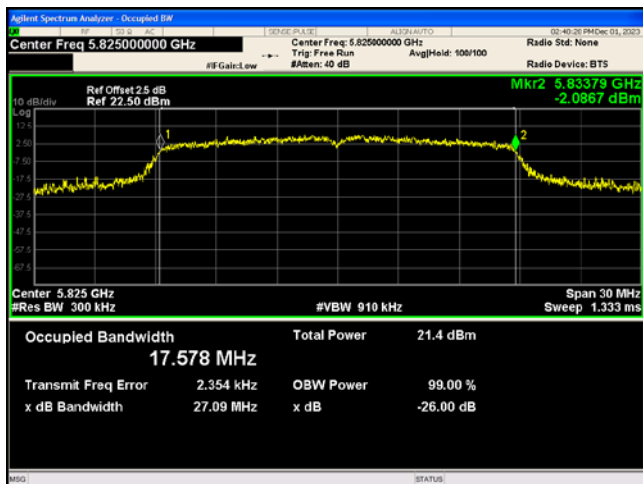
802.11n(HT20)_5745



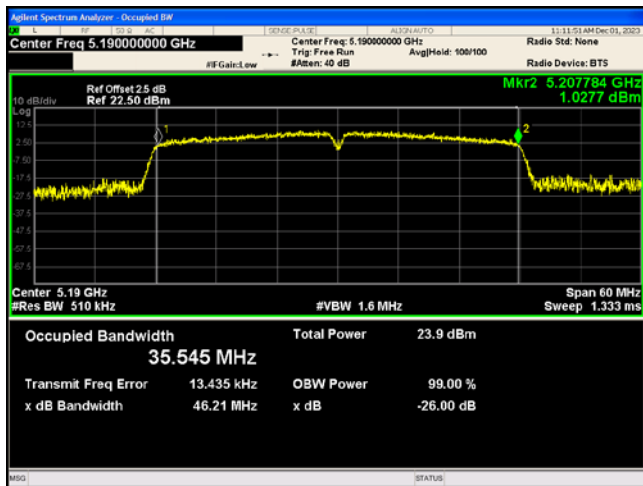
802.11n(HT20)_5785



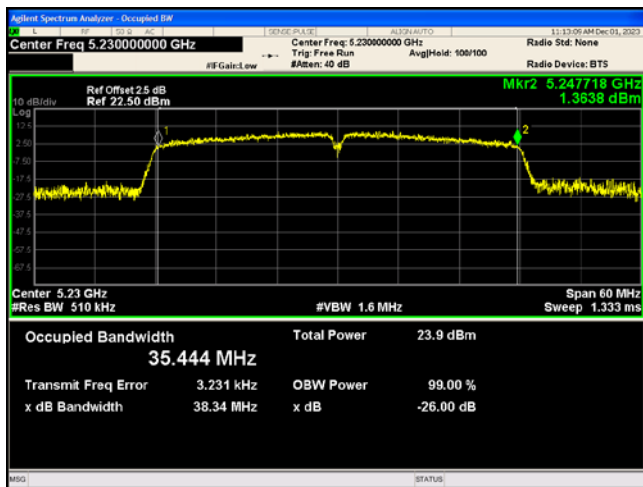
802.11n(HT20)_5825



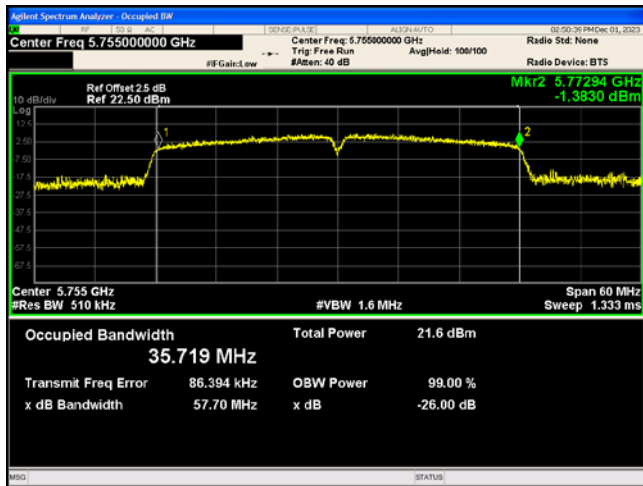
802.11n(HT40)_5190



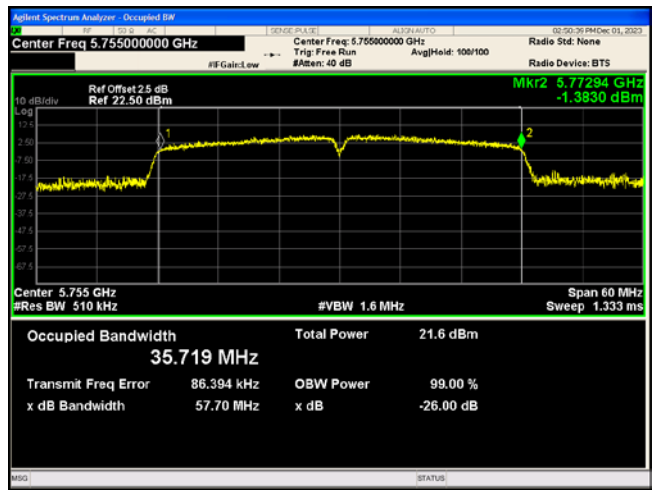
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



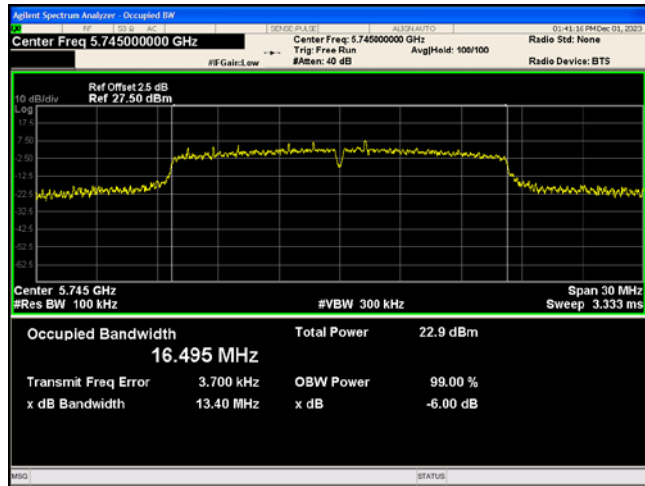
Appendix A3: Min emission bandwidth

Test Result

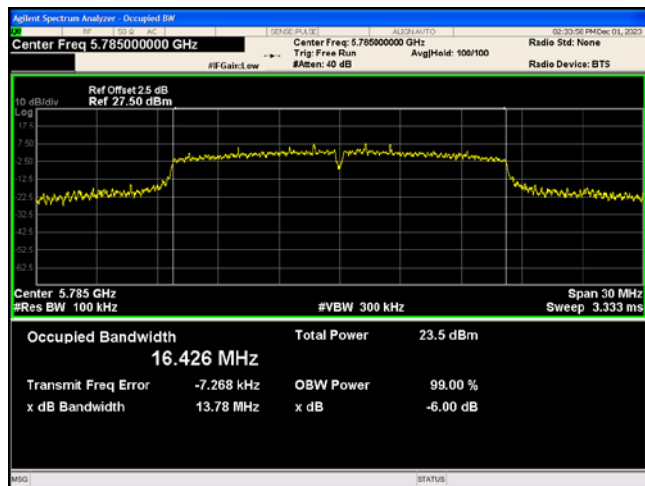
| Test Mode | Channel | 6db EBW [MHz] | Limit[MHz] | Verdict |
|---------------|---------|---------------|------------|---------|
| 802.11a | 5745 | 13.40 | >0.5 | PASS |
| | 5785 | 13.78 | >0.5 | PASS |
| | 5825 | 14.16 | >0.5 | PASS |
| 802.11n(HT20) | 5745 | 13.40 | >0.5 | PASS |
| | 5785 | 15.43 | >0.5 | PASS |
| | 5825 | 13.58 | >0.5 | PASS |
| 802.11n(HT40) | 5755 | 33.79 | >0.5 | PASS |
| | 5795 | 32.54 | >0.5 | PASS |

Test Graphs

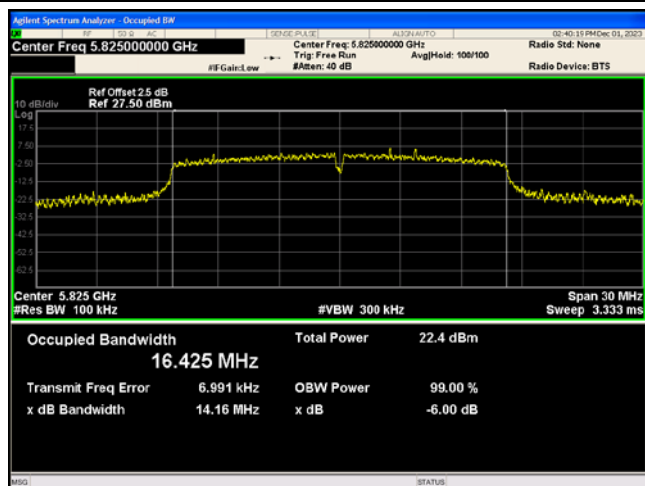
802.11a_5745



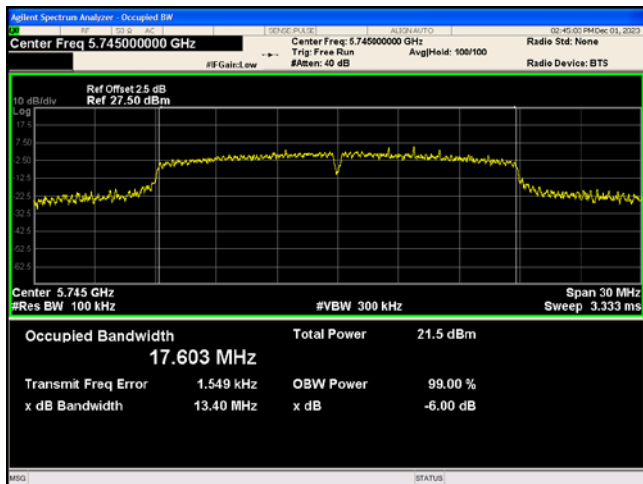
802.11a_5785



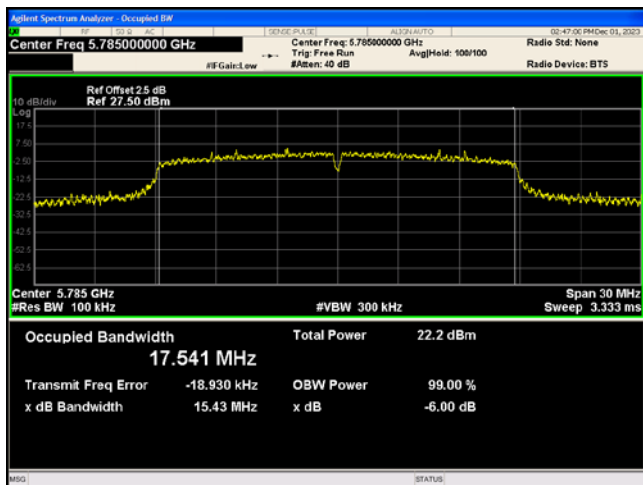
802.11a_5825



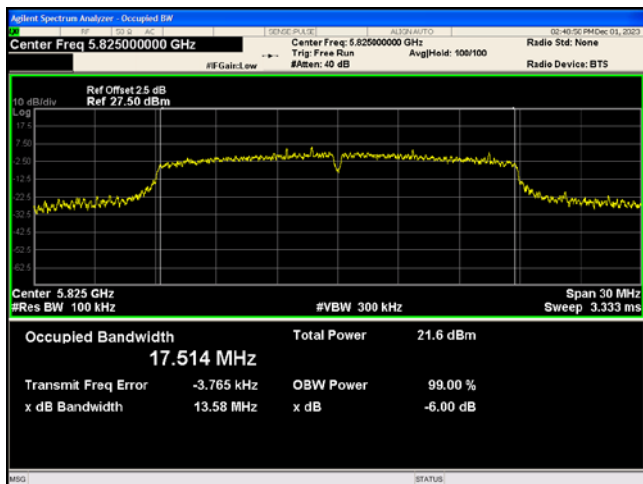
802.11n(HT20)_5745



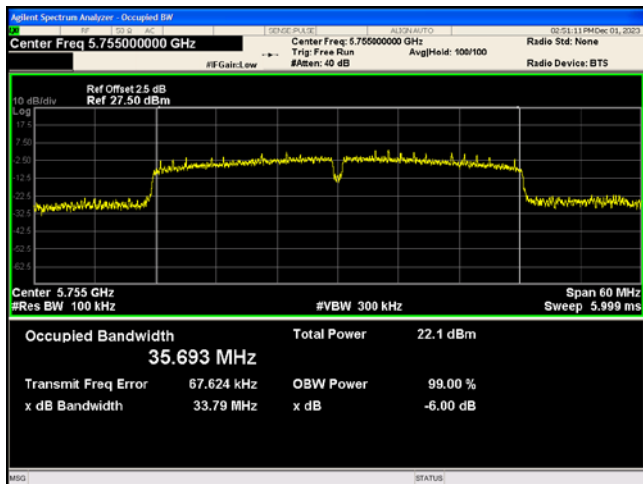
802.11n(HT20)_5785



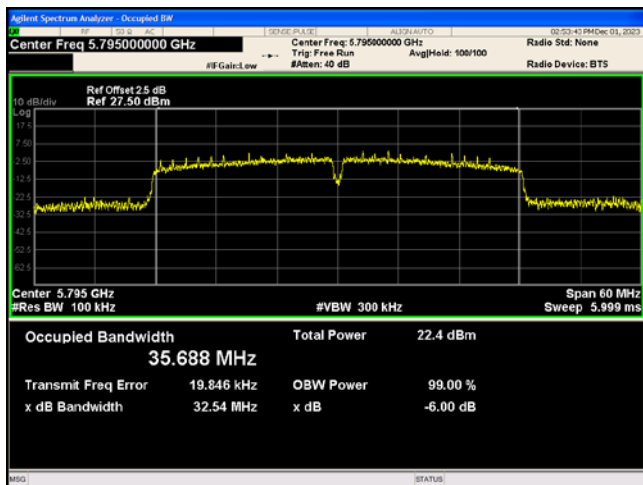
802.11n(HT20)_5825



802.11n(HT40)_5755



802.11n(HT40)_5795



Appendix B: Maximum conducted output power

Test Result

| Test Mode | Channel | Result[dBm] | Limit[dBm] | Verdict |
|---------------|---------|-------------|------------|---------|
| 802.11a | 5180 | 17.194 | <=24 | PASS |
| | 5200 | 17.168 | <=24 | PASS |
| | 5240 | 17.546 | <=24 | PASS |
| | 5745 | 16.122 | <=30 | PASS |
| | 5785 | 16.761 | <=30 | PASS |
| | 5825 | 16.080 | <=30 | PASS |
| 802.11n(HT20) | 5180 | 17.050 | <=24 | PASS |
| | 5200 | 17.182 | <=24 | PASS |
| | 5240 | 17.230 | <=24 | PASS |
| | 5745 | 14.824 | <=30 | PASS |
| | 5785 | 15.515 | <=30 | PASS |
| | 5825 | 14.979 | <=30 | PASS |
| 802.11n(HT40) | 5190 | 16.579 | <=24 | PASS |
| | 5230 | 16.630 | <=24 | PASS |
| | 5755 | 14.417 | <=30 | PASS |
| | 5795 | 14.665 | <=30 | PASS |

Note: Test results increased RF cable loss by 2.5dB.

Appendix C: Maximum power spectral density

Test Result

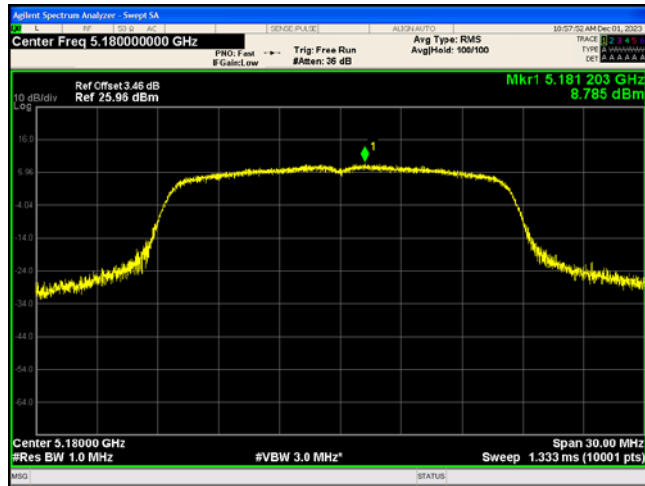
| Test Mode | Channel | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|---------------|---------|------------------|----------------|---------|
| 802.11a | 5180 | 8.785 | <=11 | PASS |
| | 5200 | 8.413 | <=11 | PASS |
| | 5240 | 9.433 | <=11 | PASS |
| | 5745 | 4.630 | <=30 | PASS |
| | 5785 | 5.294 | <=30 | PASS |
| | 5825 | 5.080 | <=30 | PASS |
| 802.11n(HT20) | 5180 | 8.874 | <=11 | PASS |
| | 5200 | 8.786 | <=11 | PASS |
| | 5240 | 8.864 | <=11 | PASS |
| | 5745 | 3.049 | <=30 | PASS |
| | 5785 | 4.010 | <=30 | PASS |
| | 5825 | 3.743 | <=30 | PASS |
| 802.11n(HT40) | 5190 | 6.162 | <=11 | PASS |
| | 5230 | 6.024 | <=11 | PASS |
| | 5755 | 0.960 | <=30 | PASS |
| | 5795 | 1.293 | <=30 | PASS |

Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725 - 5.85 GHz.

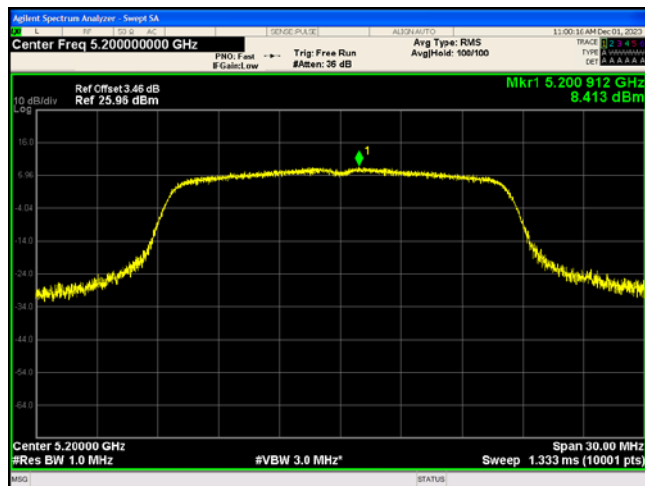
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

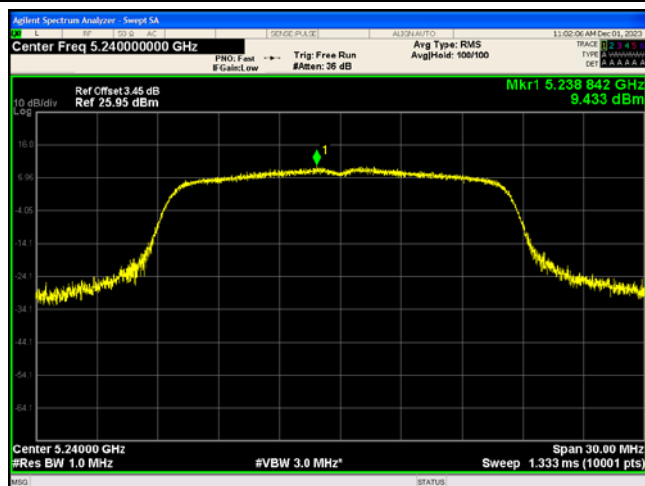
802.11a_5180



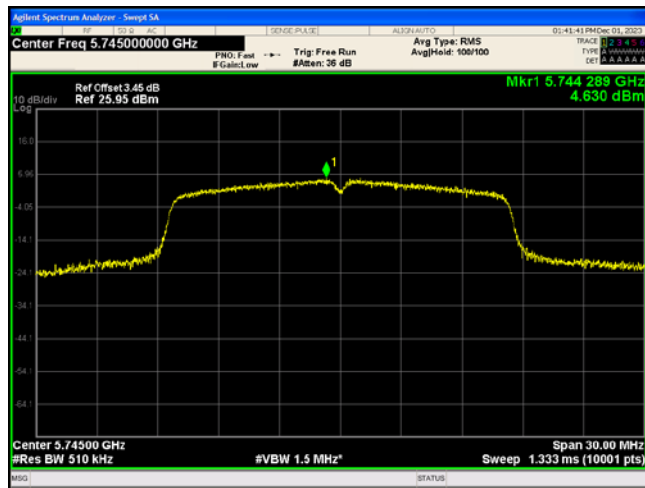
802.11a_5200



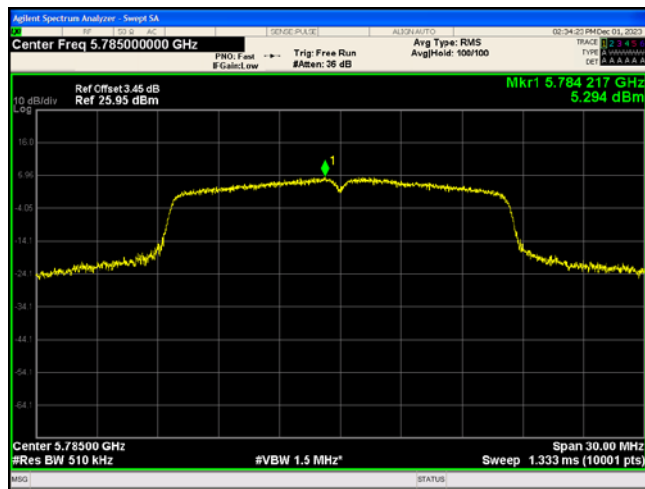
802.11a_5240



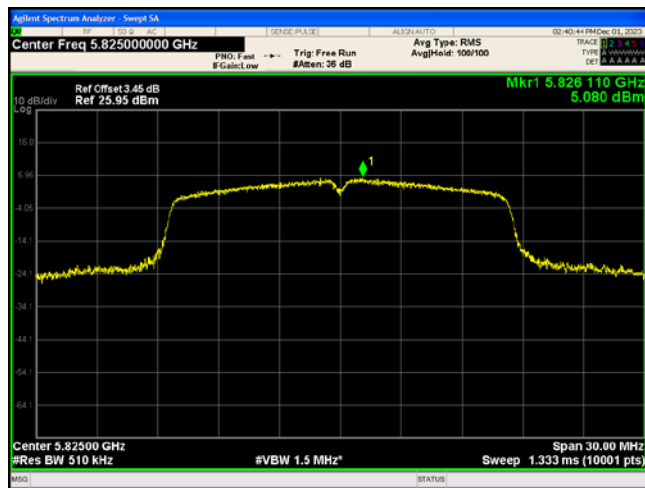
802.11a_5745



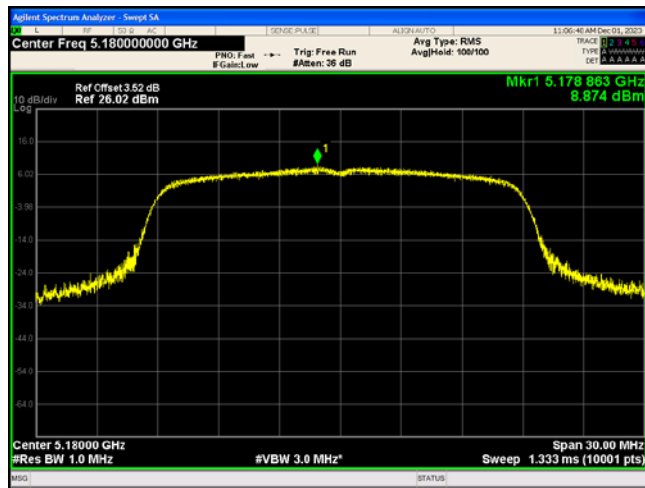
802.11a_5785



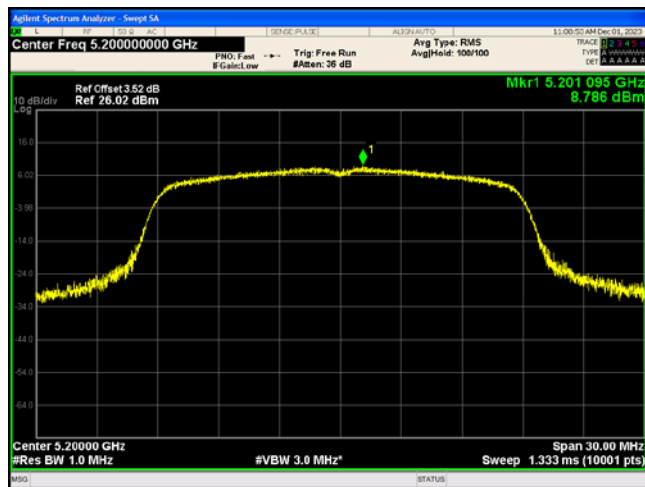
802.11a_5825



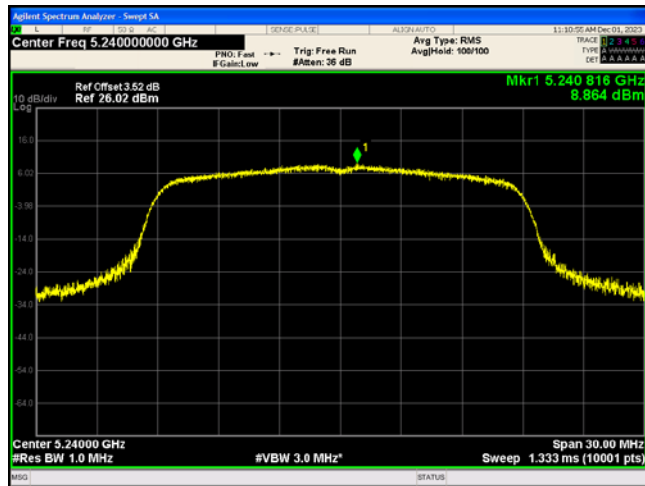
802.11n(HT20)_5180



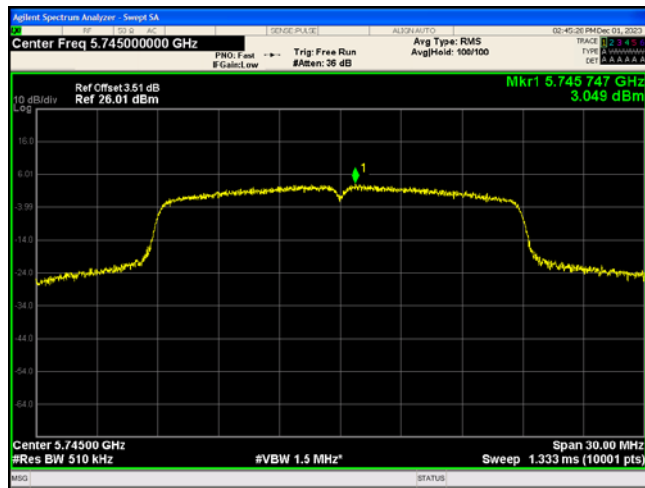
802.11n(HT20)_5200



802.11n(HT20)_5240



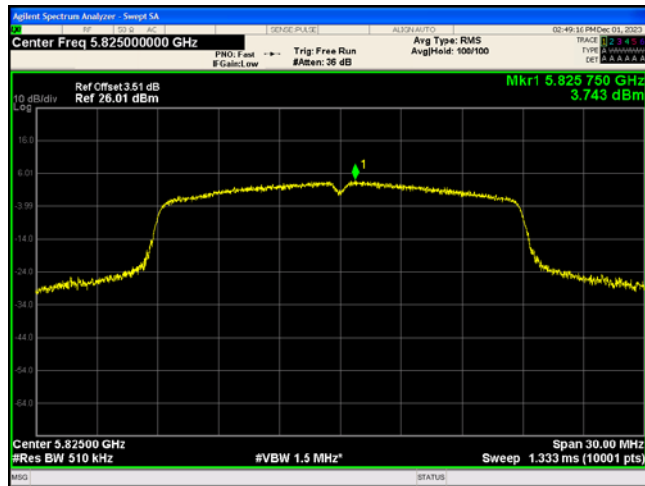
802.11n(HT20)_5745



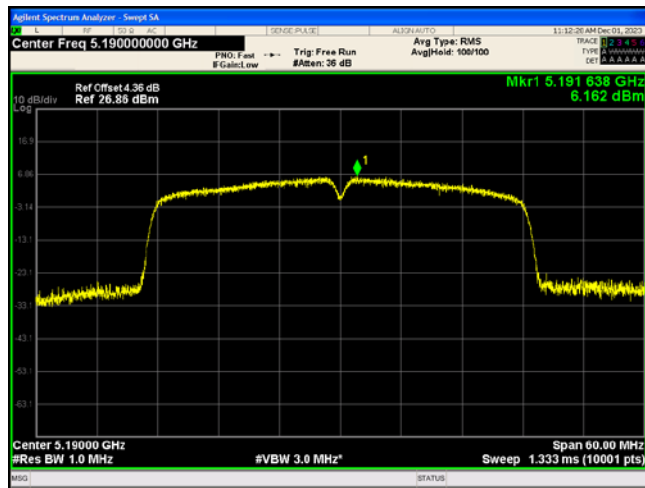
802.11n(HT20)_5785



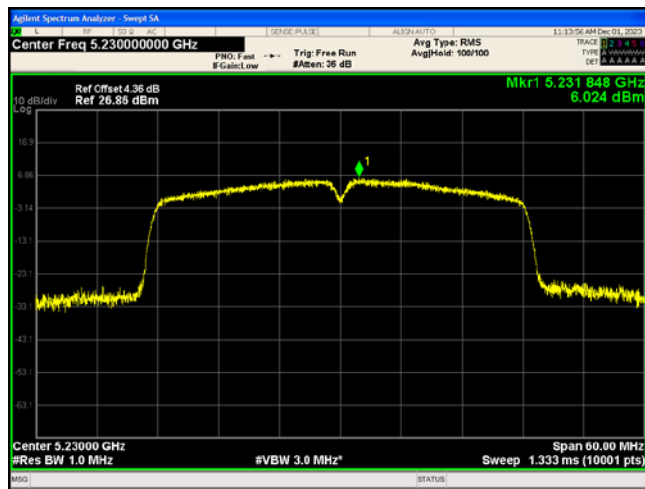
802.11n(HT20)_5825



802.11n(HT40)_5190



802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



Appendix D: Frequency Stability

Test Result

| Condition | Mode | Center Frequency (MHz) | Calculated Value of Center Frequency(MHz) | Result (ppm) | Limit (ppm) | Verdict |
|-----------|-------|------------------------|---|--------------|-------------|---------|
| NT/NV | 20MHz | 5180.0 | 5179.972031 | -5.40 | 20 | PASS |
| | | 5200.0 | 5199.971731 | -5.44 | | PASS |
| | | 5240.0 | 5239.971356 | -5.47 | | PASS |
| | 40MHz | 5190.0 | 5189.972318 | -5.33 | | PASS |
| | | 5230.0 | 5229.972993 | -5.16 | | PASS |
| | | 5180.0 | 5179.971981 | -5.41 | | PASS |
| LT/NV | 20MHz | 5200.0 | 5199.971681 | -5.45 | | PASS |
| | | 5240.0 | 5239.971368 | -5.46 | | PASS |
| | | 5190.0 | 5189.972206 | -5.36 | | PASS |
| | 40MHz | 5230.0 | 5229.972693 | -5.22 | | PASS |
| | | 5180.0 | 5179.971868 | -5.43 | | PASS |
| | | 5200.0 | 5199.971643 | -5.45 | | PASS |
| HT/NV | 20MHz | 5240.0 | 5239.971306 | -5.48 | | PASS |
| | | 5190.0 | 5189.972181 | -5.36 | | PASS |
| | | 5230.0 | 5229.972468 | -5.26 | | PASS |
| | 40MHz | 5180.0 | 5179.971918 | -5.42 | | PASS |
| | | 5200.0 | 5199.971668 | -5.45 | | PASS |
| | | 5240.0 | 5239.971343 | -5.47 | | PASS |
| 0°C/NV | 20MHz | 5190.0 | 5189.972118 | -5.37 | | PASS |
| | | 5230.0 | 5229.972368 | -5.28 | | PASS |
| | | 5180.0 | 5179.971893 | -5.43 | | PASS |
| | 40MHz | 5200.0 | 5199.971618 | -5.46 | | PASS |
| | | 5240.0 | 5239.971231 | -5.49 | | PASS |
| | | 5190.0 | 5189.971956 | -5.40 | | PASS |
| 10°C/NV | 20MHz | 5230.0 | 5229.972306 | -5.30 | PASS | |
| | | 5180.0 | 5179.971868 | -5.43 | PASS | |
| | | 5200.0 | 5199.971593 | -5.46 | PASS | |
| | 40MHz | 5240.0 | 5239.971181 | -5.50 | PASS | |
| | | 5190.0 | 5189.971981 | -5.40 | PASS | |
| | | 5230.0 | 5229.972143 | -5.33 | PASS | |
| 20°C/NV | 20MHz | 5180.0 | 5179.971918 | -5.42 | PASS | |
| | | 5200.0 | 5199.971556 | -5.47 | PASS | |
| | | 5240.0 | 5239.971193 | -5.50 | PASS | |
| | 40MHz | 5190.0 | 5189.971906 | -5.41 | PASS | |
| | | 5230.0 | 5229.972043 | -5.35 | PASS | |
| | | 5180.0 | 5179.971943 | -5.42 | PASS | |
| 30°C/NV | 20MHz | 5200.0 | 5199.971593 | -5.46 | PASS | |
| | | 5240.0 | 5239.971181 | -5.50 | PASS | |
| | | 5190.0 | 5189.972018 | -5.39 | PASS | |
| | 40MHz | 5230.0 | 5229.971993 | -5.36 | PASS | |
| | | 5180.0 | 5179.971943 | -5.42 | PASS | |
| | | 5200.0 | 5199.971593 | -5.46 | PASS | |
| 40°C/NV | 20MHz | 5240.0 | 5239.971181 | -5.50 | PASS | |
| | | 5190.0 | 5189.972018 | -5.39 | PASS | |
| | | 5230.0 | 5229.971993 | -5.36 | PASS | |
| | 40MHz | 5180.0 | 5179.971943 | -5.42 | PASS | |
| | | 5200.0 | 5199.971593 | -5.46 | PASS | |
| | | 5240.0 | 5239.971181 | -5.50 | PASS | |

| | | | | | | |
|---------|-------|--------|-------------|-------|----|------|
| 45°C/NV | 20MHz | 5180.0 | 5179.971956 | -5.41 | 20 | PASS |
| | | 5200.0 | 5199.971618 | -5.46 | | PASS |
| | | 5240.0 | 5239.971193 | -5.50 | | PASS |
| | 40MHz | 5190.0 | 5189.971831 | -5.43 | | PASS |
| | | 5230.0 | 5229.971968 | -5.36 | | PASS |

| Condition | Mode | Center Frequency (MHz) | Calculated Value of Center Frequency(MHz) | Result (ppm) | Limit (ppm) | State |
|-----------|-------|------------------------|---|--------------|-------------|-------|
| NT/NV | 20MHz | 5745.0 | 5744.968093 | -5.55 | 20 | PASS |
| | | 5785.0 | 5784.976456 | -4.07 | | PASS |
| | | 5825.0 | 5824.968643 | -5.38 | | PASS |
| | 40MHz | 5755.0 | 5754.968043 | -5.55 | | PASS |
| | | 5795.0 | 5794.967730 | -5.57 | | PASS |
| LT/NV | 20MHz | 5745.0 | 5744.967868 | -5.59 | | PASS |
| | | 5785.0 | 5784.973631 | -4.56 | | PASS |
| | | 5825.0 | 5824.968568 | -5.40 | | PASS |
| | 40MHz | 5755.0 | 5754.967980 | -5.56 | | PASS |
| | | 5795.0 | 5794.967655 | -5.58 | | PASS |
| HT/NV | 20MHz | 5745.0 | 5744.967830 | -5.60 | | PASS |
| | | 5785.0 | 5784.972231 | -4.80 | | PASS |
| | | 5825.0 | 5824.968355 | -5.43 | | PASS |
| | 40MHz | 5755.0 | 5754.968005 | -5.56 | | PASS |
| | | 5795.0 | 5794.967705 | -5.57 | | PASS |
| 0°C/NV | 20MHz | 5745.0 | 5744.967793 | -5.61 | PASS | |
| | | 5785.0 | 5784.971406 | -4.94 | PASS | |
| | | 5825.0 | 5824.968318 | -5.44 | PASS | |
| | 40MHz | 5755.0 | 5754.967918 | -5.57 | PASS | |
| | | 5795.0 | 5794.967618 | -5.59 | PASS | |
| 10°C/NV | 20MHz | 5745.0 | 5744.967843 | -5.60 | PASS | |
| | | 5785.0 | 5784.970781 | -5.05 | PASS | |
| | | 5825.0 | 5824.968193 | -5.46 | PASS | |
| | 40MHz | 5755.0 | 5754.967918 | -5.57 | PASS | |
| | | 5795.0 | 5794.967643 | -5.58 | PASS | |
| 20°C/NV | 20MHz | 5745.0 | 5744.968105 | -5.55 | PASS | |
| | | 5785.0 | 5784.970231 | -5.15 | PASS | |
| | | 5825.0 | 5824.968030 | -5.49 | PASS | |
| | 40MHz | 5755.0 | 5754.967893 | -5.58 | PASS | |
| | | 5795.0 | 5794.967605 | -5.59 | PASS | |
| 30°C/NV | 20MHz | 5745.0 | 5744.968155 | -5.54 | PASS | |
| | | 5785.0 | 5784.969780 | -5.22 | PASS | |
| | | 5825.0 | 5824.967905 | -5.51 | PASS | |
| | 40MHz | 5755.0 | 5754.967905 | -5.58 | PASS | |
| | | 5795.0 | 5794.967580 | -5.59 | PASS | |
| 40°C/NV | 20MHz | 5745.0 | 5744.968143 | -5.55 | PASS | |
| | | 5785.0 | 5784.969493 | -5.27 | PASS | |

| | | | | | | |
|---------|-------|--------|-------------|-------|--|------|
| | | 5825.0 | 5824.967780 | -5.53 | | PASS |
| | 40MHz | 5755.0 | 5754.967943 | -5.57 | | PASS |
| | | 5795.0 | 5794.967643 | -5.58 | | PASS |
| 45°C/NV | 20MHz | 5745.0 | 5744.968118 | -5.55 | | PASS |
| | | 5785.0 | 5784.969305 | -5.31 | | PASS |
| | | 5825.0 | 5824.967730 | -5.54 | | PASS |
| | 40MHz | 5755.0 | 5754.967943 | -5.57 | | PASS |
| | | 5795.0 | 5794.967643 | -5.58 | | PASS |

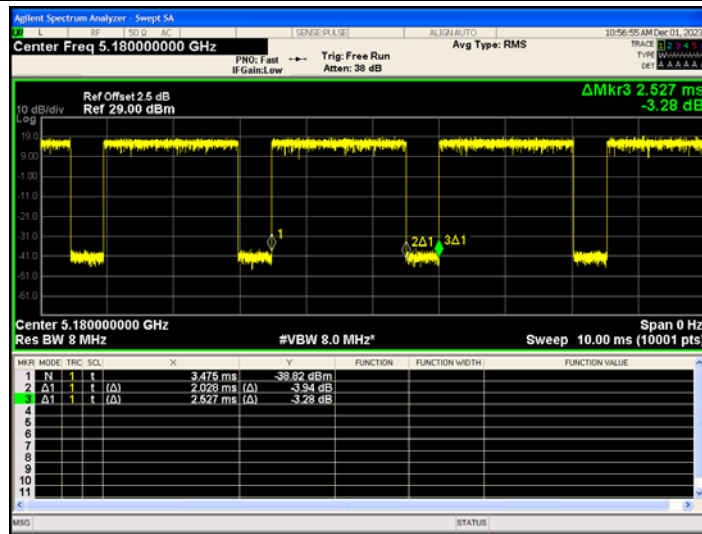
Appendix E: Duty Cycle

Test Result

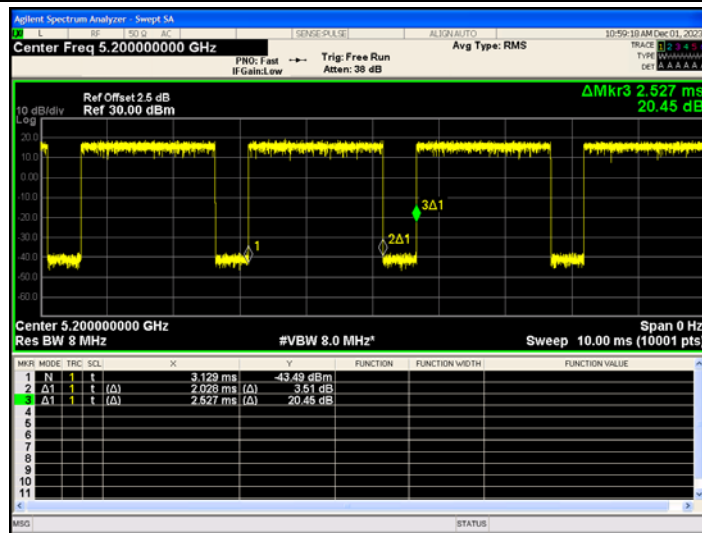
| Test Mode | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Duty Cycle Factor | 1/T Minimum VBW (kHz) | Final setting For VBW (kHz) |
|---------------|---------|----------------------------|--------------------------|----------------|-------------------|-----------------------|-----------------------------|
| 802.11a | 5180 | 2.028 | 2.527 | 80.25 | 0.96 | 0.493 | 1 |
| | 5200 | 2.028 | 2.527 | 80.25 | 0.96 | 0.493 | 1 |
| | 5240 | 2.030 | 2.527 | 80.34 | 0.95 | 0.493 | 1 |
| | 5745 | 2.030 | 2.527 | 80.34 | 0.95 | 0.493 | 1 |
| | 5785 | 2.030 | 2.528 | 80.29 | 0.95 | 0.493 | 1 |
| | 5825 | 2.032 | 2.528 | 80.35 | 0.95 | 0.492 | 1 |
| 802.11n(HT20) | 5180 | 1.892 | 2.391 | 79.13 | 1.02 | 0.529 | 1 |
| | 5200 | 1.892 | 2.391 | 79.13 | 1.02 | 0.529 | 1 |
| | 5240 | 1.892 | 2.392 | 79.10 | 1.02 | 0.529 | 1 |
| | 5745 | 1.895 | 2.392 | 79.23 | 1.01 | 0.528 | 1 |
| | 5785 | 1.894 | 2.390 | 79.22 | 1.01 | 0.528 | 1 |
| | 5825 | 1.895 | 2.392 | 79.23 | 1.01 | 0.528 | 1 |
| 802.11n(HT40) | 5190 | 0.931 | 1.431 | 65.09 | 1.86 | 1.074 | 2 |
| | 5230 | 0.932 | 1.431 | 65.13 | 1.86 | 1.073 | 2 |
| | 5755 | 0.932 | 1.431 | 65.13 | 1.86 | 1.073 | 2 |
| | 5795 | 0.933 | 1.432 | 65.15 | 1.86 | 1.072 | 2 |

Test Graphs

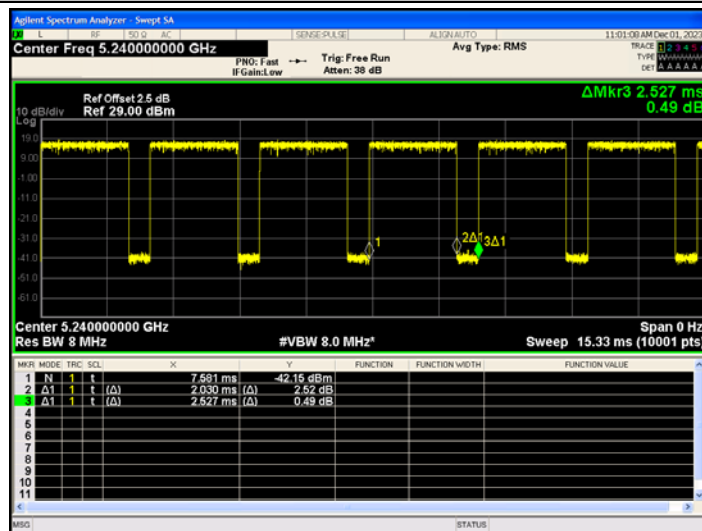
802.11a_5180



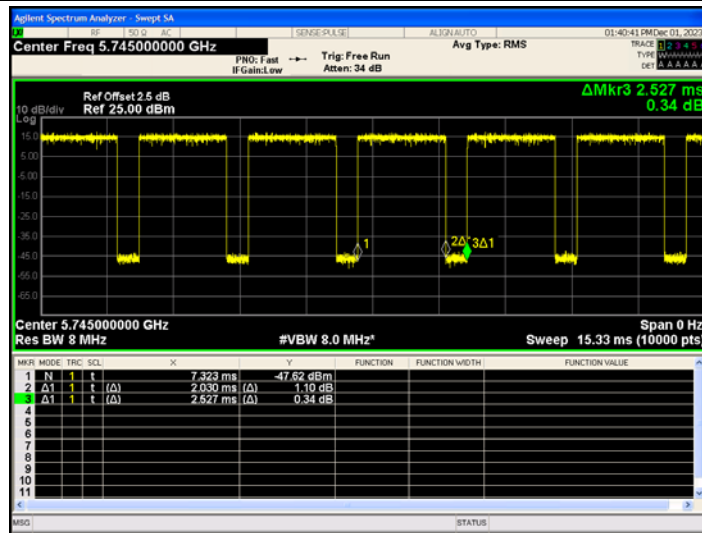
802.11a_5200



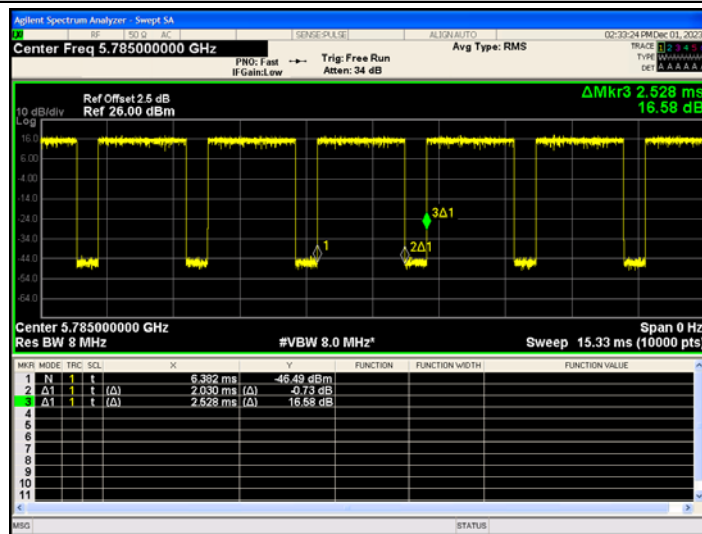
802.11a_5240



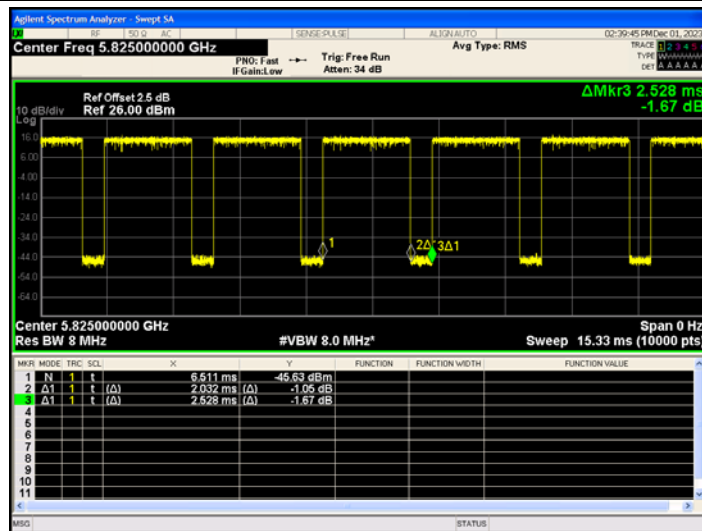
802.11a_5745



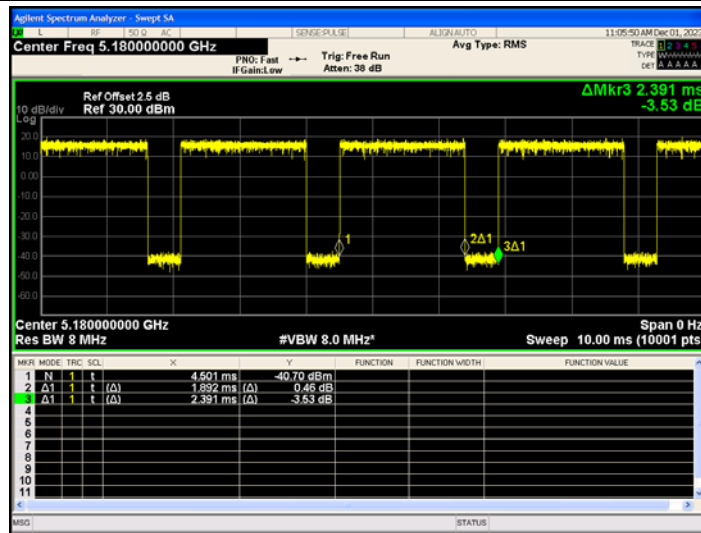
802.11a_5785



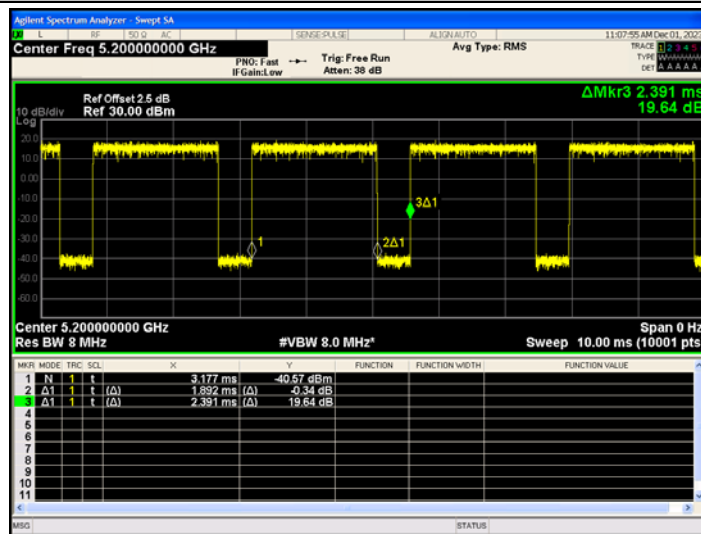
802.11a_5825



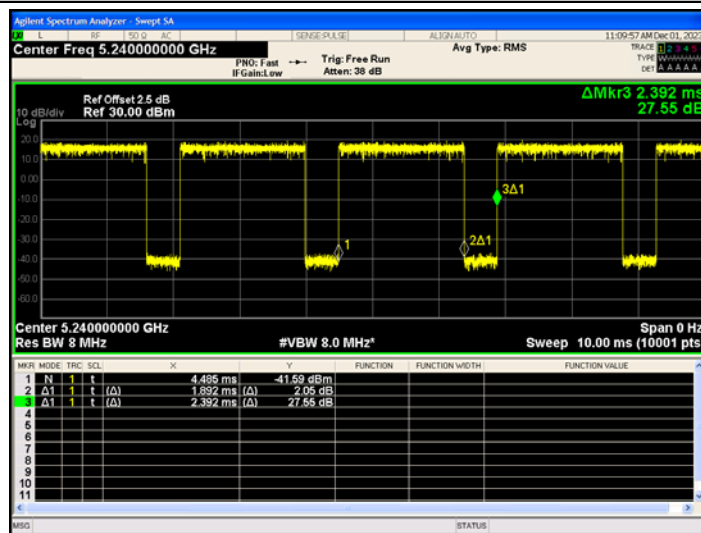
802.11n(HT20)_5180



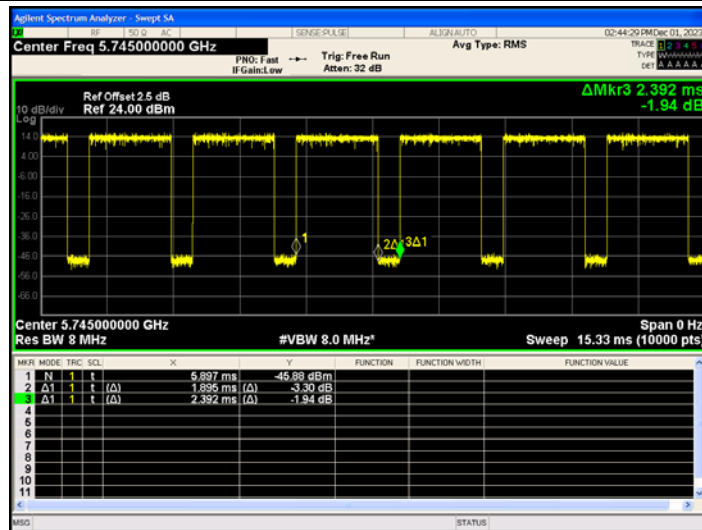
802.11n(HT20)_5200



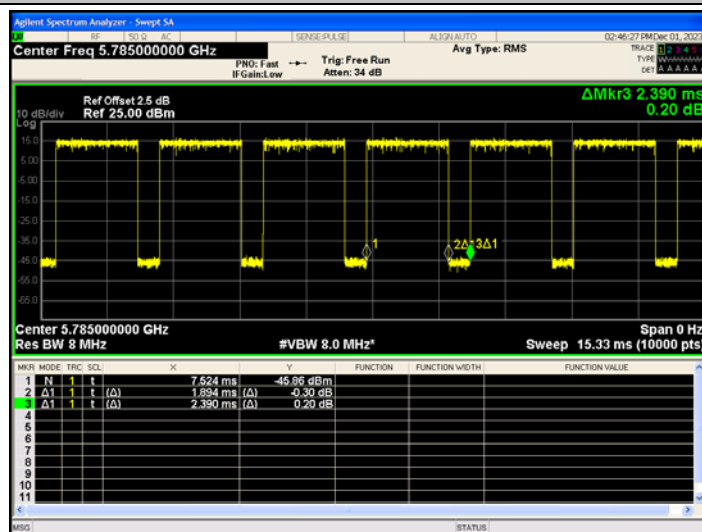
802.11n(HT20)_5240



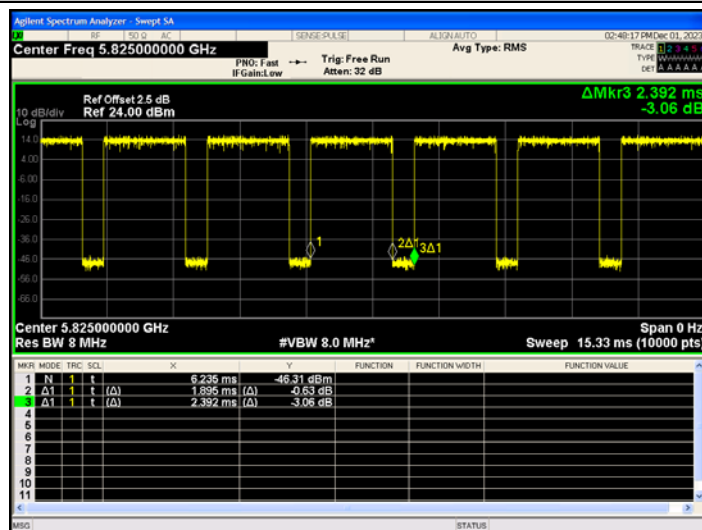
802.11n(HT20)_5745



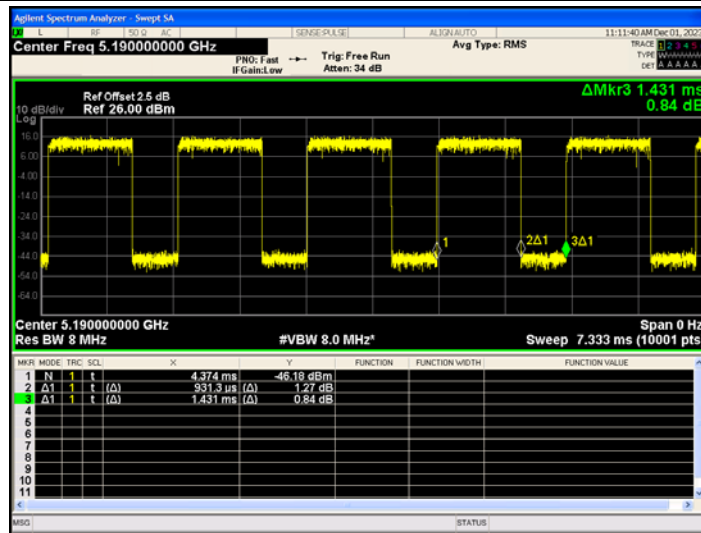
802.11n(HT20)_5785



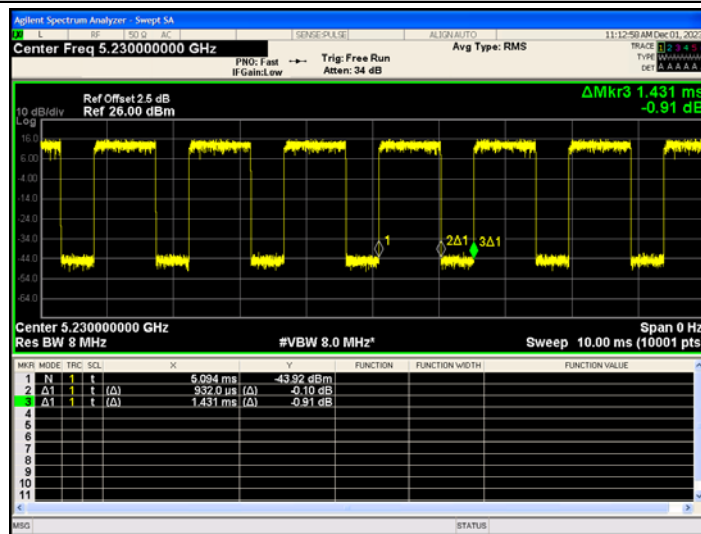
802.11n(HT20)_5825



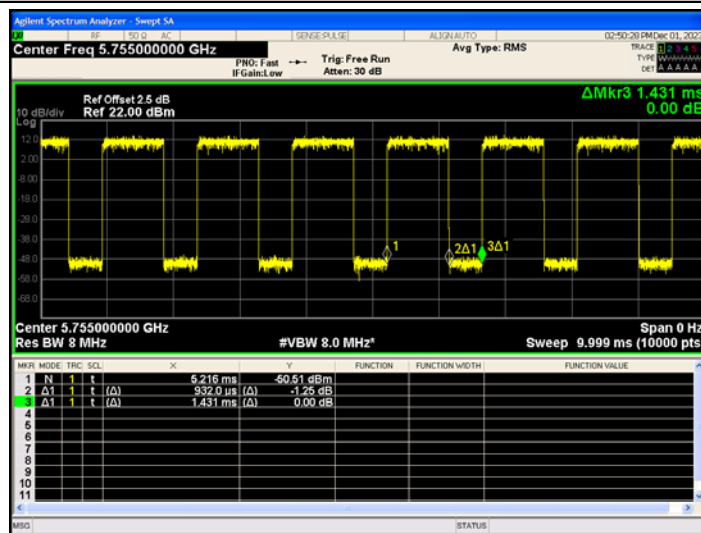
802.11n(HT40)_5190



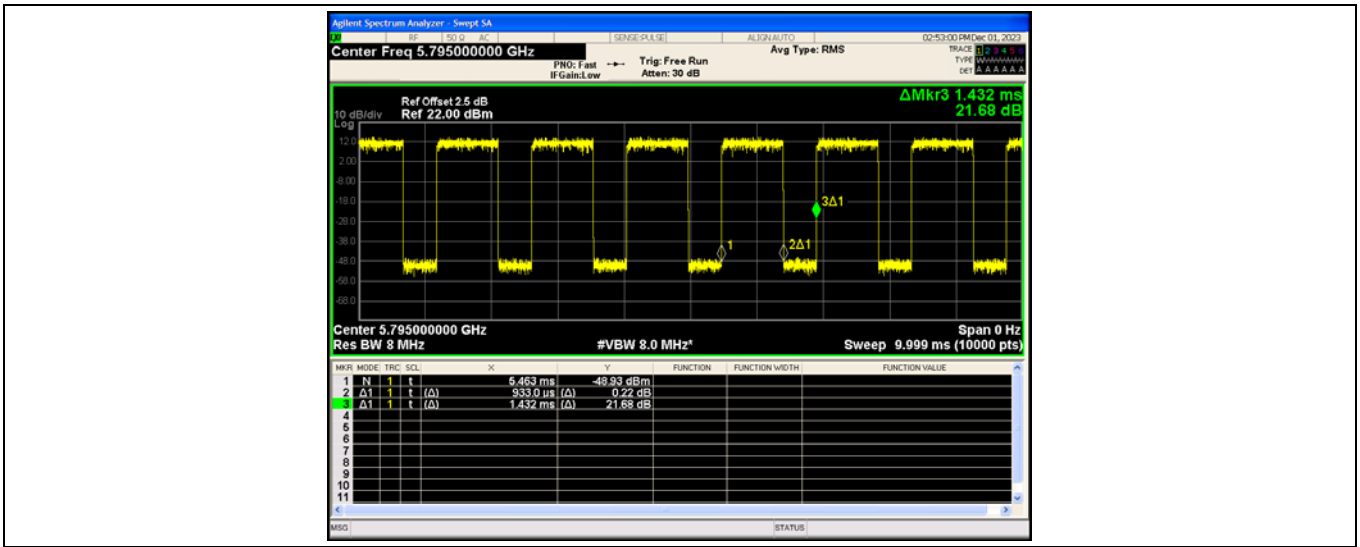
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



-----End-----