

| Mode             | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|------------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|                  |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax<br>HE40 | 5 190      | 26   | 0        | 4.03              | 3.28  | 6.68            | 0.28              | 6.96                           |
|                  |            |      | 8        | 4.52              | 4.03  | 7.29            | 0.28              | 7.57                           |
|                  |            |      | 17       | 3.93              | 3.43  | 6.70            | 0.28              | 6.98                           |
|                  | 5 230      | 26   | 0        | 4.01              | 3.51  | 6.78            | 0.28              | 7.06                           |
|                  |            |      | 8        | 4.51              | 4.20  | 7.37            | 0.28              | 7.65                           |
|                  |            |      | 17       | 3.73              | 3.67  | 6.71            | 0.28              | 6.99                           |
|                  | 5 270      | 26   | 0        | 7.55              | 6.77  | 10.19           | -0.74             | 9.45                           |
|                  |            |      | 8        | 7.90              | 7.40  | 10.67           | -0.74             | 9.93                           |
|                  |            |      | 17       | 7.32              | 6.79  | 10.07           | -0.74             | 9.33                           |
|                  | 5 310      | 26   | 0        | 7.36              | 6.85  | 10.12           | -0.74             | 9.38                           |
|                  |            |      | 8        | 7.84              | 7.36  | 10.62           | -0.74             | 9.88                           |
|                  |            |      | 17       | 7.27              | 7.11  | 10.20           | -0.74             | 9.46                           |
|                  | 5 510      | 26   | 0        | 7.11              | 7.47  | 10.30           | 0.55              | 10.85                          |
|                  |            |      | 8        | 7.79              | 8.25  | 11.04           | 0.55              | 11.59                          |
|                  |            |      | 17       | 7.12              | 7.79  | 10.48           | 0.55              | 11.03                          |
|                  | 5 550      | 26   | 0        | 7.04              | 7.46  | 10.27           | 0.55              | 10.82                          |
|                  |            |      | 8        | 7.69              | 8.20  | 10.96           | 0.55              | 11.51                          |
|                  |            |      | 17       | 7.93              | 8.49  | 11.23           | 0.55              | 11.78                          |
|                  | 5 710      | 26   | 0        | 6.95              | 7.08  | 10.03           | 0.55              | 10.58                          |
|                  |            |      | 8        | 7.62              | 7.59  | 10.62           | 0.55              | 11.17                          |
|                  |            |      | 17       | 6.86              | 7.18  | 10.03           | 0.55              | 10.58                          |
|                  | 5 755      | 26   | 0        | 13.76             | 14.67 | 17.25           | -0.25             | 17.00                          |
|                  |            |      | 8        | 14.29             | 14.84 | 17.58           | -0.25             | 17.33                          |
|                  |            |      | 17       | 13.81             | 14.47 | 17.16           | -0.25             | 16.91                          |
|                  | 5 795      | 26   | 0        | 13.30             | 14.07 | 16.71           | -0.25             | 16.46                          |
|                  |            |      | 8        | 14.25             | 14.75 | 17.52           | -0.25             | 17.27                          |
|                  |            |      | 17       | 13.58             | 14.14 | 16.88           | -0.25             | 16.63                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode             | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|------------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|                  |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax<br>HE40 | 5 190      | 52   | 37       | 6.22              | 4.22  | 8.34            | 0.28              | 8.62                           |
|                  |            |      | 40       | 6.55              | 4.93  | 8.83            | 0.28              | 9.11                           |
|                  |            |      | 44       | 6.16              | 4.48  | 8.41            | 0.28              | 8.69                           |
|                  | 5 230      | 52   | 37       | 6.22              | 4.66  | 8.52            | 0.28              | 8.80                           |
|                  |            |      | 40       | 6.70              | 5.06  | 8.97            | 0.28              | 9.25                           |
|                  |            |      | 44       | 6.23              | 4.47  | 8.45            | 0.28              | 8.73                           |
|                  | 5 270      | 52   | 37       | 9.33              | 8.78  | 12.07           | -0.74             | 11.33                          |
|                  |            |      | 40       | 9.57              | 9.54  | 12.57           | -0.74             | 11.83                          |
|                  |            |      | 44       | 9.36              | 9.16  | 12.27           | -0.74             | 11.53                          |
|                  | 5 310      | 52   | 37       | 9.17              | 8.99  | 12.09           | -0.74             | 11.35                          |
|                  |            |      | 40       | 9.32              | 9.42  | 12.38           | -0.74             | 11.64                          |
|                  |            |      | 44       | 9.16              | 9.20  | 12.19           | -0.74             | 11.45                          |
|                  | 5 510      | 52   | 37       | 9.03              | 9.63  | 12.35           | 0.55              | 12.90                          |
|                  |            |      | 40       | 9.60              | 9.87  | 12.75           | 0.55              | 13.30                          |
|                  |            |      | 44       | 8.94              | 9.66  | 12.33           | 0.55              | 12.88                          |
|                  | 5 550      | 52   | 37       | 8.85              | 9.42  | 12.15           | 0.55              | 12.70                          |
|                  |            |      | 40       | 9.46              | 9.89  | 12.69           | 0.55              | 13.24                          |
|                  |            |      | 44       | 8.99              | 9.67  | 12.35           | 0.55              | 12.90                          |
|                  | 5 710      | 52   | 37       | 8.72              | 9.02  | 11.88           | 0.55              | 12.43                          |
|                  |            |      | 40       | 9.18              | 9.43  | 12.32           | 0.55              | 12.87                          |
|                  |            |      | 44       | 8.77              | 8.96  | 11.88           | 0.55              | 12.43                          |
|                  | 5 755      | 52   | 37       | 13.90             | 14.51 | 17.23           | -0.25             | 16.98                          |
|                  |            |      | 40       | 14.36             | 14.77 | 17.58           | -0.25             | 17.33                          |
|                  |            |      | 44       | 13.96             | 14.59 | 17.30           | -0.25             | 17.05                          |
|                  | 5 795      | 52   | 37       | 13.63             | 14.43 | 17.06           | -0.25             | 16.81                          |
|                  |            |      | 40       | 14.10             | 14.83 | 17.49           | -0.25             | 17.24                          |
|                  |            |      | 44       | 13.87             | 14.48 | 17.20           | -0.25             | 16.95                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode             | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|------------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|                  |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax<br>HE40 | 5 190      | 106  | 53       | 8.44              | 7.75  | 11.12           | 0.28              | 11.40                          |
|                  |            |      | 54       | 8.68              | 8.23  | 11.47           | 0.28              | 11.75                          |
|                  |            |      | 56       | 8.57              | 7.87  | 11.24           | 0.28              | 11.52                          |
|                  | 5 230      | 106  | 53       | 8.66              | 7.93  | 11.32           | 0.28              | 11.60                          |
|                  |            |      | 54       | 8.61              | 8.37  | 11.50           | 0.28              | 11.78                          |
|                  |            |      | 56       | 8.44              | 7.95  | 11.21           | 0.28              | 11.49                          |
|                  | 5 270      | 106  | 53       | 11.55             | 11.90 | 14.74           | -0.74             | 14.00                          |
|                  |            |      | 54       | 11.79             | 12.21 | 15.02           | -0.74             | 14.28                          |
|                  |            |      | 56       | 11.73             | 11.88 | 14.82           | -0.74             | 14.08                          |
|                  | 5 310      | 106  | 53       | 11.46             | 11.88 | 14.69           | -0.74             | 13.95                          |
|                  |            |      | 54       | 11.64             | 12.31 | 15.00           | -0.74             | 14.26                          |
|                  |            |      | 56       | 11.76             | 12.28 | 15.04           | -0.74             | 14.30                          |
|                  | 5 510      | 106  | 53       | 11.79             | 12.25 | 15.04           | 0.55              | 15.59                          |
|                  |            |      | 54       | 12.32             | 12.39 | 15.37           | 0.55              | 15.92                          |
|                  |            |      | 56       | 11.86             | 12.26 | 15.07           | 0.55              | 15.62                          |
|                  | 5 550      | 106  | 53       | 11.69             | 12.33 | 15.03           | 0.55              | 15.58                          |
|                  |            |      | 54       | 11.93             | 12.38 | 15.17           | 0.55              | 15.72                          |
|                  |            |      | 56       | 11.90             | 12.34 | 15.14           | 0.55              | 15.69                          |
|                  | 5 710      | 106  | 53       | 11.39             | 11.92 | 14.67           | 0.55              | 15.22                          |
|                  |            |      | 54       | 11.59             | 12.15 | 14.89           | 0.55              | 15.44                          |
|                  |            |      | 56       | 11.45             | 11.96 | 14.72           | 0.55              | 15.27                          |
|                  | 5 755      | 106  | 53       | 13.76             | 14.55 | 17.18           | -0.25             | 16.93                          |
|                  |            |      | 54       | 14.10             | 14.74 | 17.44           | -0.25             | 17.19                          |
|                  |            |      | 56       | 13.81             | 14.55 | 17.21           | -0.25             | 16.96                          |
|                  | 5 795      | 106  | 53       | 13.52             | 14.59 | 17.10           | -0.25             | 16.85                          |
|                  |            |      | 54       | 14.00             | 14.89 | 17.48           | -0.25             | 17.23                          |
|                  |            |      | 56       | 13.66             | 14.64 | 17.19           | -0.25             | 16.94                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode          | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|---------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|               |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax HE40 | 5 190      | 242  | 61       | 11.25             | 11.64 | 14.46           | 0.28              | 14.74                          |
|               |            |      | 62       | 11.46             | 11.98 | 14.74           | 0.28              | 15.02                          |
|               | 5 230      | 242  | 61       | 11.39             | 11.81 | 14.62           | 0.28              | 14.90                          |
|               |            |      | 62       | 11.27             | 11.86 | 14.59           | 0.28              | 14.87                          |
|               | 5 270      | 242  | 61       | 13.56             | 13.86 | 16.72           | -0.74             | 15.98                          |
|               |            |      | 62       | 13.70             | 13.99 | 16.86           | -0.74             | 16.12                          |
|               | 5 310      | 242  | 61       | 13.38             | 13.85 | 16.63           | -0.74             | 15.89                          |
|               |            |      | 62       | 13.53             | 14.11 | 16.84           | -0.74             | 16.10                          |
|               | 5 510      | 242  | 61       | 13.75             | 14.51 | 17.16           | 0.55              | 17.71                          |
|               |            |      | 62       | 13.79             | 14.63 | 17.24           | 0.55              | 17.79                          |
|               | 5 550      | 242  | 61       | 13.98             | 14.56 | 17.29           | 0.55              | 17.84                          |
|               |            |      | 62       | 13.92             | 14.48 | 17.22           | 0.55              | 17.77                          |
|               | 5 710      | 242  | 61       | 13.18             | 14.11 | 16.68           | 0.55              | 17.23                          |
|               |            |      | 62       | 13.15             | 14.12 | 16.67           | 0.55              | 17.22                          |
|               | 5 755      | 242  | 61       | 13.65             | 14.47 | 17.09           | -0.25             | 16.84                          |
|               |            |      | 62       | 13.88             | 14.54 | 17.23           | -0.25             | 16.98                          |
|               | 5 795      | 242  | 61       | 13.72             | 14.30 | 17.03           | -0.25             | 16.78                          |
|               |            |      | 62       | 13.62             | 14.54 | 17.11           | -0.25             | 16.86                          |
| 802.11ax HE40 | 5 190      | 484  | 65       | 12.94             | 13.22 | 16.09           | 0.28              | 16.37                          |
|               | 5 230      | 484  | 65       | 12.92             | 13.22 | 16.08           | 0.28              | 16.36                          |
|               | 5 270      | 484  | 65       | 13.25             | 13.34 | 16.31           | -0.74             | 15.57                          |
|               | 5 310      | 484  | 65       | 13.04             | 13.38 | 16.22           | -0.74             | 15.48                          |
|               | 5 510      | 484  | 65       | 13.12             | 13.61 | 16.38           | 0.55              | 16.93                          |
|               | 5 550      | 484  | 65       | 13.17             | 13.88 | 16.55           | 0.55              | 17.10                          |
|               | 5 710      | 484  | 65       | 13.00             | 13.22 | 16.12           | 0.55              | 16.67                          |
|               | 5 755      | 484  | 65       | 13.12             | 13.75 | 16.46           | -0.25             | 16.21                          |
|               | 5 795      | 484  | 65       | 13.23             | 13.83 | 16.55           | -0.25             | 16.30                          |
| 802.11ax HE40 | 5 190      | SU   | NA       | 13.51             | 13.66 | 16.60           | 0.28              | 16.88                          |
|               | 5 230      | SU   | NA       | 13.50             | 13.78 | 16.65           | 0.28              | 16.93                          |
|               | 5 270      | SU   | NA       | 13.65             | 13.80 | 16.74           | -0.74             | 16.00                          |
|               | 5 310      | SU   | NA       | 13.46             | 13.82 | 16.65           | -0.74             | 15.91                          |
|               | 5 510      | SU   | NA       | 13.58             | 14.07 | 16.84           | 0.55              | 17.39                          |
|               | 5 550      | SU   | NA       | 13.87             | 14.29 | 17.10           | 0.55              | 17.65                          |
|               | 5 710      | SU   | NA       | 13.16             | 13.61 | 16.40           | 0.55              | 16.95                          |
|               | 5 755      | SU   | NA       | 13.65             | 14.36 | 17.03           | -0.25             | 16.78                          |
|               | 5 795      | SU   | NA       | 13.71             | 14.20 | 16.97           | -0.25             | 16.72                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode          | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|---------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|               |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax HE80 | 5 210      | 26   | 0        | 4.00              | 3.39  | 6.72            | 0.28              | 7.00                           |
|               |            |      | 18       | 4.12              | 3.15  | 6.67            | 0.28              | 6.95                           |
|               |            |      | 36       | 3.82              | 3.89  | 6.87            | 0.28              | 7.15                           |
|               | 5 290      | 26   | 0        | 7.90              | 6.81  | 10.40           | -0.74             | 9.66                           |
|               |            |      | 18       | 7.02              | 5.95  | 9.53            | -0.74             | 8.79                           |
|               |            |      | 36       | 7.27              | 6.74  | 10.02           | -0.74             | 9.28                           |
|               | 5 530      | 26   | 0        | 7.22              | 7.60  | 10.42           | 0.55              | 10.97                          |
|               |            |      | 18       | 6.79              | 7.13  | 9.97            | 0.55              | 10.52                          |
|               |            |      | 36       | 7.14              | 7.49  | 10.33           | 0.55              | 10.88                          |
|               | 5 690      | 26   | 0        | 6.97              | 7.42  | 10.21           | 0.55              | 10.76                          |
|               |            |      | 18       | 6.29              | 6.67  | 9.49            | 0.55              | 10.04                          |
|               |            |      | 36       | 6.80              | 7.31  | 10.07           | 0.55              | 10.62                          |
|               | 5 775      | 26   | 0        | 12.97             | 13.69 | 16.36           | -0.25             | 16.11                          |
|               |            |      | 18       | 13.09             | 13.66 | 16.39           | -0.25             | 16.14                          |
|               |            |      | 36       | 13.10             | 13.58 | 16.36           | -0.25             | 16.11                          |
| 802.11ax HE80 | 5 210      | 52   | 37       | 6.29              | 4.40  | 8.46            | 0.28              | 8.74                           |
|               |            |      | 44       | 6.24              | 4.67  | 8.54            | 0.28              | 8.82                           |
|               |            |      | 52       | 6.25              | 4.80  | 8.60            | 0.28              | 8.88                           |
|               | 5 290      | 52   | 37       | 9.43              | 8.98  | 12.22           | -0.74             | 11.48                          |
|               |            |      | 44       | 9.28              | 9.13  | 12.22           | -0.74             | 11.48                          |
|               |            |      | 52       | 8.91              | 9.15  | 12.04           | -0.74             | 11.30                          |
|               | 5 530      | 52   | 37       | 9.07              | 9.66  | 12.39           | 0.55              | 12.94                          |
|               |            |      | 44       | 9.30              | 9.74  | 12.54           | 0.55              | 13.09                          |
|               |            |      | 52       | 9.00              | 9.53  | 12.28           | 0.55              | 12.83                          |
|               | 5 690      | 52   | 37       | 8.75              | 9.21  | 12.00           | 0.55              | 12.55                          |
|               |            |      | 44       | 8.93              | 9.30  | 12.13           | 0.55              | 12.68                          |
|               |            |      | 52       | 8.82              | 9.03  | 11.94           | 0.55              | 12.49                          |
|               | 5 775      | 52   | 37       | 13.13             | 13.78 | 16.48           | -0.25             | 16.23                          |
|               |            |      | 44       | 13.36             | 13.84 | 16.62           | -0.25             | 16.37                          |
|               |            |      | 52       | 13.24             | 13.68 | 16.48           | -0.25             | 16.23                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode          | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|---------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|               |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax HE80 | 5 210      | 106  | 53       | 8.72              | 7.80  | 11.29           | 0.28              | 11.57                          |
|               |            |      | 56       | 8.53              | 7.90  | 11.24           | 0.28              | 11.52                          |
|               |            |      | 60       | 8.39              | 8.21  | 11.31           | 0.28              | 11.59                          |
|               | 5 290      | 106  | 53       | 11.72             | 11.78 | 14.76           | -0.74             | 14.02                          |
|               |            |      | 56       | 11.65             | 11.88 | 14.78           | -0.74             | 14.04                          |
|               |            |      | 60       | 11.64             | 11.80 | 14.73           | -0.74             | 13.99                          |
|               | 5 530      | 106  | 53       | 11.83             | 11.88 | 14.87           | 0.55              | 15.42                          |
|               |            |      | 56       | 11.86             | 11.85 | 14.87           | 0.55              | 15.42                          |
|               |            |      | 60       | 11.72             | 11.84 | 14.79           | 0.55              | 15.34                          |
|               | 5 690      | 106  | 53       | 11.52             | 11.78 | 14.66           | 0.55              | 15.21                          |
|               |            |      | 56       | 11.64             | 11.79 | 14.73           | 0.55              | 15.28                          |
|               |            |      | 60       | 11.66             | 11.71 | 14.70           | 0.55              | 15.25                          |
|               | 5 775      | 106  | 53       | 13.05             | 13.64 | 16.37           | -0.25             | 16.12                          |
|               |            |      | 56       | 13.18             | 13.54 | 16.37           | -0.25             | 16.12                          |
|               |            |      | 60       | 13.17             | 13.55 | 16.37           | -0.25             | 16.12                          |
| 802.11ax HE80 | 5 210      | 242  | 61       | 11.60             | 11.71 | 14.67           | 0.28              | 14.95                          |
|               |            |      | 62       | 11.25             | 11.25 | 14.26           | 0.28              | 14.54                          |
|               |            |      | 64       | 11.69             | 11.87 | 14.79           | 0.28              | 15.07                          |
|               | 5 290      | 242  | 61       | 12.53             | 12.78 | 15.67           | -0.74             | 14.93                          |
|               |            |      | 62       | 11.93             | 12.44 | 15.20           | -0.74             | 14.46                          |
|               |            |      | 64       | 12.42             | 12.78 | 15.61           | -0.74             | 14.87                          |
|               | 5 530      | 242  | 61       | 13.19             | 13.06 | 16.14           | 0.55              | 16.69                          |
|               |            |      | 62       | 12.28             | 13.05 | 15.69           | 0.55              | 16.24                          |
|               |            |      | 64       | 12.97             | 13.39 | 16.20           | 0.55              | 16.75                          |
|               | 5 690      | 242  | 61       | 12.51             | 12.91 | 15.72           | 0.55              | 16.27                          |
|               |            |      | 62       | 11.96             | 12.62 | 15.31           | 0.55              | 15.86                          |
|               |            |      | 64       | 13.45             | 13.82 | 16.65           | 0.55              | 17.20                          |
|               | 5 775      | 242  | 61       | 13.06             | 13.44 | 16.26           | -0.25             | 16.01                          |
|               |            |      | 62       | 12.52             | 13.02 | 15.79           | -0.25             | 15.54                          |
|               |            |      | 64       | 13.09             | 13.47 | 16.29           | -0.25             | 16.04                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

| Mode          | Freq.[MHz] | Tone | RU Index | Test Result [dBm] |       |                 | Antenna Gain(dBi) | e.i.r.p <sup>Note1</sup> (dBm) |
|---------------|------------|------|----------|-------------------|-------|-----------------|-------------------|--------------------------------|
|               |            |      |          | ANT 1             | ANT 2 | ANT1+ANT2 (SDM) |                   |                                |
| 802.11ax HE80 | 5 210      | 484  | 65       | 12.03             | 12.18 | 15.12           | 0.28              | 15.40                          |
|               |            |      | 66       | 11.94             | 12.35 | 15.16           | 0.28              | 15.44                          |
|               | 5 290      | 484  | 65       | 11.94             | 12.20 | 15.08           | -0.74             | 14.34                          |
|               |            |      | 66       | 11.87             | 12.34 | 15.12           | -0.74             | 14.38                          |
|               | 5 530      | 484  | 65       | 12.09             | 12.97 | 15.56           | 0.55              | 16.11                          |
|               |            |      | 66       | 11.96             | 12.78 | 15.40           | 0.55              | 15.95                          |
|               | 5 690      | 484  | 65       | 11.96             | 12.38 | 15.19           | 0.55              | 15.74                          |
|               |            |      | 66       | 11.93             | 12.28 | 15.12           | 0.55              | 15.67                          |
|               | 5 775      | 484  | 65       | 12.31             | 12.81 | 15.58           | -0.25             | 15.33                          |
|               |            |      | 66       | 12.41             | 12.95 | 15.70           | -0.25             | 15.45                          |
| 802.11ax HE80 | 5 210      | 996  | 67       | 11.97             | 12.01 | 15.00           | 0.28              | 15.28                          |
|               | 5 290      | 996  | 67       | 11.88             | 12.22 | 15.06           | -0.74             | 14.32                          |
|               | 5 530      | 996  | 67       | 11.89             | 12.58 | 15.26           | 0.55              | 15.81                          |
|               | 5 690      | 996  | 67       | 11.84             | 12.12 | 14.99           | 0.55              | 15.54                          |
|               | 5 775      | 996  | 67       | 12.25             | 12.76 | 15.52           | -0.25             | 15.27                          |
| 802.11ax HE80 | 5 210      | SU   | NA       | 12.22             | 12.40 | 15.32           | 0.28              | 15.60                          |
|               | 5 290      | SU   | NA       | 12.07             | 12.60 | 15.35           | -0.74             | 14.61                          |
|               | 5 530      | SU   | NA       | 12.20             | 12.87 | 15.56           | 0.55              | 16.11                          |
|               | 5 690      | SU   | NA       | 11.97             | 12.50 | 15.25           | 0.55              | 15.80                          |
|               | 5 775      | SU   | NA       | 12.67             | 13.09 | 15.90           | -0.25             | 15.65                          |

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

## 5.4 Maximum Power Spectral Density

### ■ Test requirements

#### Part. 15.407(a)

##### (1) For the band 5.15 GHz - 5.25 GHz.

(i) For an outdoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 MHz band. <sup>note1</sup>

(ii) For an indoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 MHz band. <sup>note1</sup>

(iii) For fixed point-to-point access points operating in the band 5.15 GHz - 5.25 GHz, transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.

**(iv) For mobile and portable client devices in the 5.15 GHz - 5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 MHz band. <sup>note1</sup>**

##### (2) For the 5.25 GHz - 5.35 GHz and 5.47 GHz - 5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 MHz band. <sup>note1</sup>

##### (3) For the band 5.725 GHz - 5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band. <sup>note1,note2</sup>

**Note1:** If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Note2:** 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.

#### RSS-247[6.2]

##### (1) For band 5 150 MHz – 5 250 MHz

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

##### (2) For band 5 250 MHz – 5 350 MHz

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### (3) For band 5 470 MHz – 5 600 MHz and 5 650 MHz – 5 725 MHz

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### (4) For band 5 725 MHz – 5 850 MHz

The maximum conducted output power shall not exceed 1 W. The output 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 output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## ■ Test Configuration

Refer to the APPENDIX I.

## ■ Test Procedure

Maximum Power Spectral Density is measured using Measurement Procedure of **KDB789033 D02v02r01**

- 1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA - 1, SA - 2, SA - 3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...". (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
- 2) Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- 3) Make the following adjustments to the peak value of the spectrum, if applicable:
  - a) If Method SA - 2 or SA - 2 Alternative was used, add  $10 \log(1 / x)$ , where  $x$  is the duty cycle, to the peak of the spectrum.
  - b) If Method SA - 3 Alternative was used and the linear mode was used in step II.E.2.g (viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.**
- 4) The result is the Maximum PSD over 1 MHz reference bandwidth.
- 5) For devices operating in the bands 5.15 - 5.25 GHz, 5.25 - 5.35 GHz, and 5.47 - 5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in §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 a 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 MHz.
  - b) Set VBW  $\geq 1 / T$ , where  $T$  is defined in item a1) in 12.2.
  - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log(500 \text{ kHz} / \text{RBW})$  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  $10 \log(1 \text{ MHz} / \text{RBW})$  to the measured result, whereas RBW ( $< 1$  MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
  - g) Detector = peak.
  - h) Video filtering shall be applied to a voltage-squared or power signal (i.e., rms mode), if possible. Otherwise, it shall be set to operate on a linear voltage signal (which can require use of linear display mode). Log mode shall not be used:
    - 1) The preferred voltage-squared (i.e., power or rms) mode is selected on some instruments by setting the "average-VBW type" to power or rms.
    - 2) If RMS mode is not available, then linear voltage mode is selected on some analyzers by setting the display mode to linear. Other instruments have a setting for "average-VBW type" that can be set to "voltage" regardless of the display mode.**
  - i) Trace mode = max hold.

**Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW = 100 kHz is available on nearly all spectrum analyzers.**

■ Test Results: **Comply**

| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm) |             | TF (dB) | Power Spectral Density(dBm) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm) |
|-----------------|-----------------|------|----------|---------------|-------------|---------|-----------------------------|-------------------|--------------------------------|
|                 |                 |      |          | ANT 1         | ANT 2       |         | ANT1+ANT2 (CDD)             |                   |                                |
| 802.11ax (HE20) | 5 180           | 26   | 0        | 2.13          | 2.35        | N/A     | 5.25                        | 3.28              | 8.53                           |
|                 |                 |      | 4        | 1.28          | 1.55        | N/A     | 4.43                        | 3.28              | 7.71                           |
|                 |                 |      | 8        | <b>2.27</b>   | <b>2.41</b> | N/A     | <b>5.35</b>                 | 3.28              | <b>8.63</b>                    |
|                 | 5 200           | 26   | 0        | <b>2.31</b>   | <b>2.47</b> | N/A     | <b>5.40</b>                 | 3.28              | <b>8.68</b>                    |
|                 |                 |      | 4        | 1.38          | 1.47        | N/A     | 4.44                        | 3.28              | 7.72                           |
|                 |                 |      | 8        | 2.24          | 2.39        | N/A     | 5.33                        | 3.28              | 8.61                           |
|                 | 5 240           | 26   | 0        | <b>2.38</b>   | <b>2.67</b> | N/A     | <b>5.54</b>                 | 3.28              | <b>8.82</b>                    |
|                 |                 |      | 4        | 1.27          | 1.83        | N/A     | 4.57                        | 3.28              | 7.85                           |
|                 |                 |      | 8        | 2.11          | 2.57        | N/A     | 5.36                        | 3.28              | 8.64                           |
|                 | 5 260           | 26   | 0        | 6.26          | 4.90        | N/A     | 8.64                        | 2.24              | 10.88                          |
|                 |                 |      | 4        | 5.15          | 4.97        | N/A     | 8.07                        | 2.24              | 10.31                          |
|                 |                 |      | 8        | 5.69          | 6.13        | N/A     | 8.93                        | 2.24              | 11.17                          |
|                 | 5 300           | 26   | 0        | 6.35          | 6.00        | N/A     | 9.19                        | 2.24              | 11.43                          |
|                 |                 |      | 4        | 5.24          | 4.95        | N/A     | 8.11                        | 2.24              | 10.35                          |
|                 |                 |      | 8        | 6.08          | 5.97        | N/A     | 9.04                        | 2.24              | 11.28                          |
|                 | 5 320           | 26   | 0        | 6.35          | 6.01        | N/A     | 9.20                        | 2.24              | 11.44                          |
|                 |                 |      | 4        | 5.28          | 5.05        | N/A     | 8.18                        | 2.24              | 10.42                          |
|                 |                 |      | 8        | 6.13          | 6.00        | N/A     | 9.08                        | 2.24              | 11.32                          |
|                 | 5 500           | 26   | 0        | 5.86          | 6.76        | N/A     | 9.34                        | 3.54              | 12.88                          |
|                 |                 |      | 4        | 4.91          | 5.79        | N/A     | 8.38                        | 3.54              | 11.92                          |
|                 |                 |      | 8        | 5.84          | 6.69        | N/A     | 9.30                        | 3.54              | 12.84                          |
|                 | 5 580           | 26   | 0        | 5.83          | 6.59        | N/A     | 9.24                        | 3.54              | 12.78                          |
|                 |                 |      | 4        | 4.75          | 5.75        | N/A     | 8.29                        | 3.54              | 11.83                          |
|                 |                 |      | 8        | 5.71          | 6.71        | N/A     | 9.25                        | 3.54              | 12.79                          |
|                 | 5 720           | 26   | 0        | 5.35          | 6.63        | N/A     | 9.05                        | 3.54              | 12.59                          |
|                 |                 |      | 4        | 4.20          | 5.65        | N/A     | 8.00                        | 3.54              | 11.54                          |
|                 |                 |      | 8        | 5.11          | 6.53        | N/A     | 8.89                        | 3.54              | 12.43                          |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm) |             | TF (dB) | Power Spectral Density(dBm) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm) |
|-----------------|-----------------|------|----------|---------------|-------------|---------|-----------------------------|-------------------|--------------------------------|
|                 |                 |      |          | ANT 1         | ANT 2       |         | ANT1+ANT2 (CDD)             |                   |                                |
| 802.11ax (HE20) | 5 180           | 242  | 61       | 0.90          | 1.70        | N/A     | 4.33                        | 3.28              | 7.61                           |
|                 | 5 200           | 242  | 61       | 0.71          | 1.64        | N/A     | 4.21                        | 3.28              | 7.49                           |
|                 | 5 240           | 242  | 61       | 0.82          | 1.92        | N/A     | 4.42                        | 3.28              | 7.70                           |
|                 | 5 260           | 242  | 61       | 4.18          | 5.14        | N/A     | 7.70                        | 2.24              | 9.94                           |
|                 | 5 300           | 242  | 61       | 4.27          | 5.17        | N/A     | 7.75                        | 2.24              | 9.99                           |
|                 | 5 320           | 242  | 61       | 4.10          | 5.23        | N/A     | 7.71                        | 2.24              | 9.95                           |
|                 | 5 500           | 242  | 61       | 4.33          | 5.67        | N/A     | 8.06                        | 3.54              | 11.60                          |
|                 | 5 580           | 242  | 61       | 4.01          | 5.61        | N/A     | 7.89                        | 3.54              | 11.43                          |
|                 | 5 720           | 242  | 61       | 3.89          | 5.36        | N/A     | 7.70                        | 3.54              | 11.24                          |
| 802.11ax (HE20) | 5 180           | SU   | NA       | 1.28          | 2.40        | N/A     | 4.89                        | 3.28              | 8.17                           |
|                 | 5 200           | SU   | NA       | 1.17          | 2.28        | N/A     | 4.77                        | 3.28              | 8.05                           |
|                 | 5 240           | SU   | NA       | 1.26          | 2.60        | N/A     | 4.99                        | 3.28              | 8.27                           |
|                 | 5 260           | SU   | NA       | <b>5.65</b>   | <b>6.90</b> | N/A     | <b>9.33</b>                 | 2.24              | <b>11.57</b>                   |
|                 | 5 300           | SU   | NA       | <b>5.68</b>   | <b>6.88</b> | N/A     | <b>9.33</b>                 | 2.24              | <b>11.57</b>                   |
|                 | 5 320           | SU   | NA       | <b>5.75</b>   | <b>7.09</b> | N/A     | <b>9.48</b>                 | 2.24              | <b>11.72</b>                   |
|                 | 5 500           | SU   | NA       | <b>6.16</b>   | <b>7.28</b> | N/A     | <b>9.77</b>                 | 3.54              | <b>13.31</b>                   |
|                 | 5 580           | SU   | NA       | <b>5.93</b>   | <b>7.17</b> | N/A     | <b>9.60</b>                 | 3.54              | <b>13.14</b>                   |
|                 | 5 720           | SU   | NA       | <b>5.54</b>   | <b>6.95</b> | N/A     | <b>9.31</b>                 | 3.54              | <b>12.85</b>                   |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm) |             | TF (dB) | Power Spectral Density(dBm) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm) |
|-----------------|-----------------|------|----------|---------------|-------------|---------|-----------------------------|-------------------|--------------------------------|
|                 |                 |      |          | ANT 1         | ANT 2       |         | ANT1+ANT2 (CDD)             |                   |                                |
| 802.11ax (HE40) | 5 190           | 26   | 0        | 2.05          | 2.03        | N/A     | 5.05                        | 3.28              | 8.33                           |
|                 |                 |      | 8        | <b>2.30</b>   | <b>2.45</b> | N/A     | <b>5.39</b>                 | 3.28              | <b>8.67</b>                    |
|                 |                 |      | 17       | 2.03          | 1.97        | N/A     | 5.01                        | 3.28              | 8.29                           |
|                 | 5 230           | 26   | 0        | 1.91          | 2.23        | N/A     | 5.08                        | 3.28              | 8.36                           |
|                 |                 |      | 8        | <b>2.23</b>   | <b>2.72</b> | N/A     | <b>5.49</b>                 | 3.28              | <b>8.77</b>                    |
|                 |                 |      | 17       | 1.95          | 2.03        | N/A     | 5.00                        | 3.28              | 8.28                           |
|                 | 5 270           | 26   | 0        | 5.99          | 5.74        | N/A     | 8.88                        | 2.24              | 11.12                          |
|                 |                 |      | 8        | <b>6.13</b>   | <b>6.00</b> | N/A     | <b>9.08</b>                 | 2.24              | <b>11.32</b>                   |
|                 |                 |      | 17       | 5.99          | 5.74        | N/A     | 8.88                        | 2.24              | 11.12                          |
|                 | 5 310           | 26   | 0        | 5.93          | 5.61        | N/A     | 8.78                        | 2.24              | 11.02                          |
|                 |                 |      | 8        | <b>6.09</b>   | <b>6.16</b> | N/A     | <b>9.14</b>                 | 2.24              | <b>11.38</b>                   |
|                 |                 |      | 17       | 5.95          | 5.80        | N/A     | 8.89                        | 2.24              | 11.13                          |
|                 | 5 510           | 26   | 0        | 5.50          | 6.63        | N/A     | 9.11                        | 3.54              | 12.65                          |
|                 |                 |      | 8        | <b>6.06</b>   | <b>6.82</b> | N/A     | <b>9.47</b>                 | 3.54              | <b>13.01</b>                   |
|                 |                 |      | 17       | 5.78          | 6.56        | N/A     | 9.20                        | 3.54              | 12.74                          |
|                 | 5 550           | 26   | 0        | 5.60          | 6.39        | N/A     | 9.02                        | 3.54              | 12.56                          |
|                 |                 |      | 8        | <b>6.24</b>   | <b>6.92</b> | N/A     | <b>9.60</b>                 | 3.54              | <b>13.14</b>                   |
|                 |                 |      | 17       | 5.51          | 6.59        | N/A     | 9.09                        | 3.54              | 12.63                          |
|                 | 5 710           | 26   | 0        | 5.05          | 6.49        | N/A     | 8.84                        | 3.54              | 12.38                          |
|                 |                 |      | 8        | <b>5.40</b>   | <b>6.69</b> | N/A     | <b>9.10</b>                 | 3.54              | <b>12.64</b>                   |
|                 |                 |      | 17       | 4.90          | 6.44        | N/A     | 8.75                        | 3.54              | 12.29                          |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm) |       | TF (dB) | Power Spectral Density(dBm) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm) |
|-----------------|-----------------|------|----------|---------------|-------|---------|-----------------------------|-------------------|--------------------------------|
|                 |                 |      |          | ANT 1         | ANT 2 |         | ANT1+ANT2 (CDD)             |                   |                                |
| 802.11ax (HE40) | 5 190           | 484  | 65       | -1.11         | 0.32  | N/A     | 2.67                        | 3.28              | 5.95                           |
|                 | 5 230           | 484  | 65       | -1.04         | 0.38  | N/A     | 2.74                        | 3.28              | 6.02                           |
|                 | 5 270           | 484  | 65       | -0.62         | 0.35  | N/A     | 2.90                        | 2.24              | 5.14                           |
|                 | 5 310           | 484  | 65       | -0.57         | 0.31  | N/A     | 2.90                        | 2.24              | 5.14                           |
|                 | 5 510           | 484  | 65       | -0.08         | 0.95  | N/A     | 3.48                        | 3.54              | 7.02                           |
|                 | 5 550           | 484  | 65       | 0.14          | 0.65  | N/A     | 3.41                        | 3.54              | 6.95                           |
|                 | 5 710           | 484  | 65       | -1.14         | 0.64  | N/A     | 2.85                        | 3.54              | 6.39                           |
| 802.11ax (HE40) | 5 190           | SU   | NA       | -0.49         | 0.74  | N/A     | 3.18                        | 3.28              | 6.46                           |
|                 | 5 230           | SU   | NA       | -0.31         | 1.19  | N/A     | 3.51                        | 3.28              | 6.79                           |
|                 | 5 270           | SU   | NA       | -0.04         | 1.06  | N/A     | 3.56                        | 2.24              | 5.80                           |
|                 | 5 310           | SU   | NA       | 0.11          | 1.16  | N/A     | 3.68                        | 2.24              | 5.92                           |
|                 | 5 510           | SU   | NA       | 0.23          | 1.50  | N/A     | 3.92                        | 3.54              | 7.46                           |
|                 | 5 550           | SU   | NA       | 0.37          | 1.54  | N/A     | 4.00                        | 3.54              | 7.54                           |
|                 | 5 710           | SU   | NA       | -0.40         | 1.32  | N/A     | 3.55                        | 3.54              | 7.09                           |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm) |             | TF (dB) | Power Spectral Density(dBm) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm) |
|-----------------|-----------------|------|----------|---------------|-------------|---------|-----------------------------|-------------------|--------------------------------|
|                 |                 |      |          | ANT 1         | ANT 2       |         | ANT1+ANT2 (CDD)             |                   |                                |
| 802.11ax (HE80) | 5 210           | 26   | 0        | <b>2.17</b>   | <b>2.17</b> | N/A     | <b>5.18</b>                 | 3.28              | <b>8.46</b>                    |
|                 |                 |      | 18       | 0.40          | 0.36        | N/A     | 3.39                        | 3.28              | 6.67                           |
|                 |                 |      | 36       | 1.72          | 2.22        | N/A     | 4.99                        | 3.28              | 8.27                           |
|                 | 5 290           | 26   | 0        | <b>5.95</b>   | <b>5.60</b> | N/A     | <b>8.79</b>                 | 2.24              | <b>11.03</b>                   |
|                 |                 |      | 18       | 4.07          | 3.19        | N/A     | 6.66                        | 2.24              | 8.90                           |
|                 |                 |      | 36       | 5.62          | 5.58        | N/A     | 8.61                        | 2.24              | 10.85                          |
|                 | 5 530           | 26   | 0        | <b>5.39</b>   | <b>6.27</b> | N/A     | <b>8.86</b>                 | 3.54              | <b>12.40</b>                   |
|                 |                 |      | 18       | 3.50          | 4.38        | N/A     | 6.97                        | 3.54              | 10.51                          |
|                 |                 |      | 36       | 5.30          | 6.32        | N/A     | 8.85                        | 3.54              | 12.39                          |
|                 | 5 690           | 26   | 0        | <b>4.87</b>   | <b>6.58</b> | N/A     | <b>8.82</b>                 | 3.54              | <b>12.36</b>                   |
|                 |                 |      | 18       | 3.04          | 4.48        | N/A     | 6.83                        | 3.54              | 10.37                          |
|                 |                 |      | 36       | 5.35          | 6.05        | N/A     | 8.72                        | 3.54              | 12.26                          |
| 802.11ax (HE80) | 5 210           | 996  | 67       | -4.92         | -4.15       | N/A     | -1.51                       | 3.28              | 1.77                           |
|                 | 5 290           | 996  | 67       | -4.87         | -4.07       | N/A     | -1.44                       | 2.24              | 0.80                           |
|                 | 5 530           | 996  | 67       | -4.50         | -3.40       | N/A     | -0.90                       | 3.54              | 2.64                           |
|                 | 5 690           | 996  | 67       | -5.28         | -3.65       | N/A     | -1.38                       | 3.54              | 2.16                           |
| 802.11ax (HE80) | 5 210           | SU   | NA       | -4.32         | -3.22       | N/A     | -0.72                       | 3.28              | 2.56                           |
|                 | 5 290           | SU   | NA       | -4.21         | -3.17       | N/A     | -0.65                       | 2.24              | 1.59                           |
|                 | 5 530           | SU   | NA       | -3.86         | -2.67       | N/A     | -0.21                       | 3.54              | 3.33                           |
|                 | 5 690           | SU   | NA       | -4.59         | -2.83       | N/A     | -0.61                       | 3.54              | 2.93                           |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

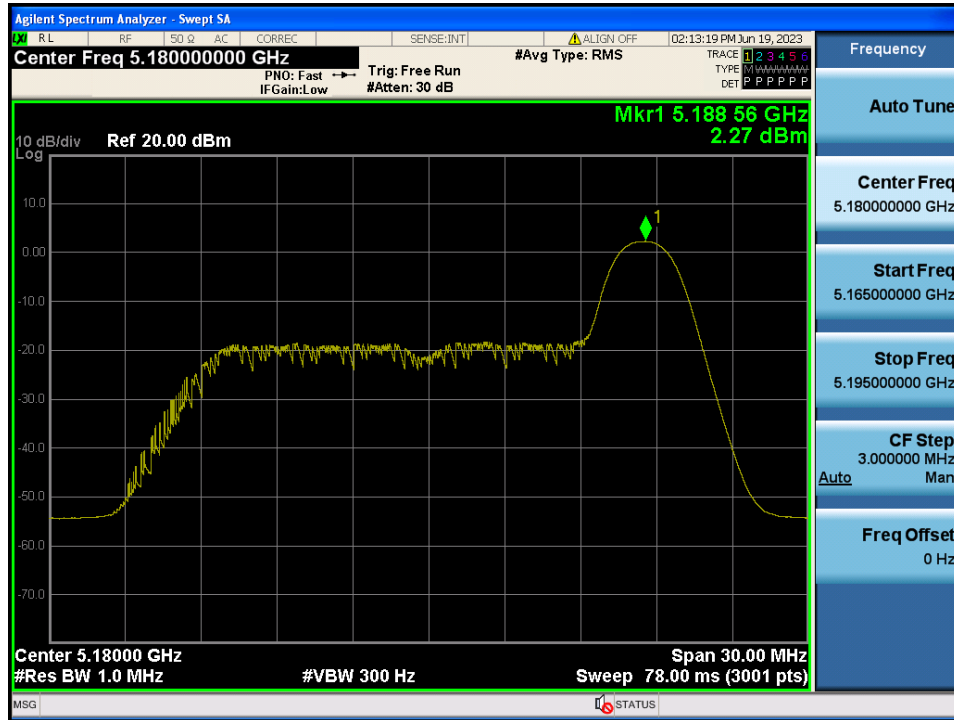
| Mode            | Frequency [MHz] | Tone | RU Index | Reading (dBm/100kHz) |             | TF <sup>Note 2</sup> (dB) | Power Spectral Density (dBm/500kHz) | Antenna Gain(dBi) | e.i.r.p Spectral Density (dBm/500kHz) |
|-----------------|-----------------|------|----------|----------------------|-------------|---------------------------|-------------------------------------|-------------------|---------------------------------------|
|                 |                 |      |          | ANT 1                | ANT 2       |                           | ANT1+ANT2 (CDD)                     |                   |                                       |
| 802.11ax (HE20) | 5 745           | 26   | 0        | 4.20                 | 6.53        | 6.99                      | 15.52                               | 2.75              | 18.27                                 |
|                 |                 |      | 4        | <b>4.22</b>          | <b>6.54</b> | 6.99                      | <b>15.53</b>                        | 2.75              | <b>18.28</b>                          |
|                 |                 |      | 8        | 3.87                 | 6.42        | 6.99                      | 15.33                               | 2.75              | 18.08                                 |
|                 | 5 785           | 26   | 0        | 4.49                 | 6.30        | 6.99                      | 15.49                               | 2.75              | 18.24                                 |
|                 |                 |      | 4        | <b>4.43</b>          | <b>6.34</b> | 6.99                      | <b>15.49</b>                        | 2.75              | <b>18.24</b>                          |
|                 |                 |      | 8        | 4.26                 | 6.31        | 6.99                      | 15.40                               | 2.75              | 18.15                                 |
|                 | 5 825           | 26   | 0        | <b>4.77</b>          | <b>6.15</b> | 6.99                      | <b>15.51</b>                        | 2.75              | <b>18.26</b>                          |
|                 |                 |      | 4        | 4.98                 | 5.95        | 6.99                      | 15.49                               | 2.75              | 18.24                                 |
|                 |                 |      | 8        | 4.56                 | 5.73        | 6.99                      | 15.18                               | 2.75              | 17.93                                 |
|                 | 5 745           | 242  | 61       | -5.70                | -3.35       | 6.99                      | 5.63                                | 2.75              | 8.38                                  |
|                 | 5 785           | 242  | 61       | -5.40                | -3.49       | 6.99                      | 5.66                                | 2.75              | 8.41                                  |
|                 | 5 825           | 242  | 61       | -5.02                | -3.89       | 6.99                      | 5.58                                | 2.75              | 8.33                                  |
|                 | 5 745           | SU   | NA       | -3.73                | -1.22       | 6.99                      | 7.70                                | 2.75              | 10.45                                 |
| 802.11ax (HE40) | 5 755           | 26   | 0        | <b>3.27</b>          | <b>5.07</b> | 6.99                      | <b>14.26</b>                        | 2.75              | <b>17.01</b>                          |
|                 |                 |      | 8        | 3.11                 | 5.14        | 6.99                      | 14.24                               | 2.75              | 16.99                                 |
|                 |                 |      | 17       | 3.06                 | 5.12        | 6.99                      | 14.21                               | 2.75              | 16.96                                 |
|                 | 5 795           | 26   | 0        | 2.58                 | 4.60        | 6.99                      | 13.71                               | 2.75              | 16.46                                 |
|                 |                 |      | 8        | <b>3.32</b>          | <b>5.27</b> | 6.99                      | <b>14.40</b>                        | 2.75              | <b>17.15</b>                          |
|                 |                 |      | 17       | 2.87                 | 4.56        | 6.99                      | 13.80                               | 2.75              | 16.55                                 |
|                 | 5 755           | 484  | 65       | -10.34               | -8.52       | 6.99                      | 0.66                                | 2.75              | 3.41                                  |
|                 | 5 795           | 484  | 65       | -9.79                | -8.04       | 6.99                      | 1.17                                | 2.75              | 3.92                                  |
|                 | 5 755           | SU   | NA       | -7.76                | -5.93       | 6.99                      | 3.25                                | 2.75              | 6.00                                  |
| 802.11ax (HE80) | 5 775           | 26   | 0        | 2.27                 | 3.80        | 6.99                      | 13.10                               | 2.75              | 15.85                                 |
|                 |                 |      | 18       | 1.86                 | 3.43        | 6.99                      | 12.72                               | 2.75              | 15.47                                 |
|                 |                 |      | 36       | <b>2.63</b>          | <b>3.54</b> | 6.99                      | <b>13.11</b>                        | 2.75              | <b>15.86</b>                          |
|                 |                 | 996  | 67       | -14.12               | -12.23      | 6.99                      | -3.07                               | 2.75              | -0.32                                 |
|                 |                 | SU   | NA       | -10.09               | -8.54       | 6.99                      | 0.75                                | 2.75              | 3.50                                  |

Note 1: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

Note 2: "U-NII 3 [TF] = 10\*LOG(500 kHz/100 kHz)

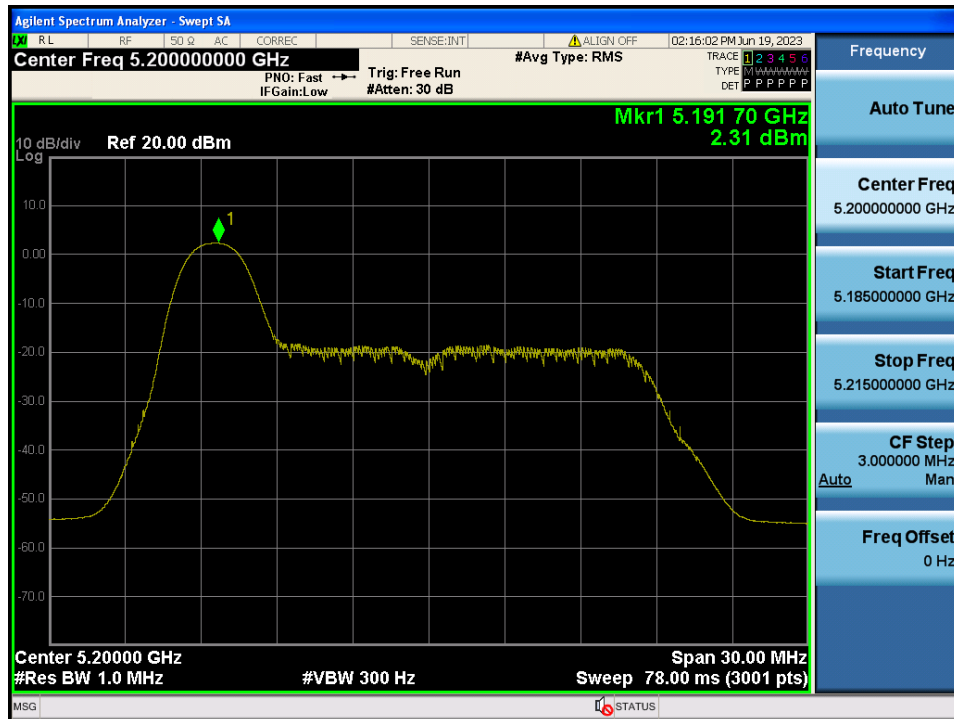
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 1 & 26 Tone & 8 RU & Ch.36



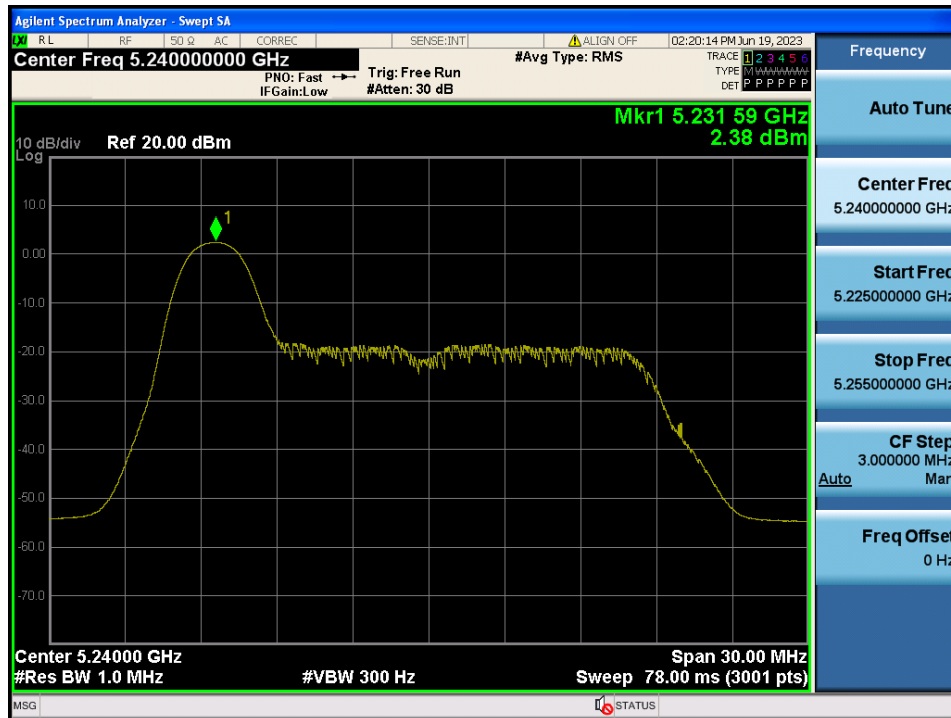
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 1 & 26 Tone & 0 RU & Ch.40



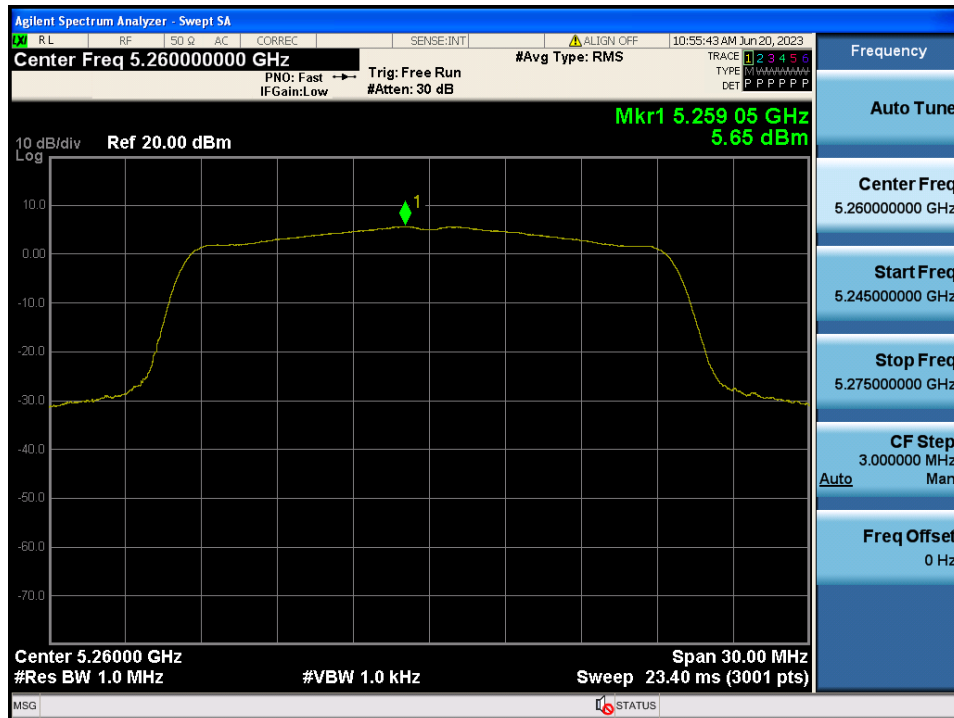
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 &amp; ANT 1 &amp; 26 Tone &amp; 0 RU &amp; Ch.48



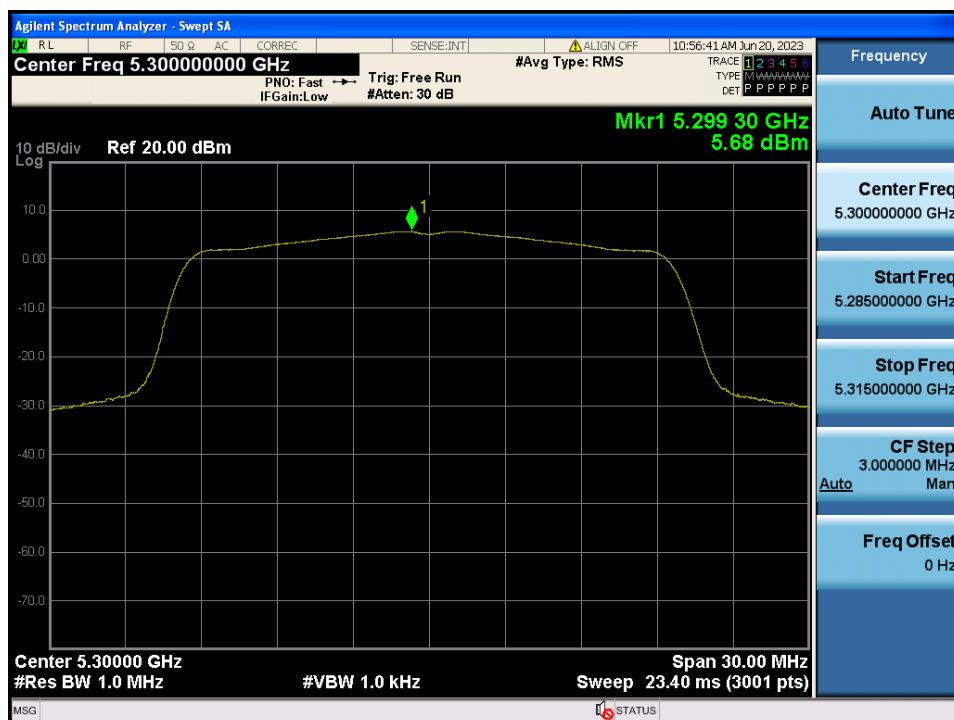
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 1 & SU & Ch.52



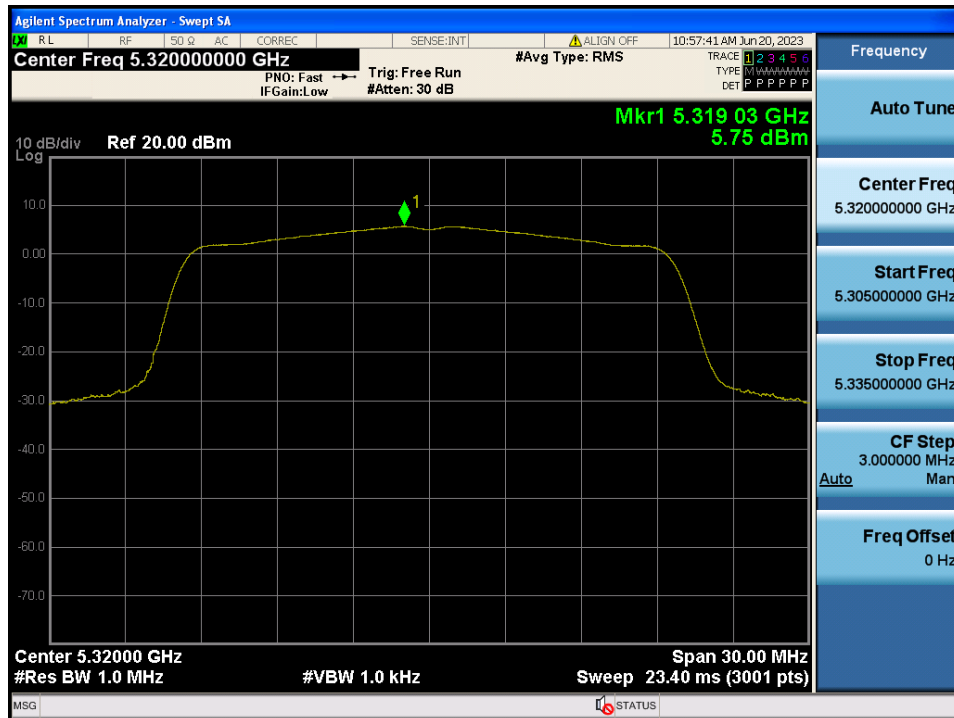
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 1 & SU & Ch.60



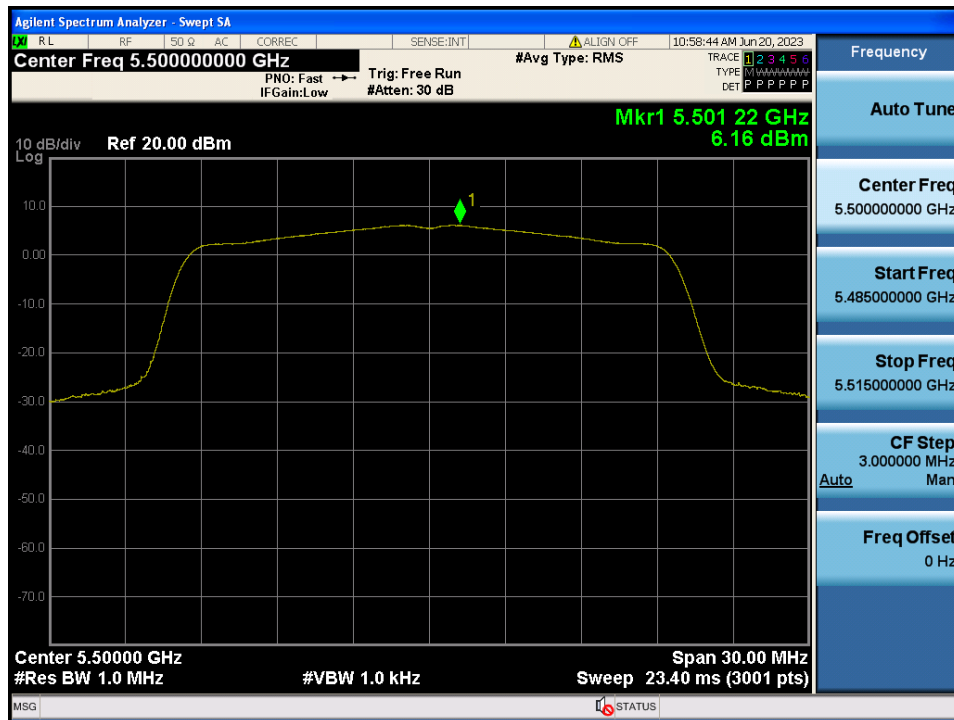
# Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 1 & SU & Ch.64



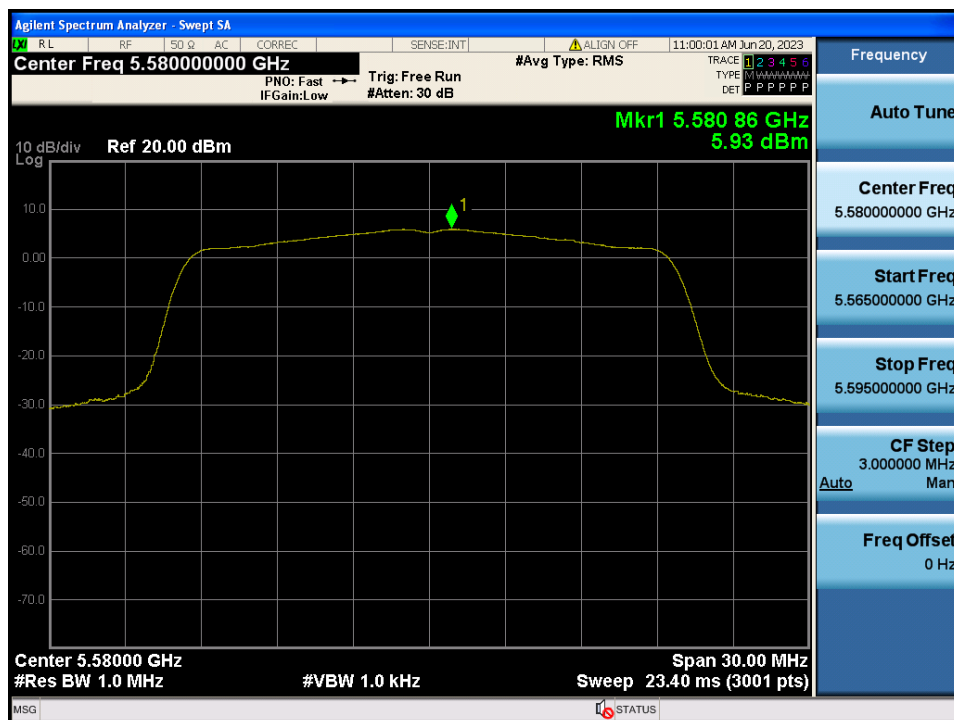
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 &amp; ANT 1 &amp; SU &amp; Ch.100



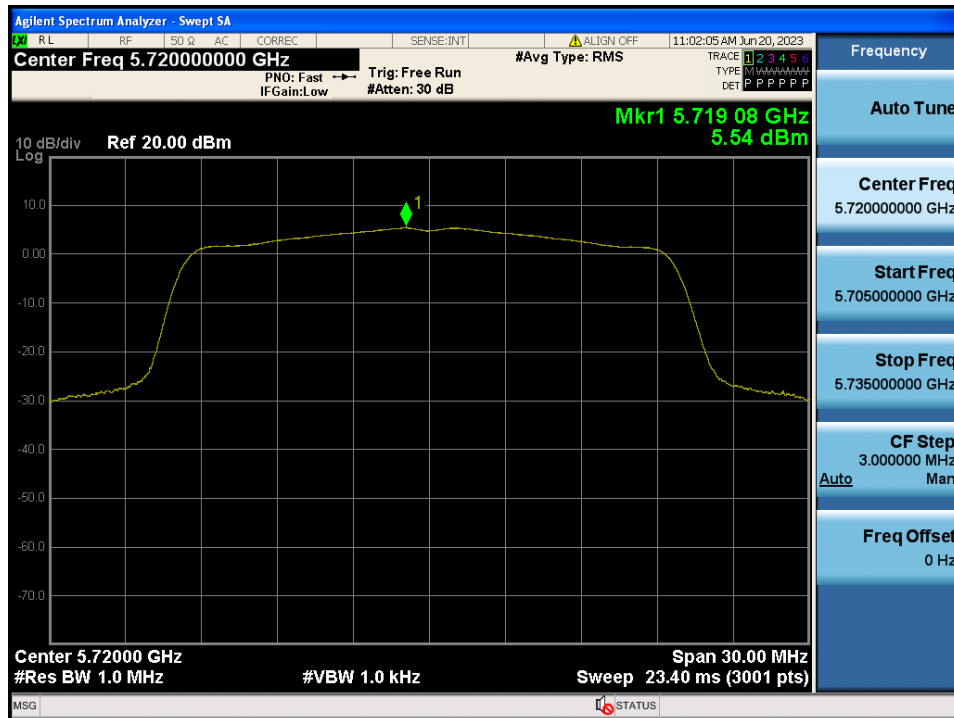
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 &amp; ANT 1 &amp; SU &amp; Ch.116

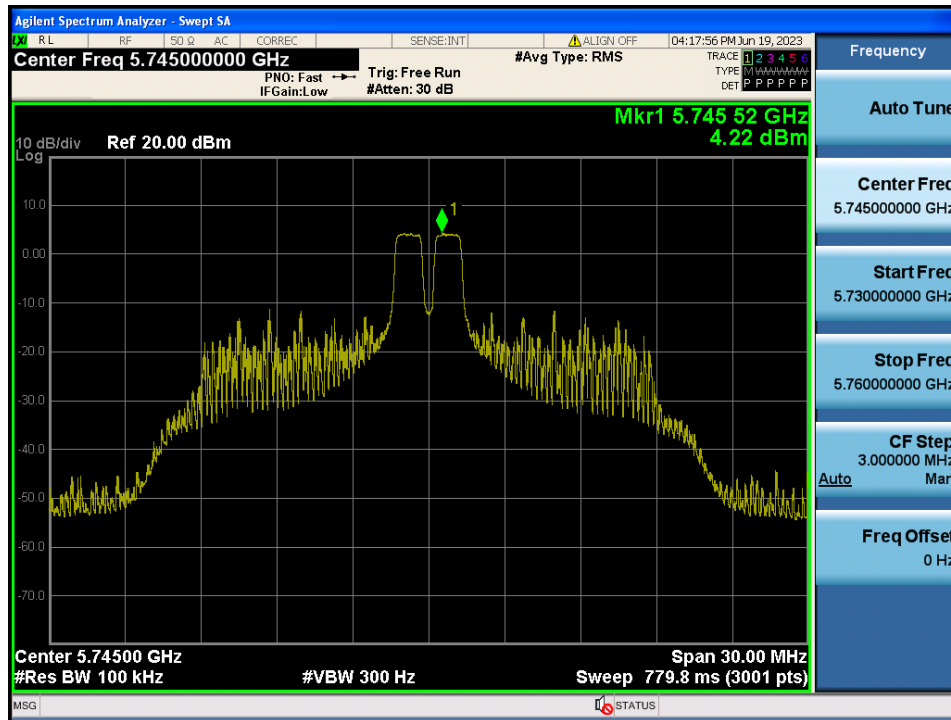


## Maximum Power Spectral Density

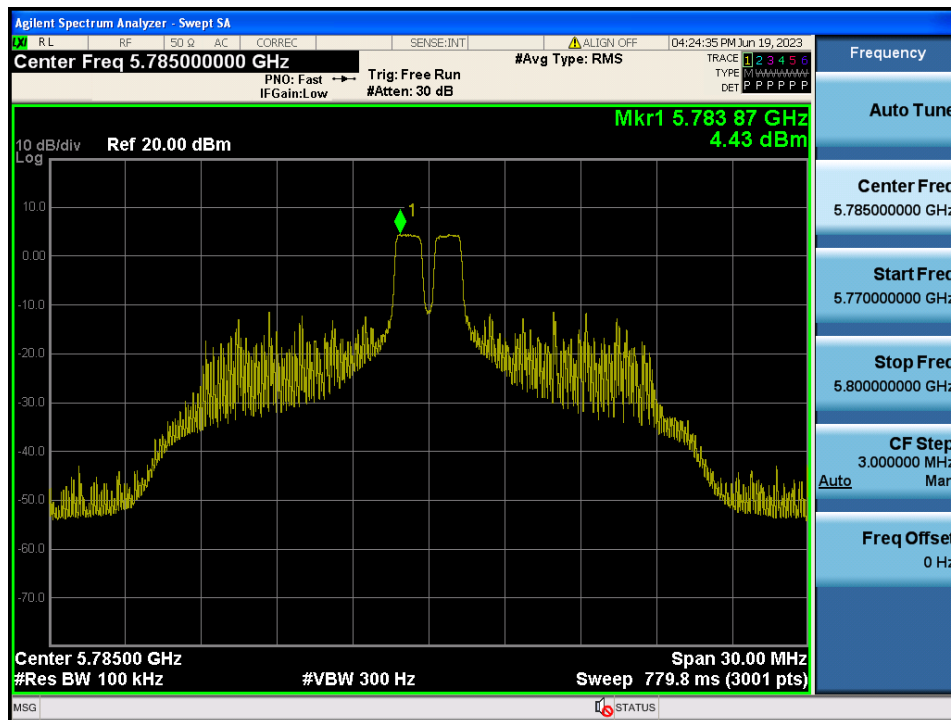
Test Mode: 802.11ax HE20 &amp; ANT 1 &amp; SU &amp; Ch.144



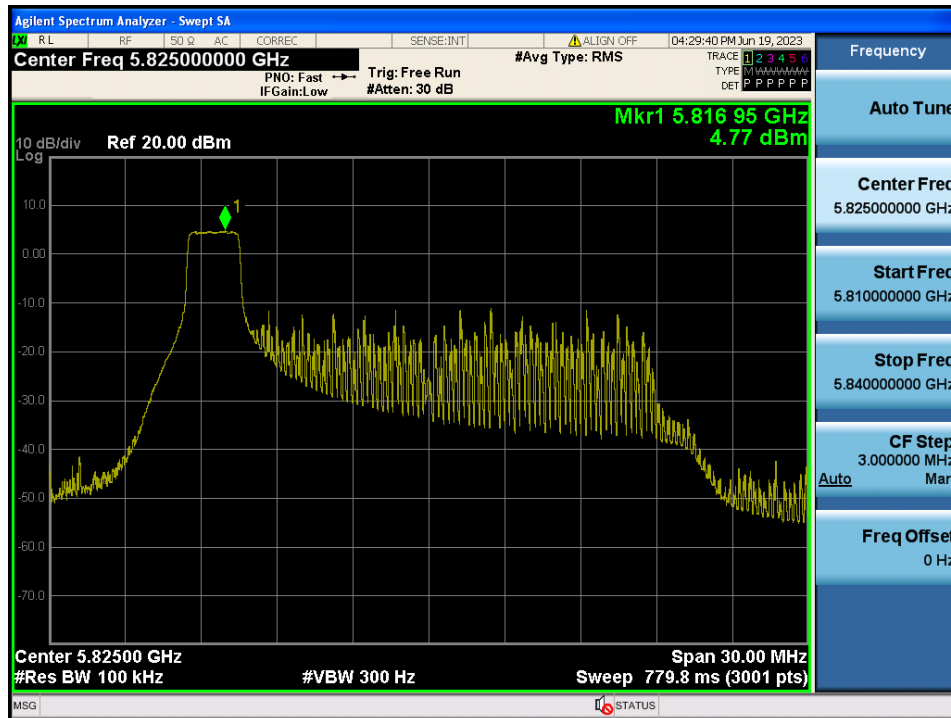
Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & 26 Tone & 4 RU & Ch.149



Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & 26 Tone & 4 RU & Ch.157

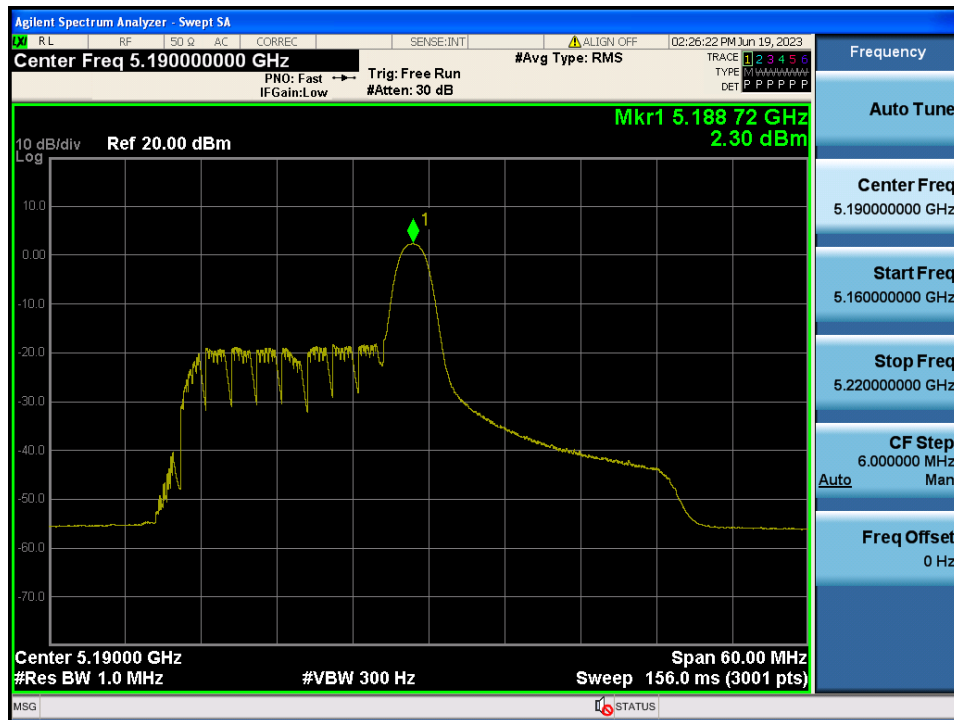


Maximum Power Spectral Density      Test Mode: 802.11ax HE20   &   ANT 1   &   26 Tone   &   0 RU   &   Ch.165



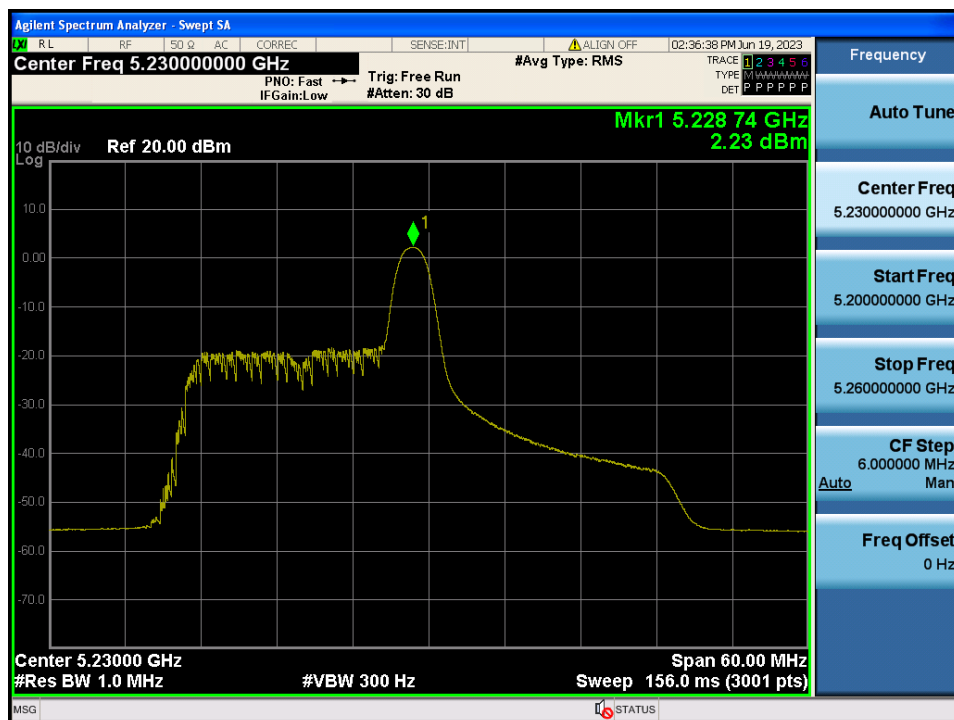
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 1 &amp; 26 Tone &amp; 8 RU &amp; Ch.38



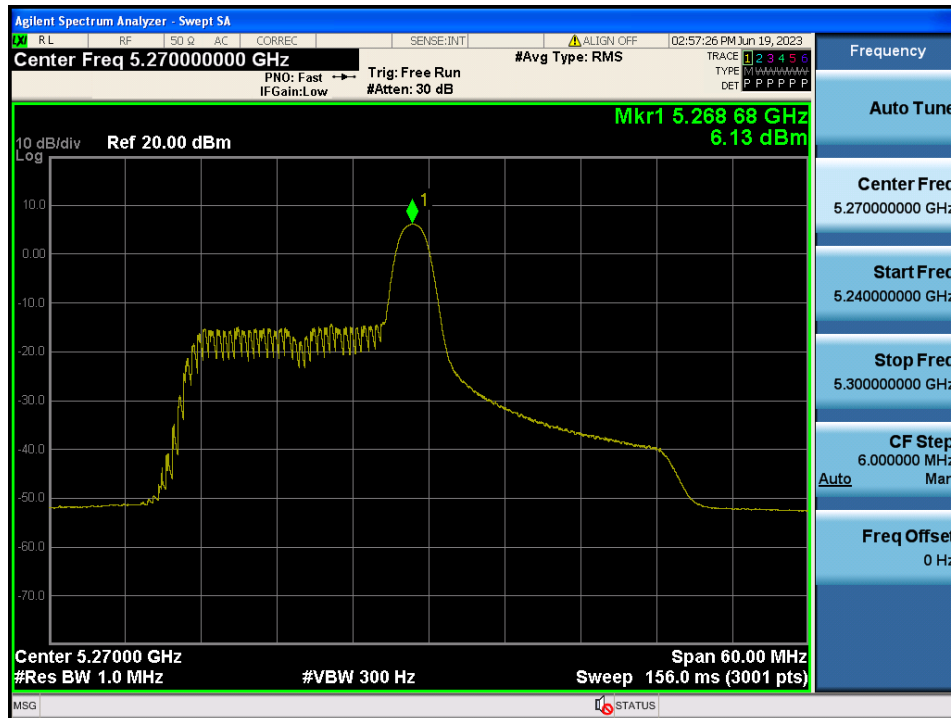
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 1 &amp; 26 Tone &amp; 8 RU &amp; Ch.46



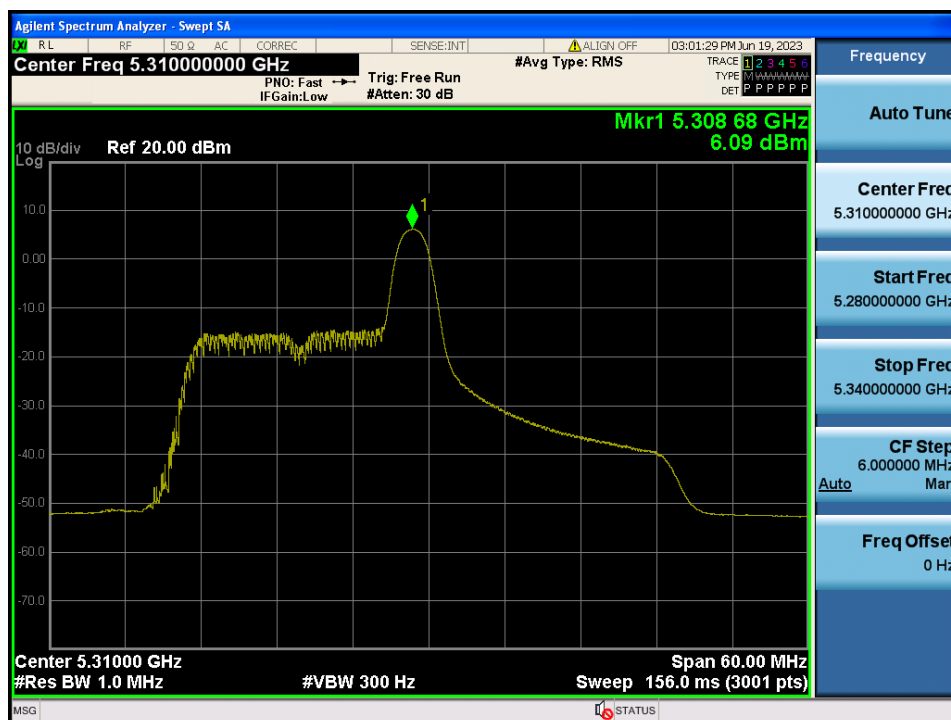
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 1 & 26 Tone & 8 RU & Ch.54



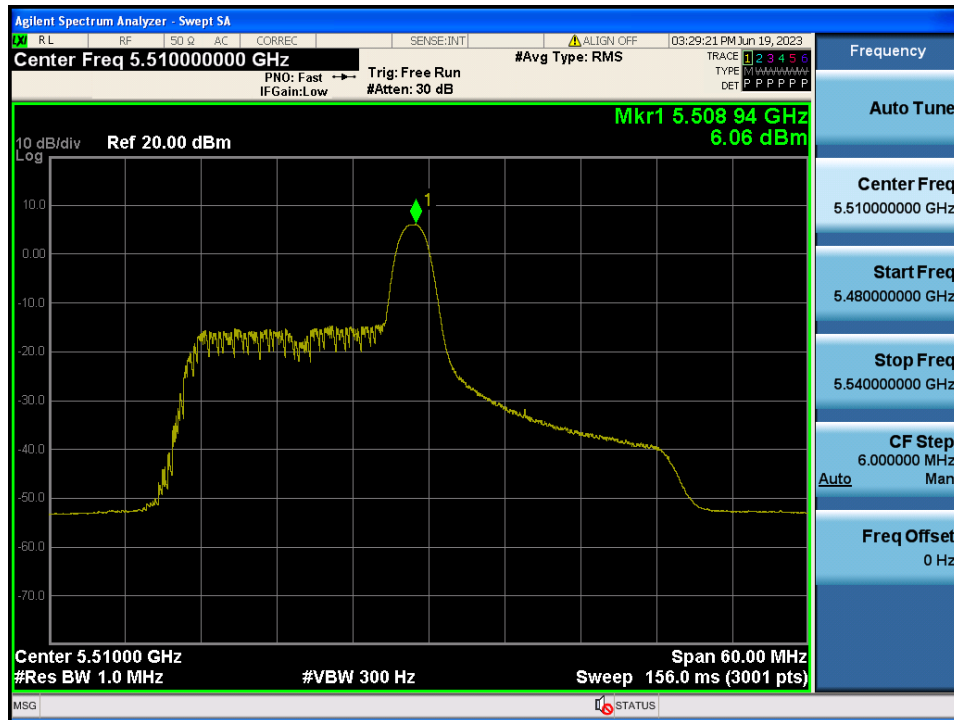
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 1 & 26 Tone & 8 RU & Ch.62



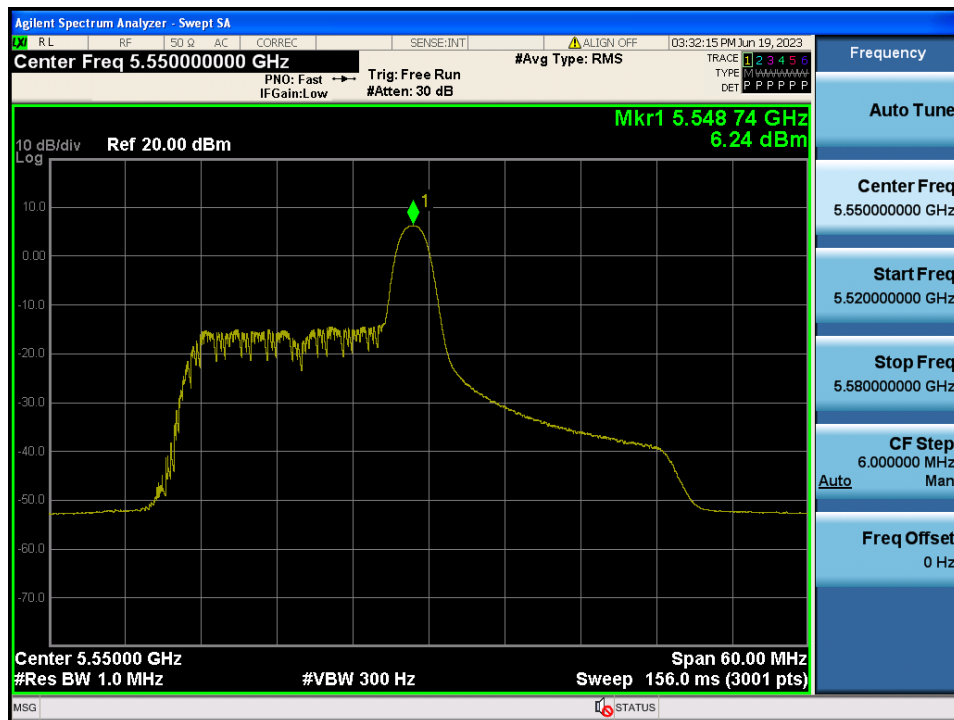
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 1 &amp; 26 Tone &amp; 8 RU &amp; Ch.102



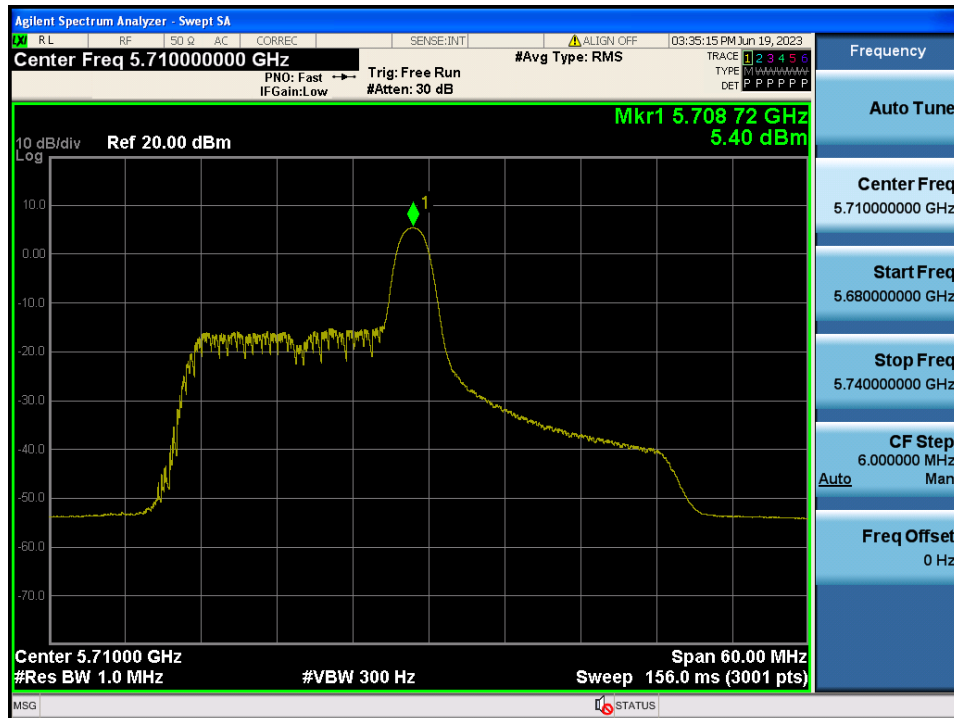
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 1 &amp; 26 Tone &amp; 8 RU &amp; Ch.110



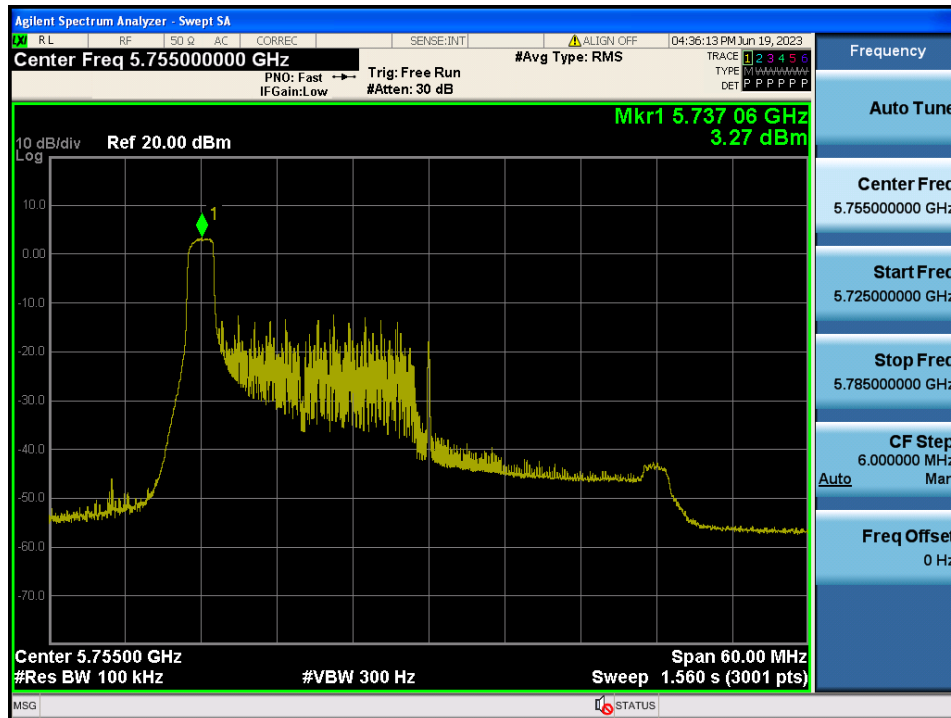
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 1 &amp; 26 Tone &amp; 8 RU &amp; Ch.142



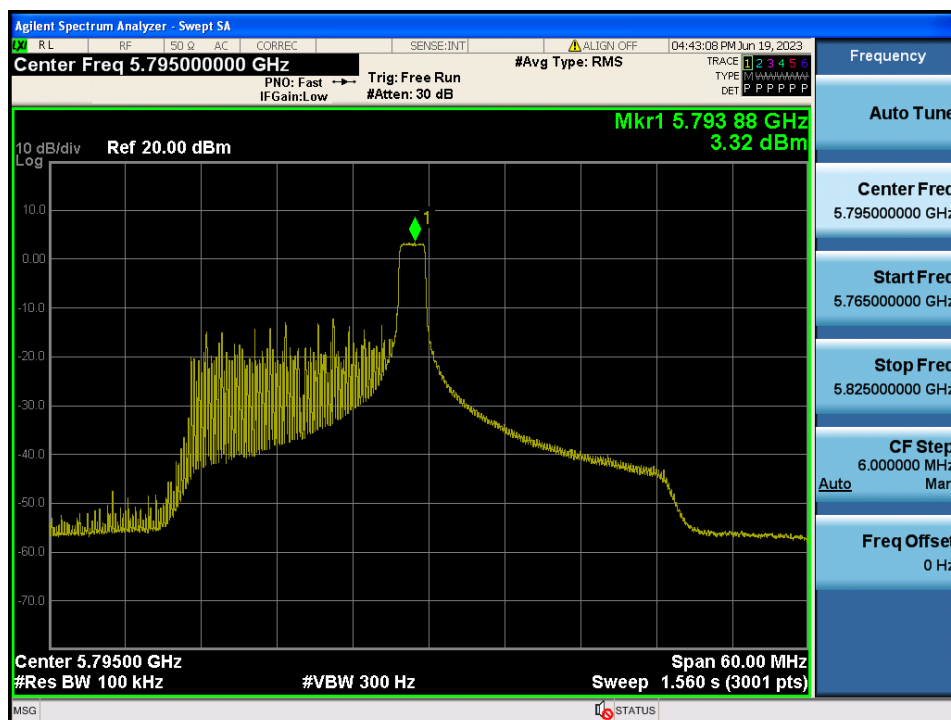
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 1 & 26 Tone & 0 RU & Ch.151



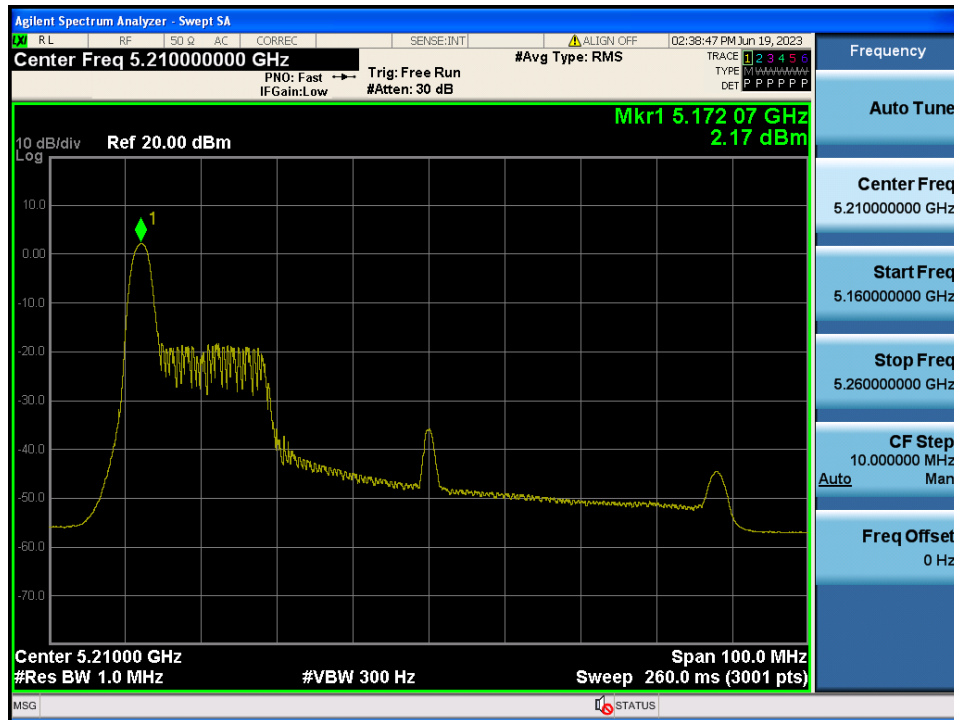
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 1 & 26 Tone & 8 RU & Ch.159



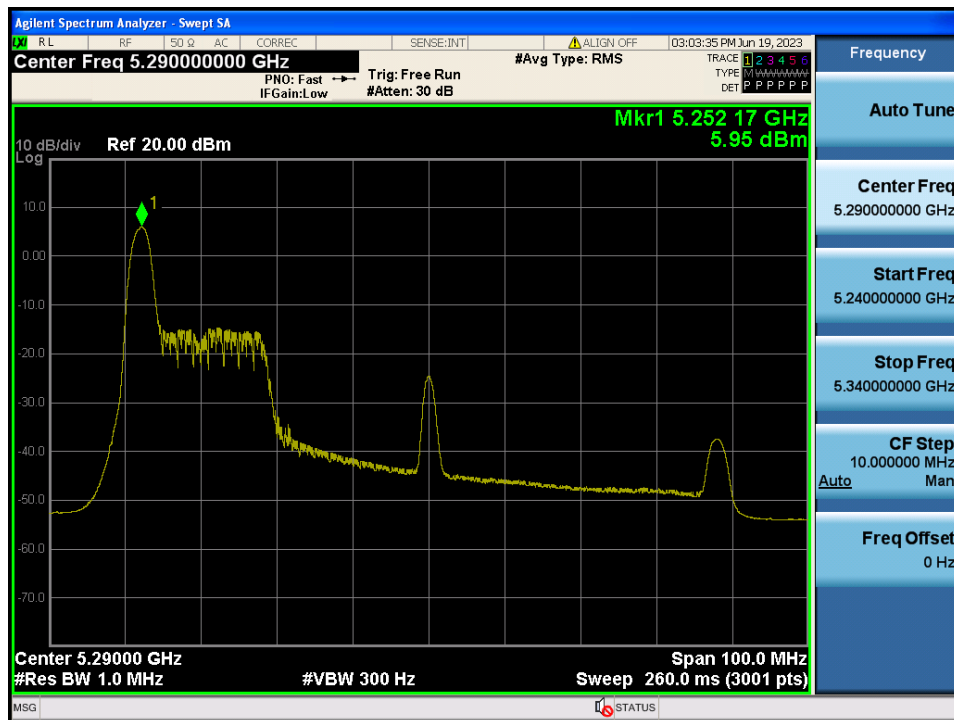
## Maximum Power Spectral Density

Test Mode: 802.11ax HE80 & ANT 1 & 26 Tone & 0 RU & Ch.42

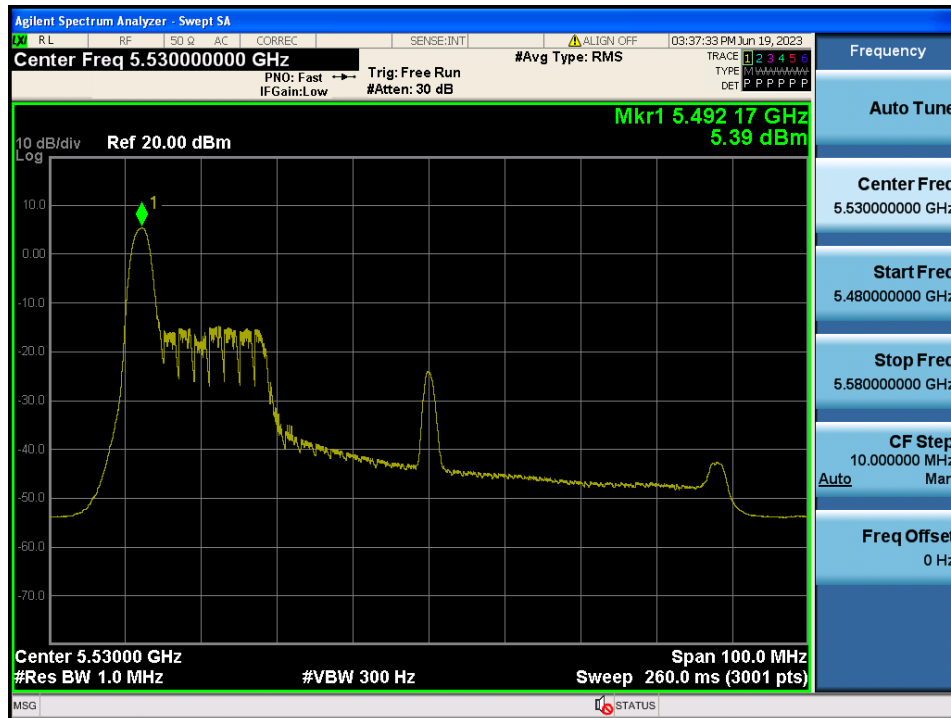


## Maximum Power Spectral Density

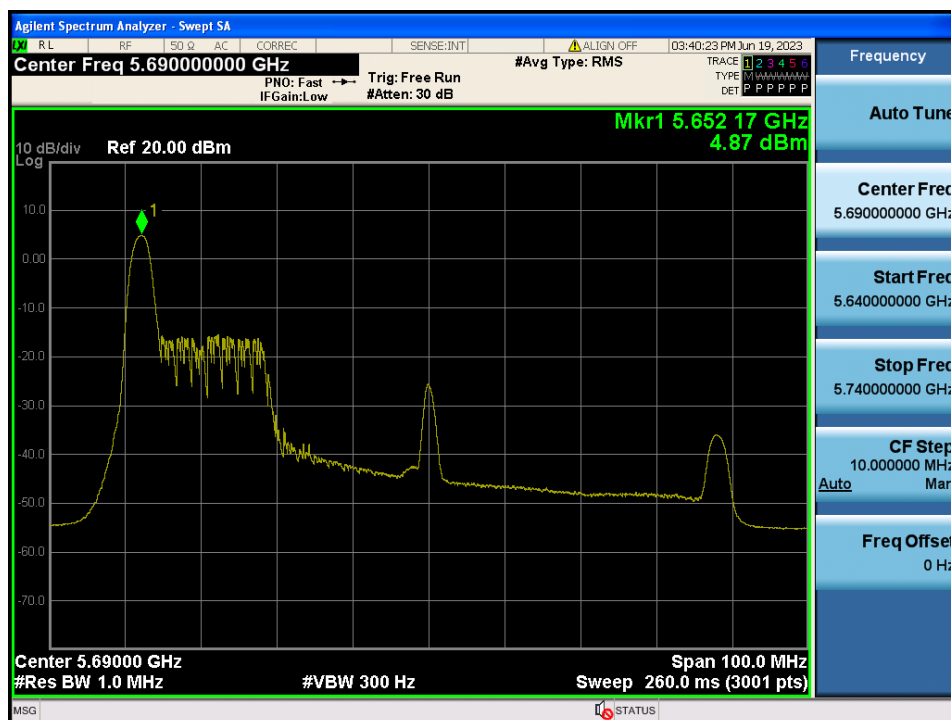
Test Mode: 802.11ax HE80 & ANT 1 & 26 Tone & 0 RU & Ch.58



Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 1 & 26 Tone & 0 RU & Ch.106

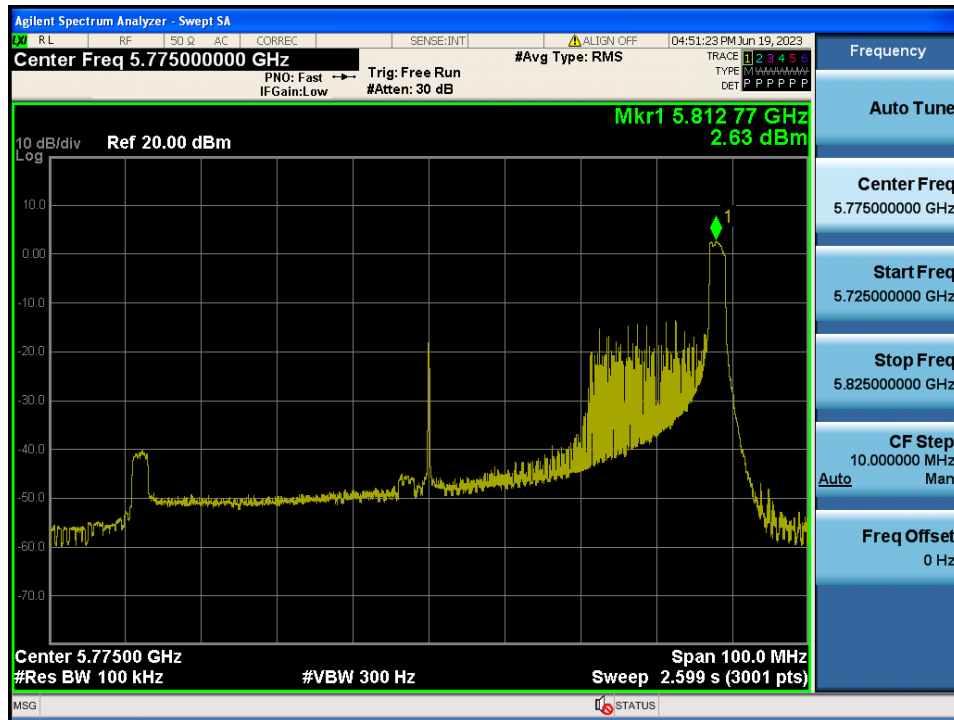


Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 1 & 26 Tone & 0 RU & Ch.138



## Maximum Power Spectral Density

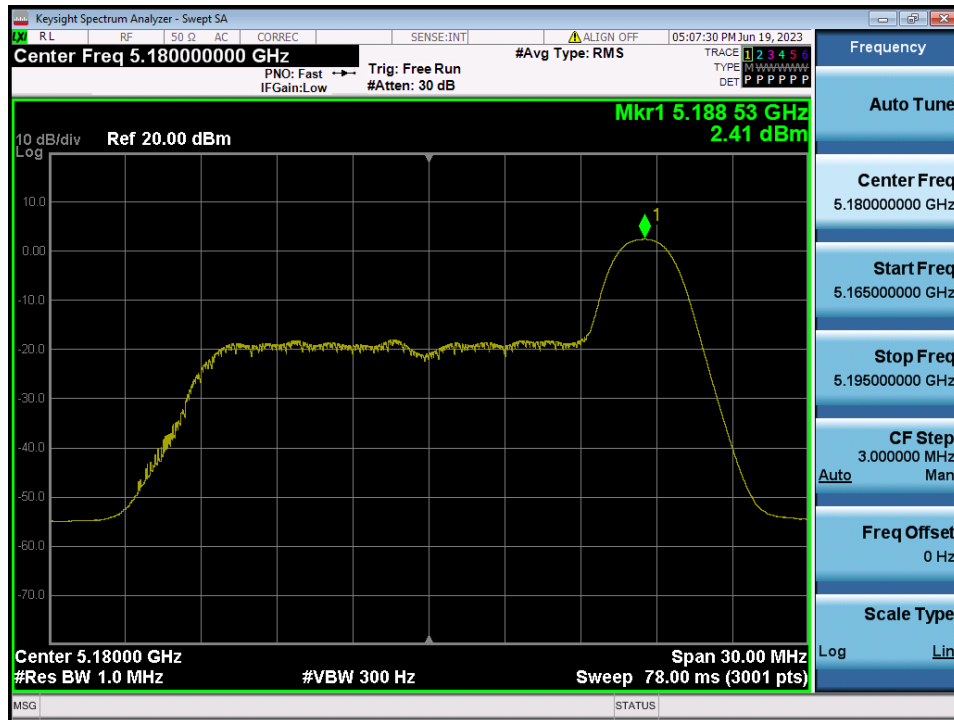
Test Mode: 802.11ax HE80 & ANT 1 & 26 Tone & 36 RU & Ch.155



- Power spectral density: CDD-Antenna 2

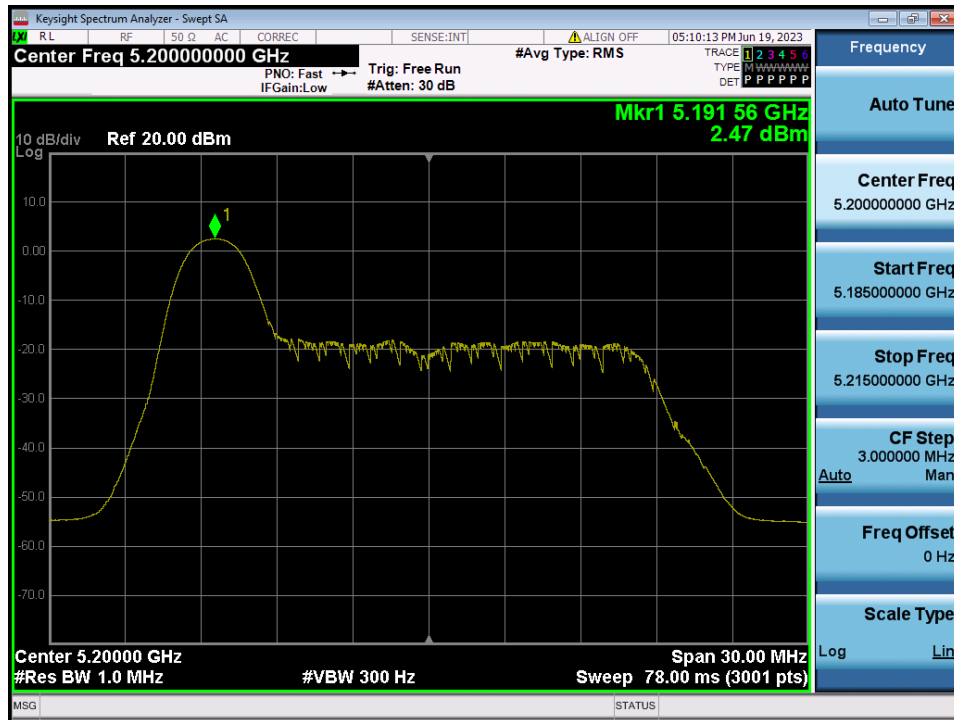
Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 8 RU & Ch.36



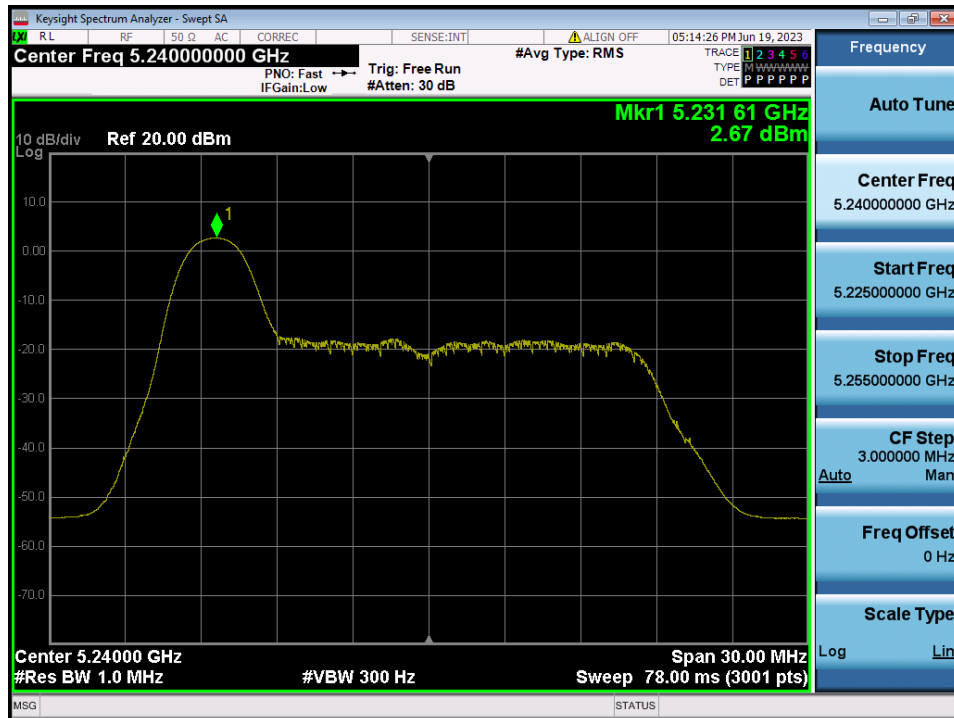
Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 0 RU & Ch.40



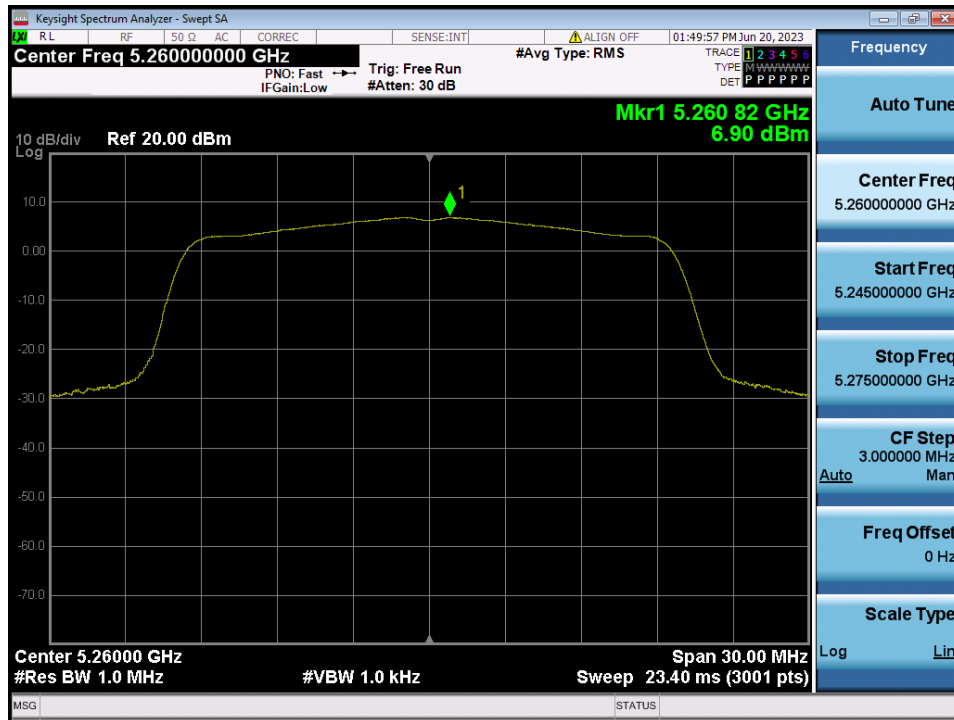
# Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 0 RU & Ch.48



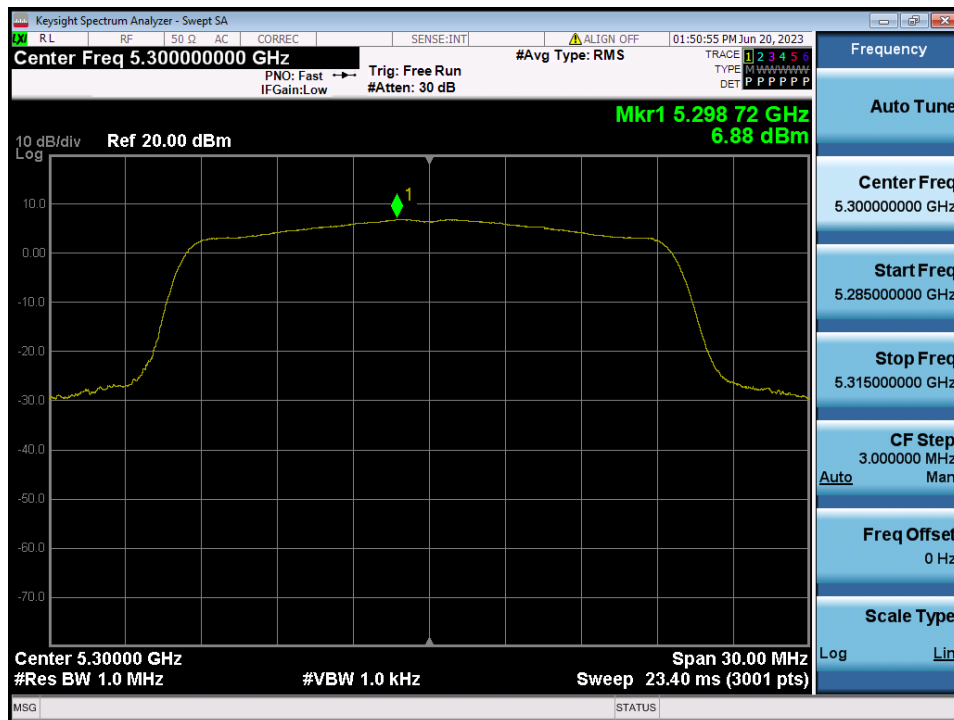
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & SU & Ch.52



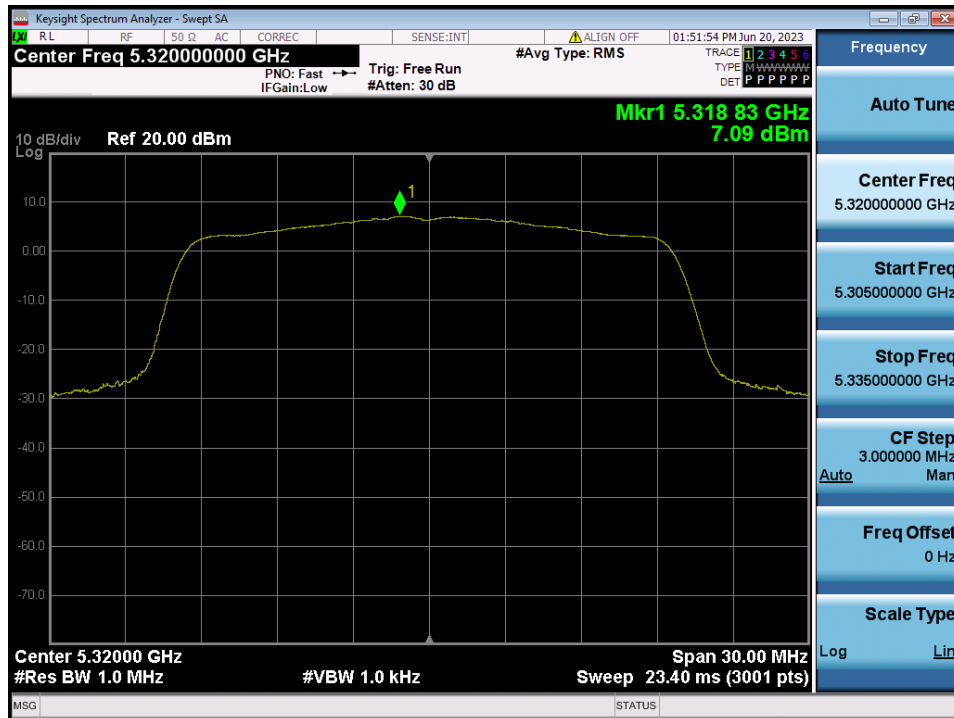
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & SU & Ch.60



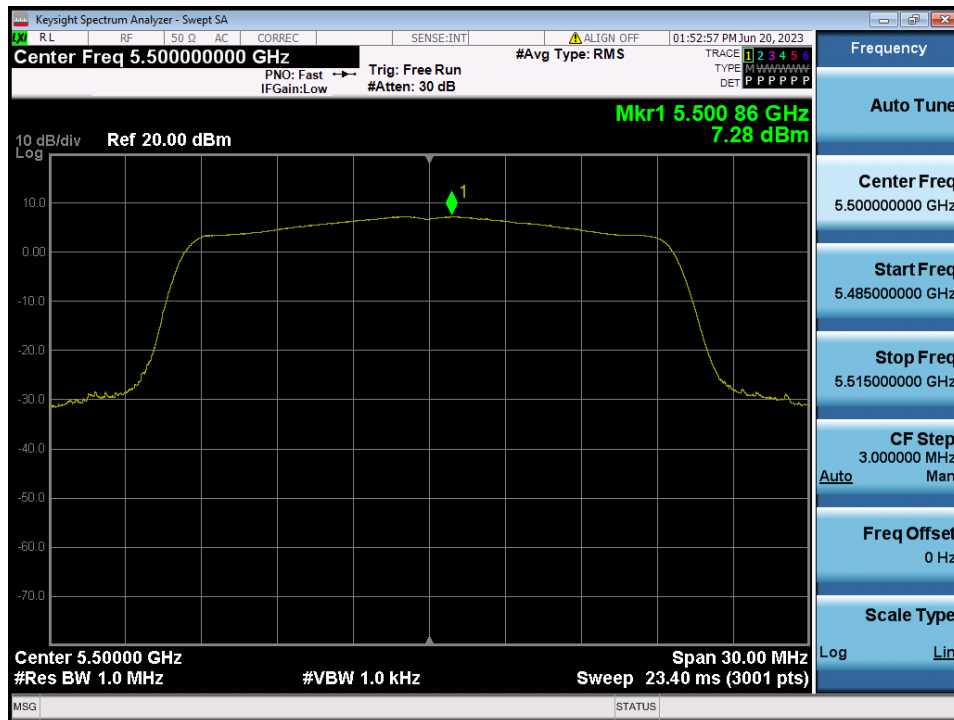
# Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & SU & Ch.64



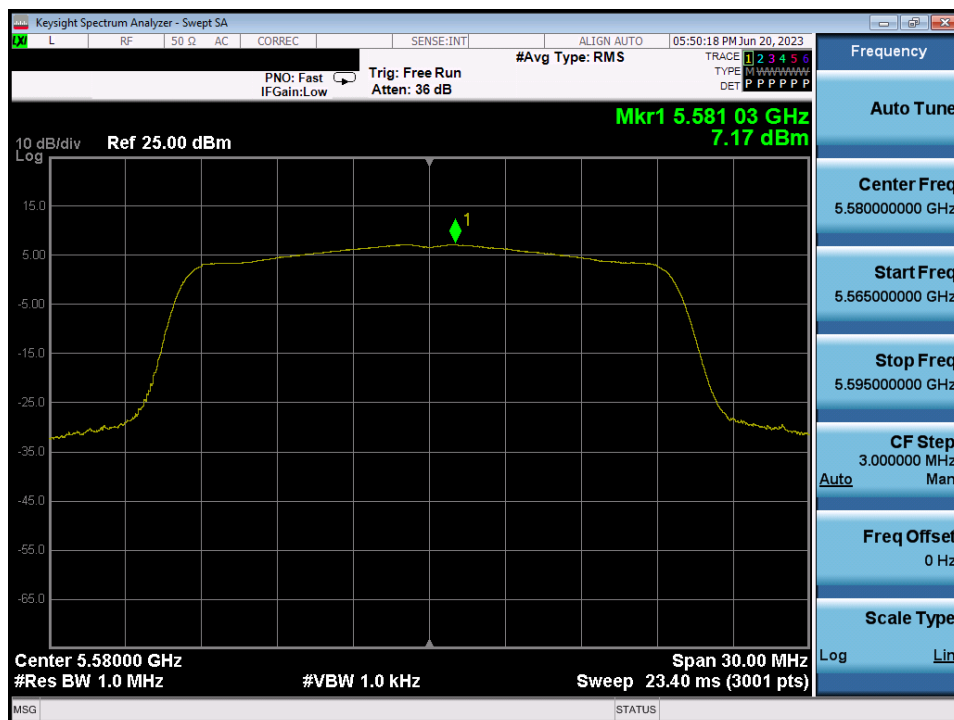
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 &amp; ANT 2 &amp; SU &amp; Ch.100



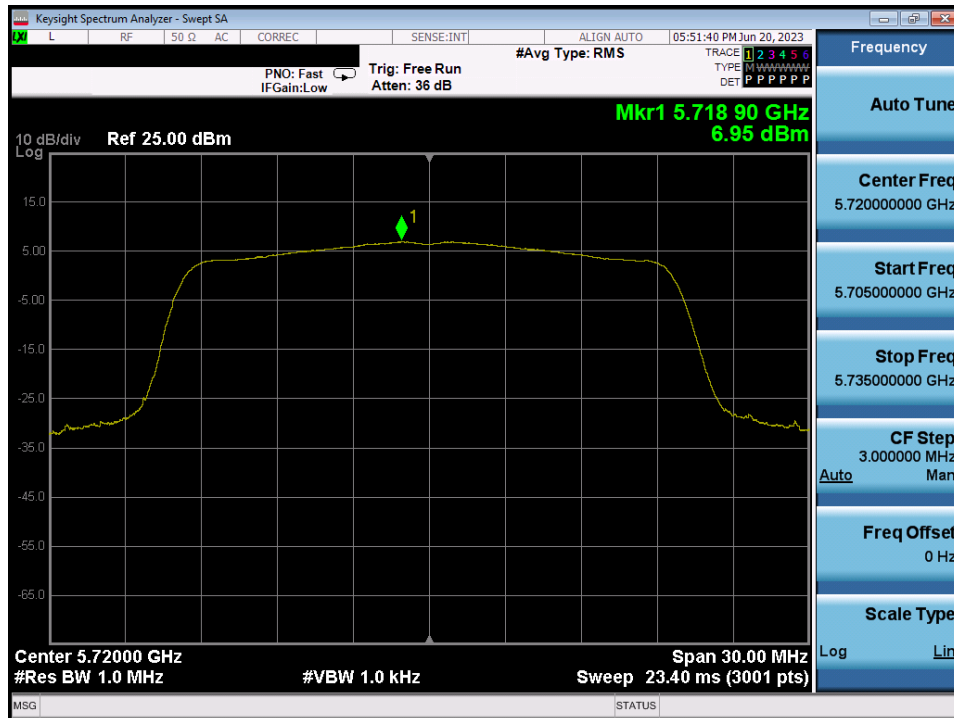
## Maximum Power Spectral Density

Test Mode: 802.11ax HE20 &amp; ANT 2 &amp; SU &amp; Ch.116

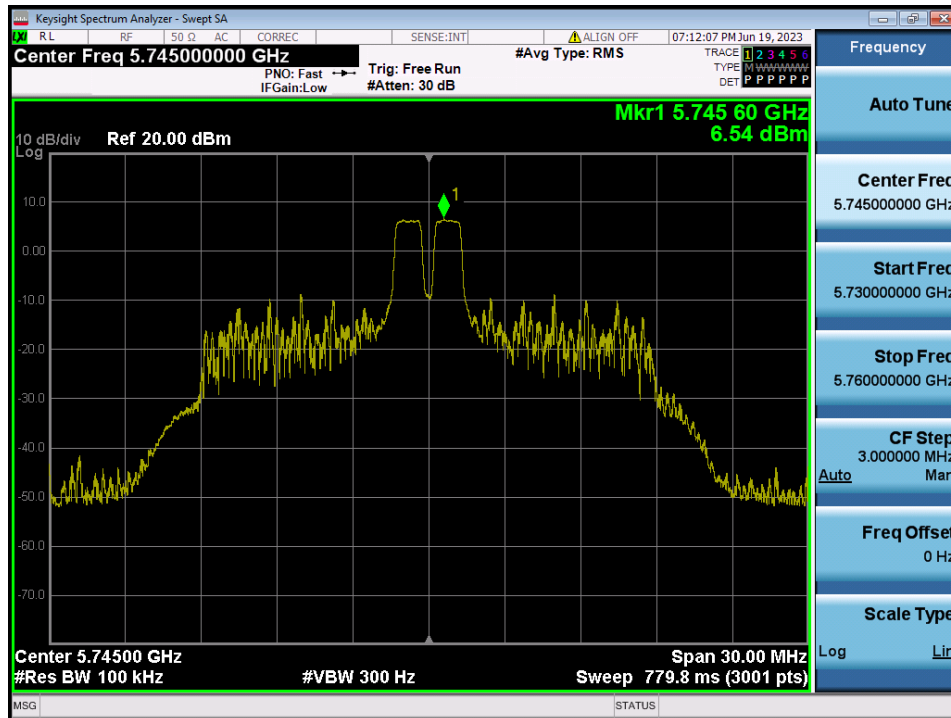


## Maximum Power Spectral Density

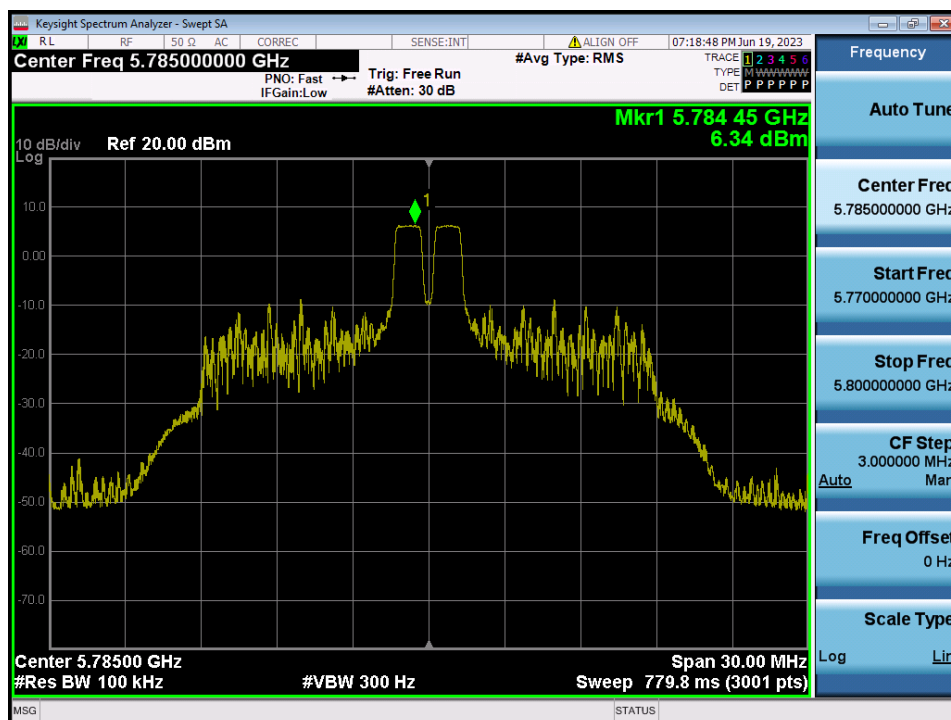
Test Mode: 802.11ax HE20 & ANT 2 & SU & Ch.144



Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 4 RU & Ch.149

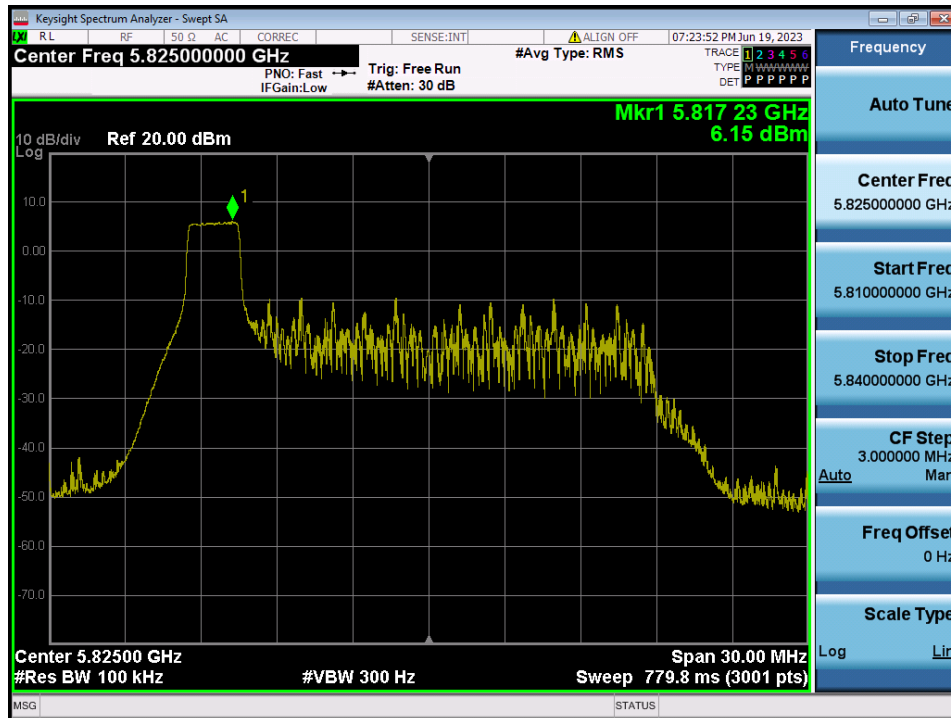


Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 4 RU & Ch.157



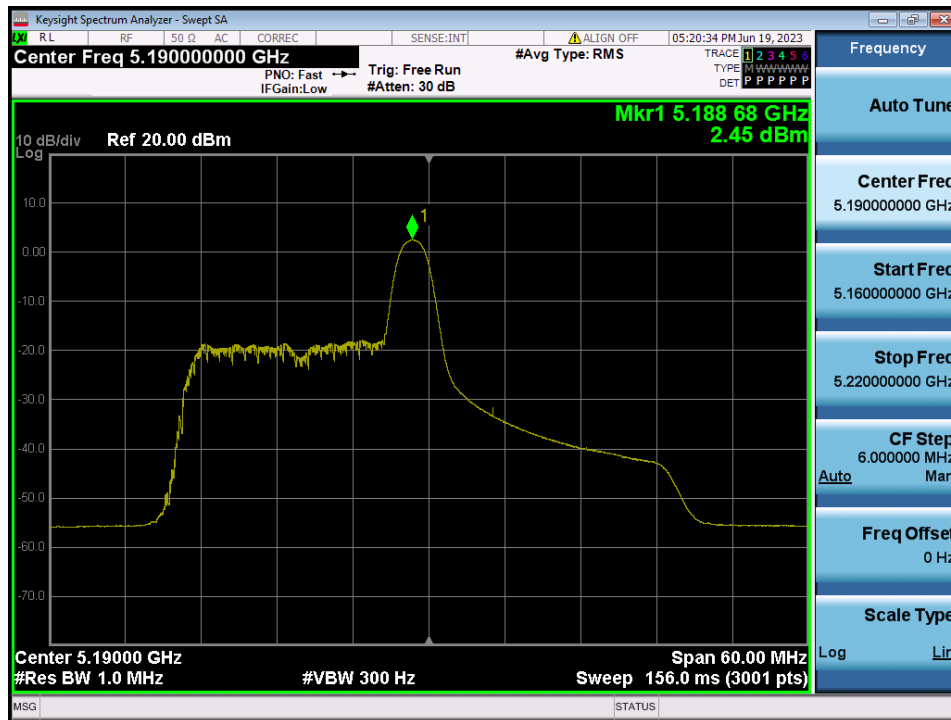
# Maximum Power Spectral Density

Test Mode: 802.11ax HE20 & ANT 2 & 26 Tone & 0 RU & Ch.165



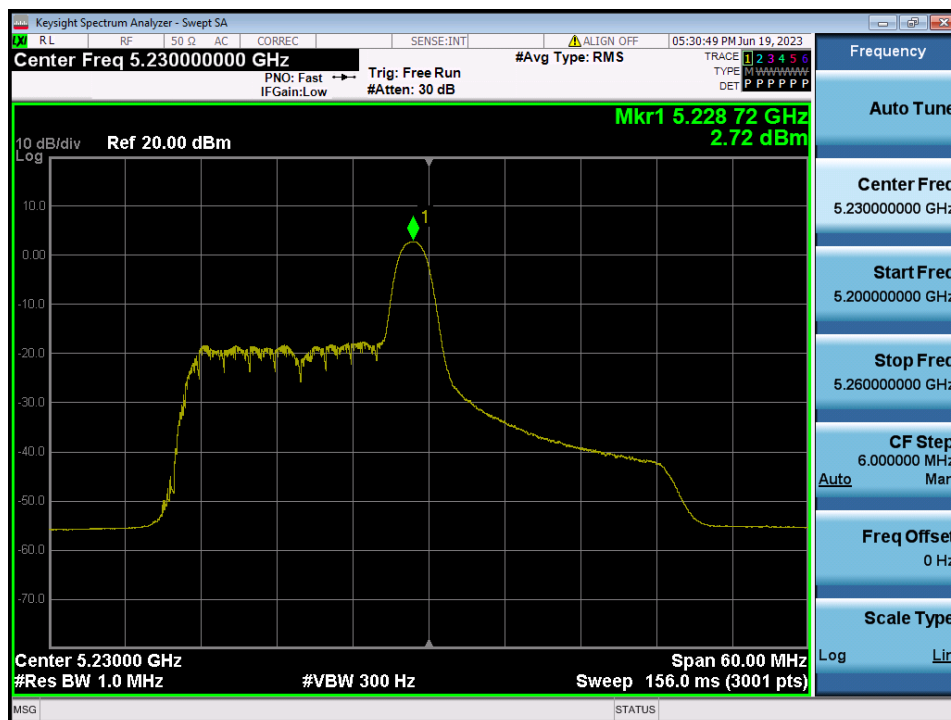
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.38



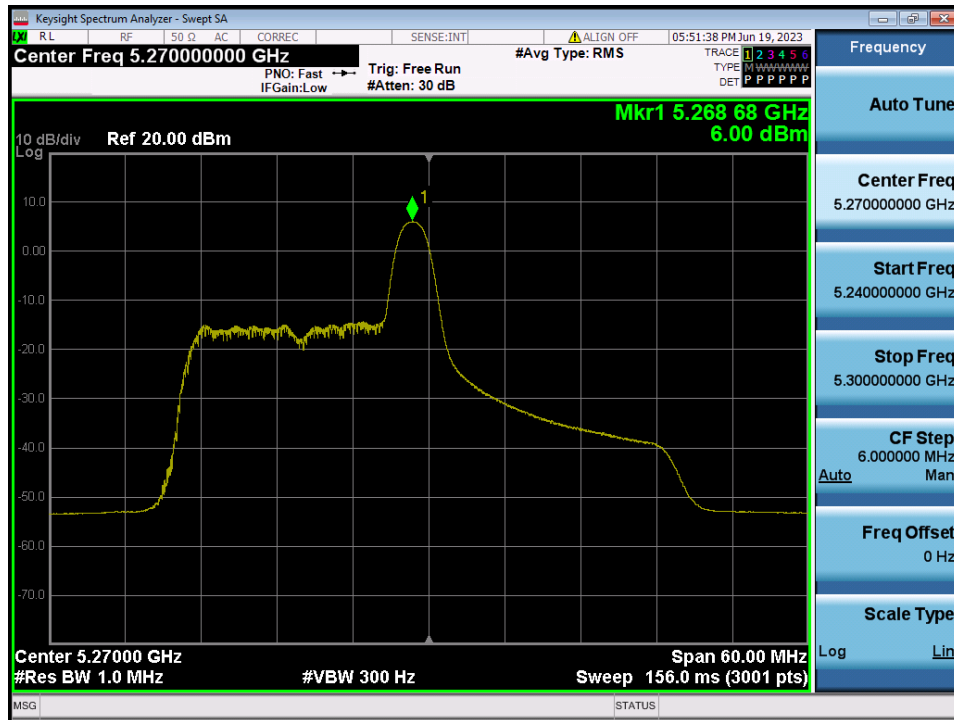
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.46



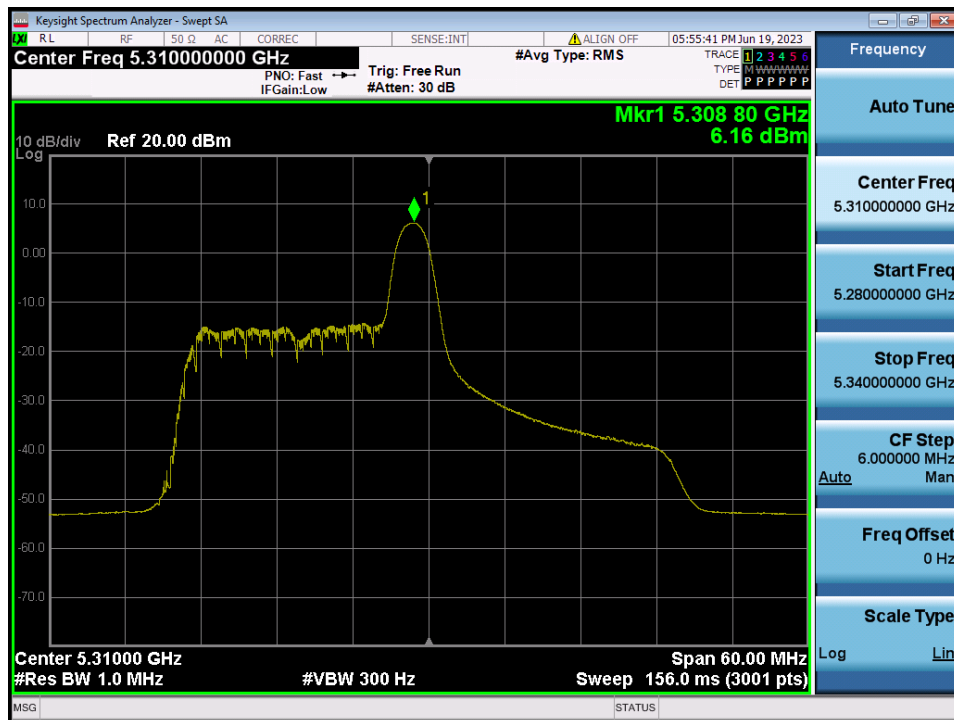
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.54



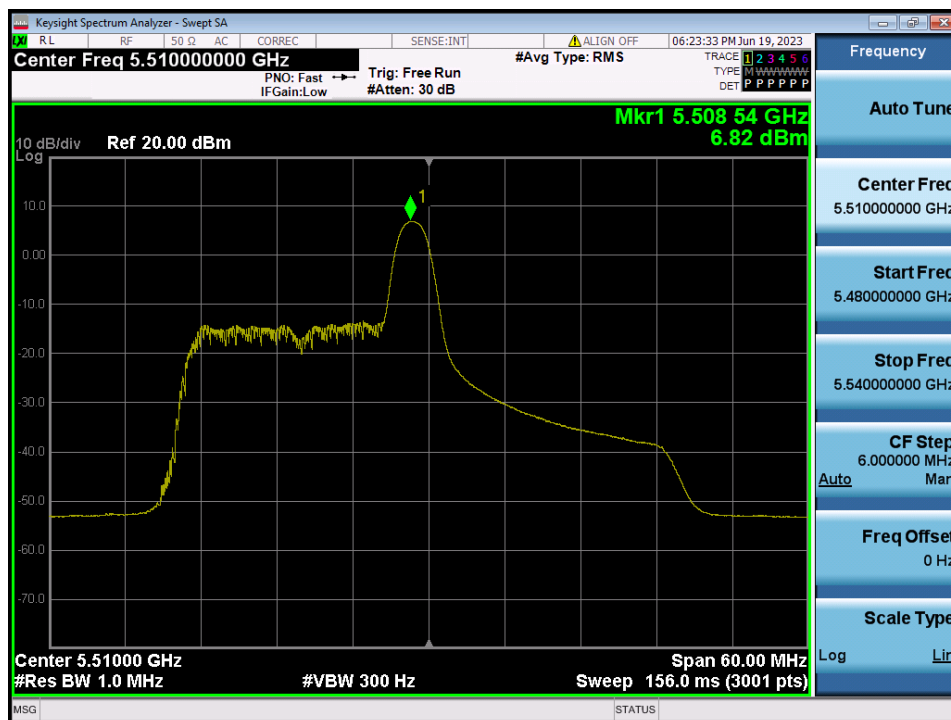
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.62



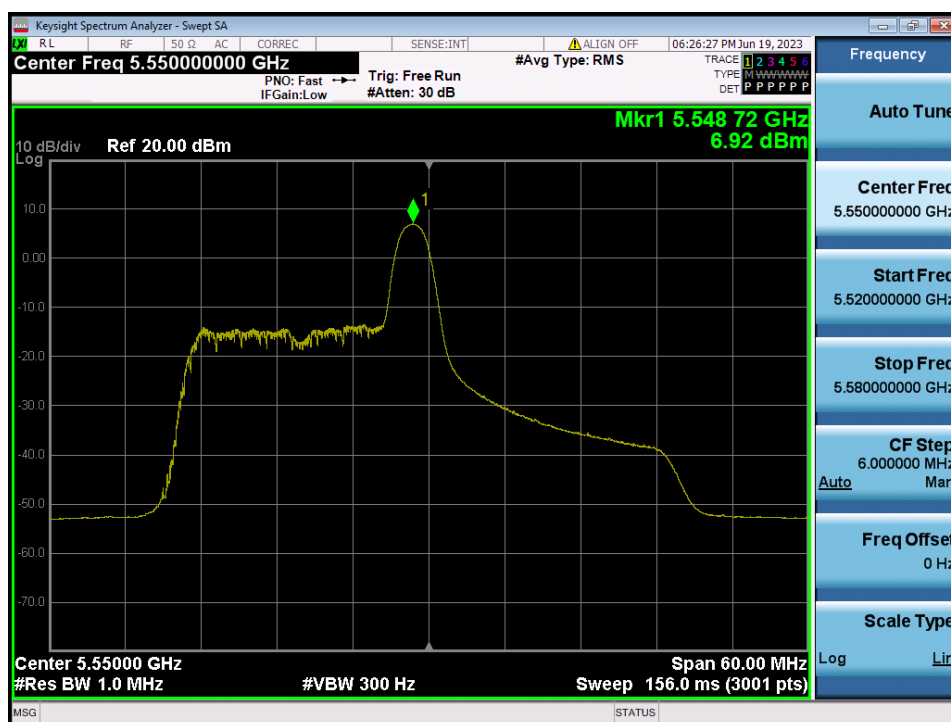
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 2 &amp; 26 Tone &amp; 8 RU &amp; Ch.102



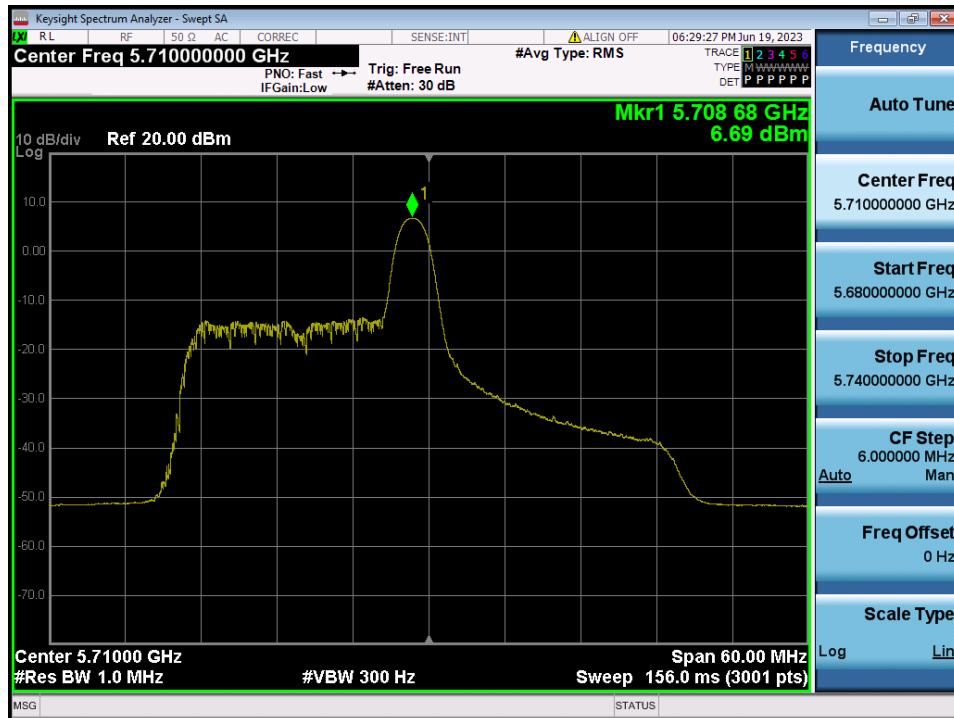
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 &amp; ANT 2 &amp; 26 Tone &amp; 8 RU &amp; Ch.110



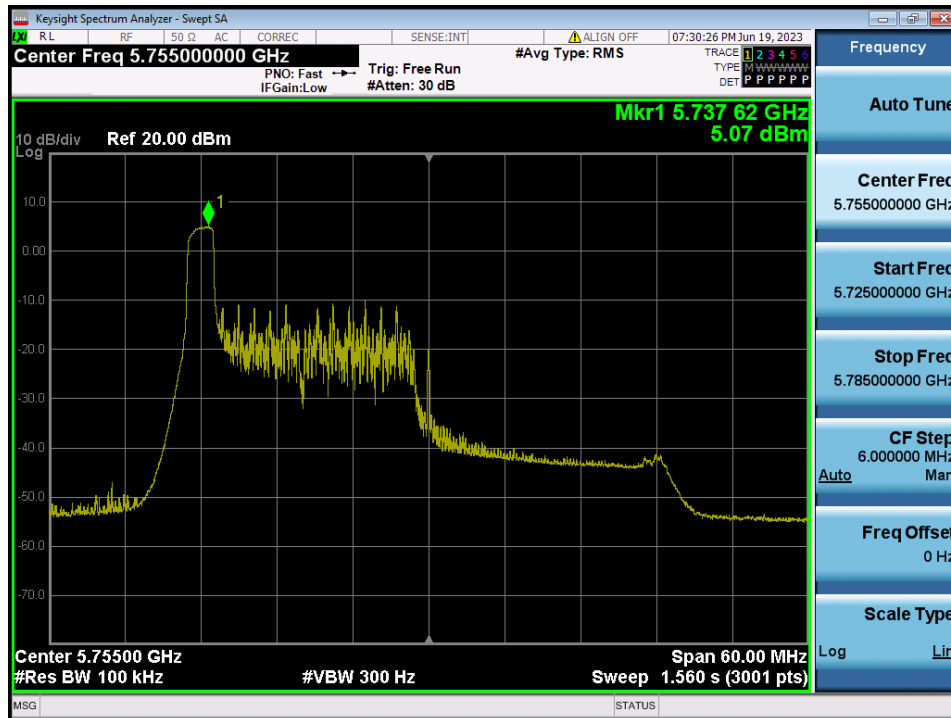
# Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.142



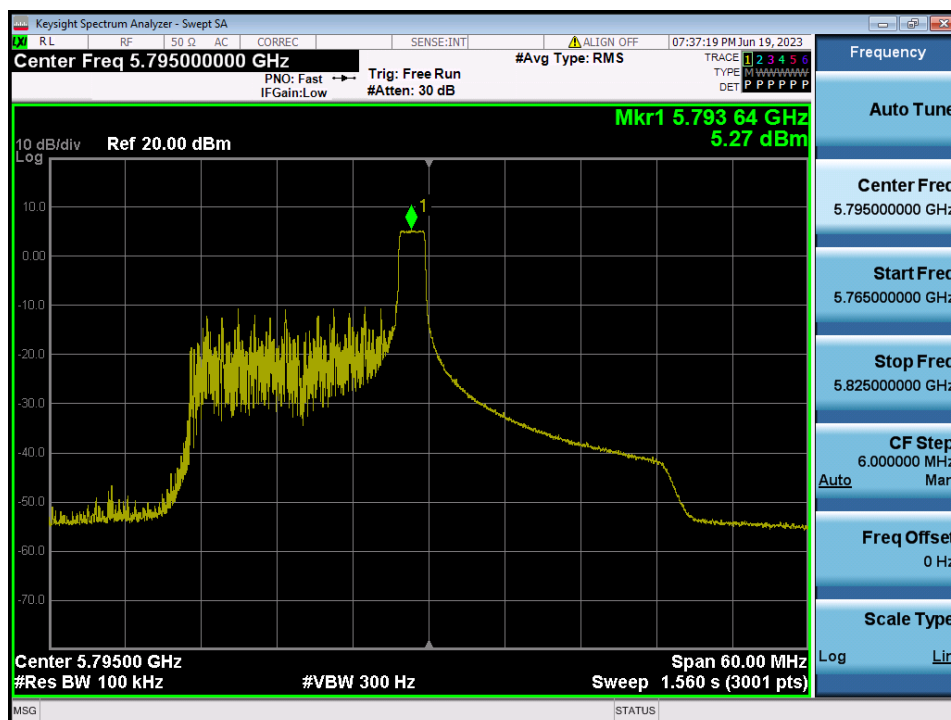
## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 0 RU & Ch.151



## Maximum Power Spectral Density

Test Mode: 802.11ax HE40 & ANT 2 & 26 Tone & 8 RU & Ch.159



## Maximum Power Spectral Density

Test Mode: 802.11ax HE80 & ANT 2 & 26 Tone & 0 RU & Ch.42

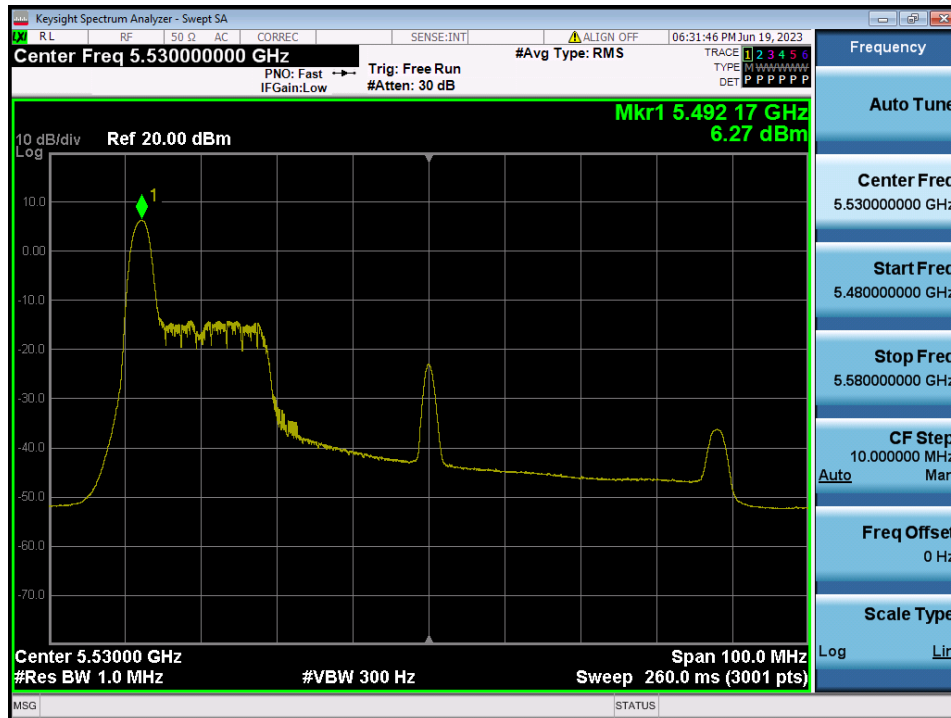


## Maximum Power Spectral Density

Test Mode: 802.11ax HE80 & ANT 2 & 26 Tone & 0 RU & Ch.58



Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 2 & 26 Tone & 0 RU & Ch.106

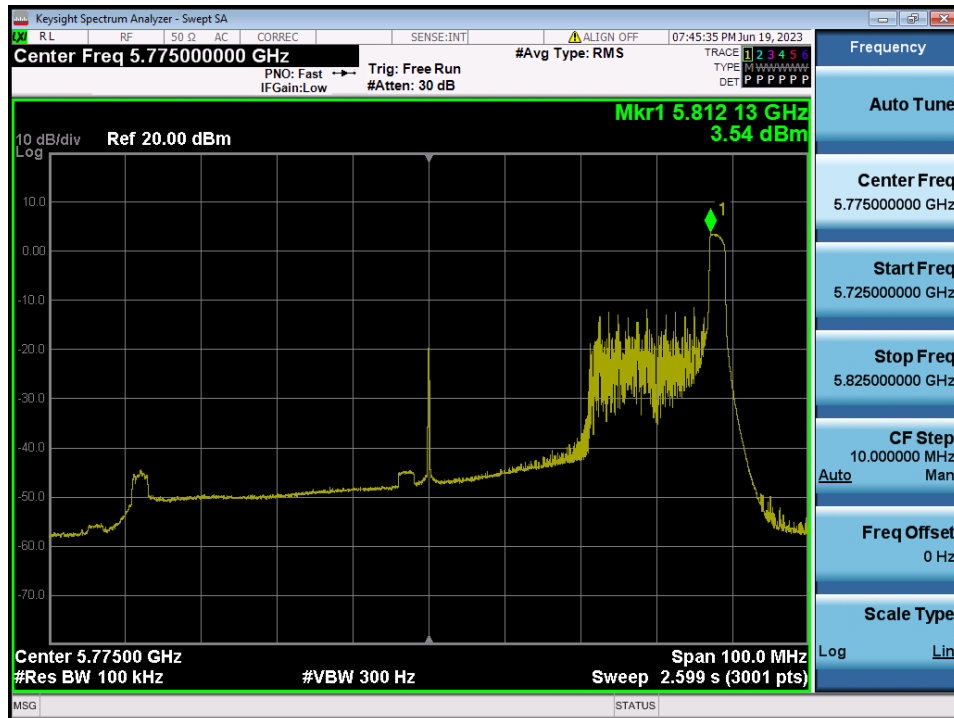


Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 2 & 26 Tone & 0 RU & Ch.138



## Maximum Power Spectral Density

Test Mode: 802.11ax HE80 & ANT 2 & 26 Tone & 36 RU & Ch.155



## 5.5 Unwanted Emissions

### ■ Test Requirements

#### - Part 15.407(b) & RSS-Gen[6.2]

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the **5.15 GHz - 5.25 GHz band**: all emissions outside of the **5.15 GHz - 5.35 GHz band** shall not exceed an **EIRP of -27 dBm/MHz**.
- (2) For transmitters operating in the **5.25 GHz - 5.35 GHz band**: all emissions outside of the **5.15 GHz - 5.35 GHz band** shall not exceed an **EIRP of -27 dBm/MHz**.
- (3) For transmitters operating in the **5.47 GHz - 5.725 GHz band**: all emissions outside of the **5.47 GHz - 5.725 GHz band** shall not exceed an **EIRP of -27 dBm/MHz**.
- (4) For transmitters operating in the **5.725 GHz - 5.85 GHz band**: (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (5) Unwanted emissions **below 1 GHz** must comply with the general field strength limits set forth in **Section 15.209**.

Further, any U-NII devices using an **AC power line** are required to comply also with the conducted limits set forth in **Section 15.207**.

#### - Part 15.209 & RSS-247[8.9]: General requirements

| Frequency (MHz) | FCC Limit (uV/m) | IC Limit (uA/m)   | Measurement Distance (m) |
|-----------------|------------------|-------------------|--------------------------|
| 0.009 – 0.490   | 2 400 / F (kHz)  | 6.37/F (F in kHz) | 300                      |
| 0.490 – 1.705   | 24 000 / F (kHz) | 63.7/F (F in kHz) | 30                       |
| 1.705 – 30.0    | 30               | 0.08              | 30                       |

| Frequency (MHz) | FCC Limit (uV/m) | IC Limit (uV/m) | Measurement Distance (m) |
|-----------------|------------------|-----------------|--------------------------|
| 30 ~ 88         | 100 **           | 100             | 3                        |
| 88 ~ 216        | 150 **           | 150             | 3                        |
| 216 ~ 960       | 200 **           | 200             | 3                        |
| Above 960       | 500              | 500             | 3                        |

\*\*Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

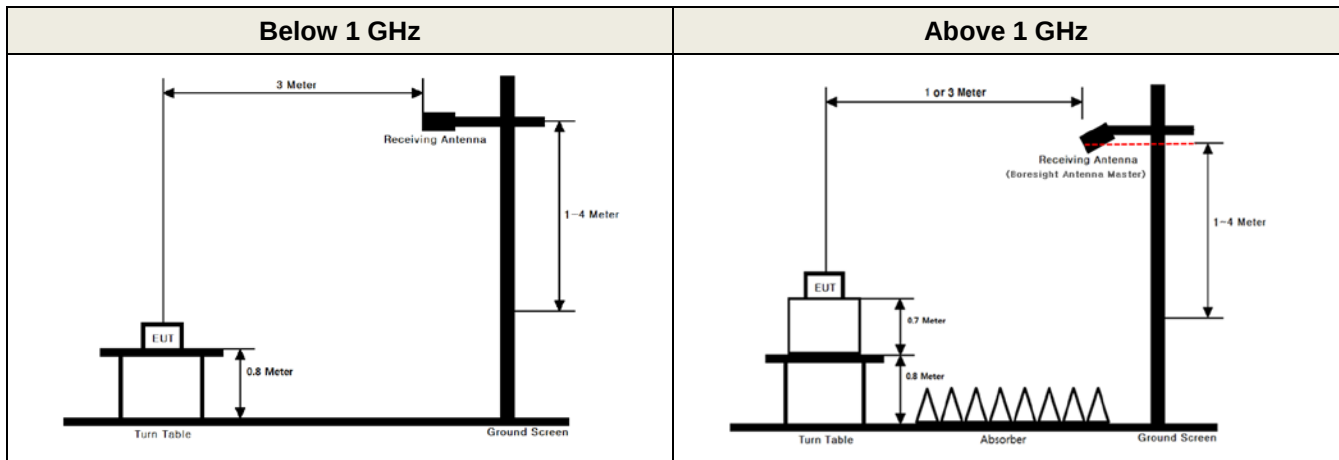
### - Part 15.205(a): Restricted band of operation

| MHz                 | MHz                   | MHz                     | MHz               | GHz          | GHz           |
|---------------------|-----------------------|-------------------------|-------------------|--------------|---------------|
| 0.009 ~ 0.110       | 8.414 25 ~ 8.414 75   | 108 ~ 121.94            | 1 300 ~ 1 427     | 4.5 ~ 5.15   | 14.47 ~ 14.5  |
| 0.495 ~ 0.505       | 12.29 ~ 12.293        | 123 ~ 138               | 1 435 ~ 1 626.5   | 5.35 ~ 5.46  | 15.35 ~ 16.2  |
| 2.173 5 ~ 2.190 5   | 12.519 75 ~ 12.520 25 | 149.9 ~ 150.05          | 1 645.5 ~ 1 646.5 | 7.25 ~ 7.75  | 17.7 ~ 21.4   |
| 4.125 ~ 4.128       | 12.576 75 ~ 12.577 25 | 156.524 75 ~ 156.525 25 | 1 660 ~ 1 710     | 8.025 ~ 8.5  | 22.01 ~ 23.12 |
| 4.177 25 ~ 4.177 75 | 13.36 ~ 13.41         | 156.7 ~ 156.9           | 1 718.8 ~ 1 722.2 | 9.0 ~ 9.2    | 23.6 ~ 24.0   |
| 4.207 25 ~ 4.207 75 | 16.42 ~ 16.423        | 162.012 5 ~ 167.17      | 2 200 ~ 2 300     | 9.3 ~ 9.5    | 31.2 ~ 31.8   |
| 6.215 ~ 6.218       | 16.694 75 ~ 16.695 25 | 167.72 ~ 173.2          | 2 310 ~ 2 390     | 10.6 ~ 12.7  | 36.43 ~ 36.5  |
| 6.267 75 ~ 6.268 25 | 16.804 25 ~ 16.804 75 | 240 ~ 285               | 2 483.5 ~ 2 500   | 13.25 ~ 13.4 | Above 38.6    |
| 6.311 75 ~ 6.312 25 | 25.5 ~ 25.67          | 322 ~ 335.4             | 2 655 ~ 2 900     |              |               |
| 8.291 ~ 8.294       | 37.5 ~ 38.25          | 399.90 ~ 410            | 3 260 ~ 3 267     |              |               |
| 8.362 ~ 8.366       | 73 ~ 74.6             | 608 ~ 614               | 3 332 ~ 3 339     |              |               |
| 8.376 25 ~ 8.386 75 | 74.8 ~ 75.2           | 960 ~ 1 240             | 3 345.8 ~ 3 358   |              |               |
|                     |                       |                         | 3 600 ~ 4 400     |              |               |

### - RSS-Gen[8.10]: Restricted frequency bands

| MHz                 | MHz                   | MHz                | MHz               | MHz             | GHz           |
|---------------------|-----------------------|--------------------|-------------------|-----------------|---------------|
| 0.090 ~ 0.110       | 8.362 ~ 8.366         | 73 ~ 74.6          | 608 ~ 614         | 3 345.8 ~ 3 358 | 9.0 ~ 9.2     |
| 0.495 ~ 0.505       | 8.376 25 ~ 8.386 75   | 74.8 ~ 75.2        | 960 ~ 1 427       | 3 500 ~ 4 400   | 9.3 ~ 9.5     |
| 2.173 5 ~ 2.190 5   | 8.414 25 ~ 8.414 75   | 108 ~ 138          | 1 435 ~ 1 626.5   | 4 500 ~ 5 150   | 10.6 ~ 12.7   |
| 3.020 ~ 3.026       | 12.29 ~ 12.293        | 149.9 ~ 150.05     | 1 645.5 ~ 1 646.5 | 5 350 ~ 5 460   | 13.25 ~ 13.4  |
| 4.125 ~ 4.128       | 12.519 75 ~ 12.520 25 | 156.524 75 ~       | 1 660 ~ 1 710     | 7 250 ~ 7 750   | 14.47 ~ 14.5  |
| 4.177 25 ~ 4.177 75 | 12.576 75 ~ 12.577 25 | 156.525 25         | 1 718.8 ~ 1 722.2 | 8 025 ~ 8 500   | 15.35 ~ 16.2  |
| 4.207 25 ~ 4.207 75 | 13.36 ~ 13.41         | 156.7 ~ 156.9      | 2 200 ~ 2 300     |                 | 17.7 ~ 21.4   |
| 5.677 ~ 5.683       | 16.42 ~ 16.423        | 162.01 25 ~ 167.17 | 2 310 ~ 2 390     |                 | 22.01 ~ 23.12 |
| 6.215 ~ 6.218       | 16.694 75 ~ 16.695 25 | 167.72 ~ 173.2     | 2 483.5 ~ 2 500   |                 | 23.6 ~ 24.0   |
| 6.267 75 ~ 6.268 25 | 16.804 25 ~ 16.804 75 | 240 ~ 285          | 2 655 ~ 2 900     |                 | 31.2 ~ 31.8   |
| 6.311 75 ~ 6.312 25 | 25.5 ~ 25.67          | 322 ~ 335.4        | 3 260 ~ 3 267     |                 | 36.43 ~ 36.5  |
| 8.291 ~ 8.294       | 37.5 ~ 38.25          | 399.90 ~ 410       | 3 332 ~ 3 339     |                 | Above 38.6    |

## ■ Test Configuration



## ■ Test Procedure

1. The EUT is placed on a non-conductive table. For emission measurements at or below 1 GHz, the table height is 80 cm. For emission measurements above 1 GHz, the table height is 1.5 m.
2. The turn table shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 1 m or 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.

Radiated spurious emission measured using following Measurement Procedure of KDB789033 D02v02r01

### ► General Requirements for Unwanted Emissions Measurements

The following requirements apply to all unwanted emissions measurements, both in and outside of the restricted bands:

#### ▪ EUT Duty Cycle

- (1) The EUT shall be configured or modified to **transmit continuously** except as stated in (ii), below. The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (**to no lower than 98 percent**) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.
- (2) If **continuous transmission (or at least 98 percent duty cycle) cannot be achieved** due to hardware limitations of the EUT (e.g., overheating), the following additions to the measurement and reporting procedures are required:
  - The EUT shall be configured to operate at the maximum achievable duty cycle.
  - Measure the duty cycle, x, of the transmitter output signal.
  - Adjustments to measurement procedures (e.g., increasing test time and number of traces averaged) shall be performed as described in the procedures below.
  - The test report shall include the following additional information:
    - The reason for the duty cycle limitation.
    - The duty cycle achieved for testing and the associated transmit duration and interval between transmissions.
    - The sweep time and the amount of time used for trace stabilization during max-hold measurements for peak emission measurements.
- (3) Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

**► Measurements below 1 000 MHz**

- a) Follow the requirements in section II.G.3, “General Requirements for Unwanted Emissions Measurements”.
- b) Compliance shall be demonstrated using **CISPR quasi-peak detection**; however, **peak detection** is permitted as an alternative to quasi-peak detection.

**► Measurements Above 1 000 MHz (Peak)**

- a) Follow the requirements in section II.G.3, “General Requirements for Unwanted Emissions Measurements”.
- b) Peak emission levels are measured by setting the analyzer as follows:
  - (i) **RBW = 1 MHz.**
  - (ii) **VBW ≥ 3 MHz.**
  - (iii) **Detector = Peak.**
  - (iv) Sweep time = Auto.
  - (v) Trace mode = Max hold.
  - (vi) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately  $1/x$ , where  $x$  is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

**► Measurements Above 1000 MHz (Method –VB-A)**

- a) **RBW = 1 MHz.**
- b) Video bandwidth:
  - (i) If the EUT is configured to transmit with  $D \geq 98\%$ , then set  $VBW \leq RBW / 100$  (i.e., 10 kHz), but not less than 10 Hz.
  - (ii) **If the EUT D is < 98%, then set  $VBW \geq 1 / T$** , where T is defined in item a1) of 12.2.
- c) Video bandwidth mode or display mode:
  - (i) The instrument shall be set with video filtering applied in the power domain. Typically, this requires setting the detector mode to RMS (power averaging) and setting the average-VBW type to power (rms).
  - (ii) As an alternative, the instrument may be set to linear detector mode. Video filtering shall be applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode to accomplish this. Others have a setting for average-VBW type, which can be set to “voltage” regardless of the display mode.
- d) **Detector = peak.**
- e) Sweep time = auto.
- f) Trace mode = max hold.
- g) Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of  $1/x$ , where D is the duty cycle. For example, use at least 200 traces if the duty cycle is 25%. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 50 traces should be averaged.)

Please refer to Appendix I for the  $1 / T$

## Test Results

### Test Notes

- The radiated emissions were investigated 9 kHz to 40 GHz. And no other spurious and harmonic emissions were found below listed frequencies.
- Information of Distance Correction Factor  
For finding emissions, measurements may be performed at a distance closer than that specified in the regulations.  
In this case, the distance factor is applied to the result.  
- Calculation of distance correction factor  
At frequencies below 30 MHz =  $40 \log(\text{tested distance} / \text{specified distance})$   
At frequencies at or above 30 MHz =  $20 \log(\text{tested distance} / \text{specified distance})$   
When distance factor is "N/A", the measurements were performed at the specified distance and distance factor is not applied.
- Sample Calculation.  
 $\text{Margin} = \text{Limit} - \text{Result}$  /  $\text{Result} = \text{Reading} + \text{TF} + \text{DCF}$  /  $\text{TF} = \text{AF} + \text{CL} + \text{HL} + \text{AL} - \text{AG}$   
Where, TF = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain, HL = High pass filter Loss, AL = Attenuator Loss, DCF = Distance Correction Factor
- The limit is converted to field strength.  
 $E(\text{dBuV/m}) = \text{EIRP}(\text{dBm}) + 95.2 \text{ dB} = -27 \text{ dBm} + 95.2 = 68.2 \text{ dBuV/m}$

### Radiated Spurious Emissions data(9 kHz ~ 40 GHz) : MIMO(CDD) & 802.11ax HE20

| Band     | Tested Frequency (MHz) | Tone | RU | Freq. (MHz) | ANT Pol | EUT Position (Axis) | Detector Mode | Reading (dBuV) | TF (dB/m) | DCF (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|----------|------------------------|------|----|-------------|---------|---------------------|---------------|----------------|-----------|----------|-----------------|----------------|-------------|
| U-NII 1  | 5 180                  | 26   | 0  | 5 149.72    | H       | X                   | PK            | 51.80          | 3.39      | N/A      | 55.19           | 74.00          | 18.81       |
|          |                        | 26   | 0  | 5 149.69    | H       | X                   | AV            | 40.85          | 3.39      | N/A      | 44.24           | 54.00          | 9.76        |
|          |                        | 26   | 4  | 10 360.85   | H       | X                   | PK            | 41.96          | 10.14     | N/A      | 52.10           | 68.20          | 16.10       |
|          |                        | 242  | 61 | 5 149.16    | H       | X                   | PK            | 52.95          | 3.39      | N/A      | 56.34           | 74.00          | 17.66       |
|          |                        | 242  | 61 | 5 149.30    | H       | X                   | AV            | 43.08          | 3.39      | N/A      | 46.47           | 54.00          | 7.53        |
|          |                        | SU   | NA | 5 149.47    | H       | X                   | PK            | 52.96          | 3.39      | N/A      | 56.35           | 74.00          | 17.65       |
|          |                        | SU   | NA | 5 149.59    | H       | X                   | AV            | 43.01          | 3.39      | N/A      | 46.40           | 54.00          | 7.60        |
|          |                        | SU   | NA | 10 360.26   | H       | X                   | PK            | 43.08          | 10.14     | N/A      | 53.22           | 68.20          | 14.98       |
|          | 5 200                  | 26   | 4  | 10 400.74   | H       | X                   | PK            | 43.11          | 10.48     | N/A      | 53.59           | 68.20          | 14.61       |
|          |                        | SU   | NA | 10 400.01   | H       | X                   | PK            | 43.28          | 10.48     | N/A      | 53.76           | 68.20          | 14.44       |
|          | 5 240                  | 26   | 4  | 10 479.83   | H       | X                   | PK            | 43.91          | 11.26     | N/A      | 55.17           | 68.20          | 13.03       |
|          |                        | SU   | NA | 10 480.42   | H       | X                   | PK            | 43.55          | 11.26     | N/A      | 54.81           | 68.20          | 13.39       |
| U-NII 2A | 5 260                  | 26   | 4  | 10 520.30   | H       | X                   | PK            | 43.71          | 11.42     | N/A      | 55.13           | 68.20          | 13.07       |
|          |                        | SU   | NA | 10 519.52   | H       | X                   | PK            | 46.57          | 11.42     | N/A      | 57.99           | 68.20          | 10.21       |
|          | 5 300                  | 26   | 4  | 10 599.09   | H       | X                   | PK            | 43.36          | 11.37     | N/A      | 54.73           | 68.20          | 13.47       |
|          |                        | 26   | 4  | 10 601.88   | H       | X                   | AV            | 32.65          | 11.37     | N/A      | 44.02           | 54.00          | 9.98        |
|          |                        | SU   | NA | 10 599.90   | H       | X                   | PK            | 44.32          | 11.37     | N/A      | 55.69           | 68.20          | 12.51       |
|          |                        | SU   | NA | 10 600.43   | H       | X                   | AV            | 33.24          | 11.37     | N/A      | 44.61           | 54.00          | 9.39        |
|          | 5 320                  | 26   | 8  | 5 351.04    | H       | X                   | PK            | 50.91          | 3.82      | N/A      | 54.73           | 74.00          | 19.27       |
|          |                        | 26   | 8  | 5 350.53    | H       | X                   | AV            | 40.36          | 3.82      | N/A      | 44.18           | 54.00          | 9.82        |
|          |                        | 26   | 4  | 10 640.53   | H       | X                   | PK            | 44.38          | 11.43     | N/A      | 55.81           | 74.00          | 18.19       |
|          |                        | 26   | 4  | 10 640.95   | H       | X                   | AV            | 32.78          | 11.43     | N/A      | 44.21           | 54.00          | 9.79        |
|          |                        | 242  | 61 | 5 351.90    | H       | X                   | PK            | 53.29          | 3.82      | N/A      | 57.11           | 74.00          | 16.89       |
|          |                        | 242  | 61 | 5 350.83    | H       | X                   | AV            | 42.62          | 3.82      | N/A      | 46.44           | 54.00          | 7.56        |
|          |                        | SU   | NA | 5 350.83    | H       | X                   | PK            | 52.70          | 3.82      | N/A      | 56.52           | 74.00          | 17.48       |
|          |                        | SU   | NA | 5 350.38    | H       | X                   | AV            | 42.53          | 3.82      | N/A      | 46.35           | 54.00          | 7.65        |
|          |                        | SU   | NA | 10 640.33   | H       | X                   | PK            | 45.46          | 11.43     | N/A      | 56.89           | 74.00          | 17.11       |
|          |                        | SU   | NA | 10 639.39   | H       | X                   | AV            | 33.63          | 11.43     | N/A      | 45.06           | 54.00          | 8.94        |

**Radiated Spurious Emissions data(9 kHz ~ 40 GHz) : MIMO(CDD) & 802.11ax HE20**

| Band     | Tested Frequency (MHz) | Tone | RU | Freq. (MHz) | ANT Pol | EUT Position (Axis) | Detector Mode | Reading (dBuV) | TF (dB/m) | DCF (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|----------|------------------------|------|----|-------------|---------|---------------------|---------------|----------------|-----------|----------|-----------------|----------------|-------------|
| U-NII 2C | 5 500                  | 26   | 0  | 5 459.32    | H       | X                   | PK            | 51.67          | 3.76      | N/A      | 55.43           | 74.00          | 18.57       |
|          |                        | 26   | 0  | 5 459.50    | H       | X                   | AV            | 40.59          | 3.76      | N/A      | 44.35           | 54.00          | 9.65        |
|          |                        | 26   | 0  | 5 464.82    | H       | X                   | PK            | 51.25          | 3.74      | N/A      | 54.99           | 68.20          | 13.21       |
|          |                        | 26   | 4  | 10 999.72   | H       | X                   | PK            | 45.16          | 11.44     | N/A      | 56.60           | 74.00          | 17.40       |
|          |                        | 26   | 4  | 11 000.10   | H       | X                   | AV            | 33.37          | 11.44     | N/A      | 44.81           | 54.00          | 9.19        |
|          |                        | 242  | 61 | 5 459.51    | H       | X                   | PK            | 52.64          | 3.76      | N/A      | 56.40           | 74.00          | 17.60       |
|          |                        | 242  | 61 | 5 459.02    | H       | X                   | AV            | 41.74          | 3.76      | N/A      | 45.50           | 54.00          | 8.50        |
|          |                        | 242  | 61 | 5 461.98    | H       | X                   | PK            | 52.64          | 3.75      | N/A      | 56.39           | 68.20          | 11.81       |
|          |                        | SU   | NA | 5 458.60    | H       | X                   | PK            | 54.41          | 3.76      | N/A      | 58.17           | 74.00          | 15.83       |
|          |                        | SU   | NA | 5 458.70    | H       | X                   | AV            | 42.74          | 3.76      | N/A      | 46.50           | 54.00          | 7.50        |
|          |                        | SU   | NA | 5 468.11    | H       | X                   | PK            | 54.34          | 3.73      | N/A      | 58.07           | 68.20          | 10.13       |
|          |                        | SU   | NA | 10 999.82   | H       | X                   | PK            | 45.73          | 11.44     | N/A      | 57.17           | 74.00          | 16.83       |
|          |                        | SU   | NA | 10 999.22   | H       | X                   | AV            | 34.11          | 11.44     | N/A      | 45.55           | 54.00          | 8.45        |
|          | 5 580                  | 26   | 4  | 11 158.59   | H       | X                   | PK            | 45.14          | 10.84     | N/A      | 55.98           | 74.00          | 18.02       |
|          |                        | 26   | 4  | 11 158.02   | H       | X                   | AV            | 33.83          | 10.84     | N/A      | 44.67           | 54.00          | 9.33        |
|          |                        | SU   | NA | 11 160.18   | H       | X                   | PK            | 45.41          | 10.84     | N/A      | 56.25           | 74.00          | 17.75       |
|          |                        | SU   | NA | 11 159.69   | H       | X                   | AV            | 34.31          | 10.84     | N/A      | 45.15           | 54.00          | 8.85        |
|          | 5 720                  | 26   | 8  | 11 440.79   | H       | X                   | PK            | 44.87          | 9.70      | N/A      | 54.57           | 74.00          | 19.43       |
|          |                        | 26   | 8  | 11 441.09   | H       | X                   | AV            | 32.61          | 9.70      | N/A      | 42.31           | 54.00          | 11.69       |
|          |                        | SU   | NA | 11 440.46   | H       | X                   | PK            | 45.14          | 9.70      | N/A      | 54.84           | 74.00          | 19.16       |
|          |                        | SU   | NA | 11 440.15   | H       | X                   | AV            | 34.17          | 9.70      | N/A      | 43.87           | 54.00          | 10.13       |
| U-NII 3  | 5 745                  | 26   | 0  | 5 645.58    | H       | X                   | PK            | 53.71          | 4.10      | N/A      | 57.81           | 68.20          | 10.39       |
|          |                        | 26   | 0  | 5 655.50    | H       | X                   | PK            | 55.18          | 4.11      | N/A      | 59.29           | 72.27          | 12.98       |
|          |                        | 26   | 4  | 11 488.89   | H       | X                   | PK            | 45.04          | 9.57      | N/A      | 54.61           | 74.00          | 19.39       |
|          |                        | 26   | 4  | 11 489.05   | H       | X                   | AV            | 33.91          | 9.57      | N/A      | 43.48           | 54.00          | 10.52       |
|          |                        | 242  | 61 | 5 640.18    | H       | X                   | PK            | 52.47          | 4.09      | N/A      | 56.56           | 68.20          | 11.64       |
|          |                        | 242  | 61 | 5 683.10    | H       | X                   | PK            | 53.81          | 4.15      | N/A      | 57.96           | 92.69          | 34.73       |
|          |                        | SU   | NA | 5 630.13    | H       | X                   | PK            | 53.03          | 4.07      | N/A      | 57.10           | 68.20          | 11.10       |
|          |                        | SU   | NA | 5 684.58    | H       | X                   | PK            | 55.04          | 4.15      | N/A      | 59.19           | 93.79          | 34.60       |
|          |                        | SU   | NA | 11 490.46   | H       | X                   | PK            | 45.25          | 9.56      | N/A      | 54.81           | 74.00          | 19.19       |
|          |                        | SU   | NA | 11 490.32   | H       | X                   | AV            | 34.27          | 9.56      | N/A      | 43.83           | 54.00          | 10.17       |
|          | 5 785                  | 26   | 4  | 11 567.76   | H       | X                   | PK            | 43.94          | 9.48      | N/A      | 53.42           | 74.00          | 20.58       |
|          |                        | 26   | 4  | 11 567.63   | H       | X                   | AV            | 32.76          | 9.48      | N/A      | 42.24           | 54.00          | 11.76       |
|          |                        | SU   | NA | 11 569.47   | H       | X                   | PK            | 43.71          | 9.48      | N/A      | 53.19           | 74.00          | 20.81       |
|          |                        | SU   | NA | 11 568.83   | H       | X                   | AV            | 33.13          | 9.48      | N/A      | 42.61           | 54.00          | 11.39       |
|          | 5 825                  | 26   | 8  | 5 912.56    | H       | X                   | PK            | 51.53          | 4.56      | N/A      | 56.09           | 77.41          | 21.32       |
|          |                        | 26   | 8  | 5 973.11    | H       | X                   | PK            | 51.41          | 4.90      | N/A      | 56.31           | 68.20          | 11.89       |
|          |                        | 26   | 4  | 11 650.03   | H       | X                   | PK            | 45.77          | 9.53      | N/A      | 55.30           | 74.00          | 18.70       |
|          |                        | 26   | 4  | 11 650.70   | H       | X                   | AV            | 33.81          | 9.53      | N/A      | 43.34           | 54.00          | 10.66       |
|          |                        | 242  | 61 | 5 875.94    | H       | X                   | PK            | 52.39          | 4.21      | N/A      | 56.60           | 104.50         | 47.90       |
|          |                        | 242  | 61 | 5 926.16    | H       | X                   | PK            | 50.39          | 4.65      | N/A      | 55.04           | 68.20          | 13.16       |
|          |                        | SU   | NA | 5 877.42    | H       | X                   | PK            | 52.10          | 4.22      | N/A      | 56.32           | 103.41         | 47.09       |
|          |                        | SU   | NA | 5 978.15    | H       | X                   | PK            | 51.16          | 4.92      | N/A      | 56.08           | 68.20          | 12.12       |
|          |                        | SU   | NA | 11 649.72   | H       | X                   | PK            | 45.26          | 9.53      | N/A      | 54.79           | 74.00          | 19.21       |
|          |                        | SU   | NA | 11 650.17   | H       | X                   | AV            | 34.07          | 9.53      | N/A      | 43.60           | 54.00          | 10.40       |

**Radiated Spurious Emissions data(9 kHz ~ 40 GHz) : MIMO(CDD) & 802.11ax(HE40)**

| Band     | Tested Frequency (MHz) | Tone | RU | Freq. (MHz) | ANT Pol | EUT Position (Axis) | Detector Mode | Reading (dBuV) | TF (dB/m) | DCF (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|----------|------------------------|------|----|-------------|---------|---------------------|---------------|----------------|-----------|----------|-----------------|----------------|-------------|
| U-NII 1  | 5 190                  | 26   | 0  | 5 136.60    | H       | X                   | PK            | 51.92          | 3.33      | N/A      | 55.25           | 74.00          | 18.75       |
|          |                        | 26   | 0  | 5 137.72    | H       | X                   | AV            | 40.88          | 3.33      | N/A      | 44.21           | 54.00          | 9.79        |
|          |                        | 26   | 0  | 10 380.36   | H       | X                   | PK            | 43.39          | 10.31     | N/A      | 53.70           | 68.20          | 14.50       |
|          |                        | 484  | 65 | 5 149.50    | H       | X                   | PK            | 56.54          | 3.39      | N/A      | 59.93           | 74.00          | 14.07       |
|          |                        | 484  | 65 | 5 149.34    | H       | X                   | AV            | 45.65          | 3.39      | N/A      | 49.04           | 54.00          | 4.96        |
|          |                        | SU   | NA | 5 149.94    | H       | X                   | PK            | 57.22          | 3.39      | N/A      | 60.61           | 74.00          | 13.39       |
|          |                        | SU   | NA | 5 149.64    | H       | X                   | AV            | 46.63          | 3.39      | N/A      | 50.02           | 54.00          | 3.98        |
|          |                        | SU   | NA | 10 380.14   | H       | X                   | PK            | 42.86          | 10.31     | N/A      | 53.17           | 68.20          | 15.03       |
|          | 5 230                  | 26   | 8  | 10 459.66   | H       | X                   | PK            | 44.08          | 11.09     | N/A      | 55.17           | 68.20          | 13.03       |
|          |                        | SU   | NA | 10 460.49   | H       | X                   | PK            | 44.14          | 11.09     | N/A      | 55.23           | 68.20          | 12.97       |
| U-NII 2A | 5 270                  | 26   | 8  | 10 540.49   | H       | X                   | PK            | 43.14          | 11.41     | N/A      | 54.55           | 68.20          | 13.65       |
|          |                        | SU   | NA | 10 540.39   | H       | X                   | PK            | 44.78          | 11.41     | N/A      | 56.19           | 68.20          | 12.01       |
|          | 5 310                  | 26   | 17 | 5 350.87    | H       | X                   | PK            | 51.30          | 3.82      | N/A      | 55.12           | 74.00          | 18.88       |
|          |                        | 26   | 17 | 5 350.57    | H       | X                   | AV            | 40.34          | 3.82      | N/A      | 44.16           | 54.00          | 9.84        |
|          |                        | 26   | 8  | 10 618.64   | H       | X                   | PK            | 43.80          | 11.40     | N/A      | 55.20           | 74.00          | 18.80       |
|          |                        | 26   | 8  | 10 617.72   | H       | X                   | AV            | 31.98          | 11.40     | N/A      | 43.38           | 54.00          | 10.62       |
|          |                        | 484  | 65 | 5 350.24    | H       | X                   | PK            | 54.85          | 3.82      | N/A      | 58.67           | 74.00          | 15.33       |
|          |                        | 484  | 65 | 5 350.80    | H       | X                   | AV            | 45.79          | 3.82      | N/A      | 49.61           | 54.00          | 4.39        |
|          |                        | SU   | NA | 5 351.02    | H       | X                   | PK            | 58.46          | 3.82      | N/A      | 62.28           | 74.00          | 11.72       |
|          |                        | SU   | NA | 5 350.63    | H       | X                   | AV            | 46.43          | 3.82      | N/A      | 50.25           | 54.00          | 3.75        |
|          |                        | SU   | NA | 10 619.40   | H       | X                   | PK            | 44.35          | 11.40     | N/A      | 55.75           | 74.00          | 18.25       |
|          |                        | SU   | NA | 10 619.33   | H       | X                   | AV            | 33.51          | 11.40     | N/A      | 44.91           | 54.00          | 9.09        |
| U-NII 2C | 5 510                  | 26   | 0  | 5 458.56    | H       | X                   | PK            | 52.81          | 3.76      | N/A      | 56.57           | 74.00          | 17.43       |
|          |                        | 26   | 0  | 5 459.43    | H       | X                   | AV            | 41.29          | 3.76      | N/A      | 45.05           | 54.00          | 8.95        |
|          |                        | 26   | 0  | 5 468.03    | H       | X                   | PK            | 52.21          | 3.73      | N/A      | 55.94           | 68.20          | 12.26       |
|          |                        | 26   | 8  | 11 018.30   | H       | X                   | PK            | 45.19          | 11.36     | N/A      | 56.55           | 74.00          | 17.45       |
|          |                        | 26   | 8  | 11 018.53   | H       | X                   | AV            | 33.25          | 11.36     | N/A      | 44.61           | 54.00          | 9.39        |
|          |                        | 484  | 65 | 5 459.08    | H       | X                   | PK            | 55.12          | 3.76      | N/A      | 58.88           | 74.00          | 15.12       |
|          |                        | 484  | 65 | 5 459.60    | H       | X                   | AV            | 43.42          | 3.76      | N/A      | 47.18           | 54.00          | 6.82        |
|          |                        | 484  | 65 | 5 466.09    | H       | X                   | PK            | 58.62          | 3.74      | N/A      | 62.36           | 68.20          | 5.84        |
|          |                        | SU   | NA | 5 459.04    | H       | X                   | PK            | 54.69          | 3.76      | N/A      | 58.45           | 74.00          | 15.55       |
|          |                        | SU   | NA | 5 459.65    | H       | X                   | AV            | 43.38          | 3.76      | N/A      | 47.14           | 54.00          | 6.86        |
|          |                        | SU   | NA | 5 466.26    | H       | X                   | PK            | 57.56          | 3.74      | N/A      | 61.30           | 68.20          | 6.90        |
|          |                        | SU   | NA | 11 019.09   | H       | X                   | PK            | 45.23          | 11.36     | N/A      | 56.59           | 74.00          | 17.41       |
|          |                        | SU   | NA | 11 019.40   | H       | X                   | AV            | 34.32          | 11.35     | N/A      | 45.67           | 54.00          | 8.33        |
|          | 5 550                  | 26   | 8  | 11 098.20   | H       | X                   | PK            | 43.74          | 11.10     | N/A      | 54.84           | 74.00          | 19.16       |
|          |                        | 26   | 8  | 11 098.94   | H       | X                   | AV            | 32.52          | 11.10     | N/A      | 43.62           | 54.00          | 10.38       |
|          |                        | SU   | NA | 11 099.86   | H       | X                   | PK            | 44.09          | 11.10     | N/A      | 55.19           | 74.00          | 18.81       |
|          |                        | SU   | NA | 11 100.94   | H       | X                   | AV            | 33.41          | 11.10     | N/A      | 44.51           | 54.00          | 9.49        |
|          | 5 710                  | 26   | 8  | 11 419.59   | H       | X                   | PK            | 43.77          | 9.79      | N/A      | 53.56           | 74.00          | 20.44       |
|          |                        | 26   | 8  | 11 419.40   | H       | X                   | AV            | 32.18          | 9.79      | N/A      | 41.97           | 54.00          | 12.03       |
|          |                        | SU   | NA | 11 419.19   | H       | X                   | PK            | 44.42          | 9.80      | N/A      | 54.22           | 74.00          | 19.78       |
|          |                        | SU   | NA | 11 418.83   | H       | X                   | AV            | 33.90          | 9.80      | N/A      | 43.70           | 54.00          | 10.30       |

**Radiated Spurious Emissions data(9 kHz ~ 40 GHz) : *MIMO(CDD) & 802.11ax(HE40)***

| Band    | Tested Frequency (MHz) | Tone | RU | Freq. (MHz) | ANT Pol | EUT Position (Axis) | Detector Mode | Reading (dBuV) | TF (dB/m) | DCF (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------|------------------------|------|----|-------------|---------|---------------------|---------------|----------------|-----------|----------|-----------------|----------------|-------------|
| U-NII 3 | 5 755                  | 26   | 0  | 5 628.45    | H       | X                   | PK            | 54.65          | 4.07      | N/A      | 58.72           | 68.20          | 9.48        |
|         |                        | 26   | 0  | 5 717.95    | H       | X                   | PK            | 69.24          | 4.21      | N/A      | 73.45           | 110.23         | 36.78       |
|         |                        | 26   | 8  | 11 509.13   | H       | X                   | PK            | 45.54          | 9.53      | N/A      | 55.07           | 74.00          | 18.93       |
|         |                        | 26   | 8  | 11 509.19   | H       | X                   | AV            | 33.95          | 9.53      | N/A      | 43.48           | 54.00          | 10.52       |
|         |                        | 484  | 65 | 5 647.20    | H       | X                   | PK            | 52.82          | 4.10      | N/A      | 56.92           | 68.20          | 11.28       |
|         |                        | 484  | 65 | 5 664.48    | H       | X                   | PK            | 53.44          | 4.12      | N/A      | 57.56           | 78.92          | 21.36       |
|         |                        | SU   | NA | 5 633.53    | H       | X                   | PK            | 53.54          | 4.08      | N/A      | 57.62           | 68.20          | 10.58       |
|         |                        | SU   | NA | 5 718.00    | H       | X                   | PK            | 66.85          | 4.21      | N/A      | 71.06           | 110.24         | 39.18       |
|         |                        | SU   | NA | 11 509.74   | H       | X                   | PK            | 45.90          | 9.53      | N/A      | 55.43           | 74.00          | 18.57       |
|         |                        | SU   | NA | 11 508.85   | H       | X                   | AV            | 34.42          | 9.53      | N/A      | 43.95           | 54.00          | 10.05       |
|         | 5 795                  | 26   | 17 | 5 878.16    | H       | X                   | PK            | 51.24          | 4.23      | N/A      | 55.47           | 102.86         | 47.39       |
|         |                        | 26   | 17 | 5 944.63    | H       | X                   | PK            | 51.84          | 4.76      | N/A      | 56.60           | 68.20          | 11.60       |
|         |                        | 26   | 8  | 11 588.65   | H       | X                   | PK            | 44.98          | 9.49      | N/A      | 54.47           | 74.00          | 19.53       |
|         |                        | 26   | 8  | 11 588.02   | H       | X                   | AV            | 32.97          | 9.49      | N/A      | 42.46           | 54.00          | 11.54       |
|         |                        | 484  | 65 | 5 883.76    | H       | X                   | PK            | 51.51          | 4.29      | N/A      | 55.80           | 98.72          | 42.92       |
|         |                        | 484  | 65 | 5 926.47    | H       | X                   | PK            | 50.24          | 4.66      | N/A      | 54.90           | 68.20          | 13.30       |
|         |                        | SU   | NA | 5 905.12    | H       | X                   | PK            | 51.35          | 4.51      | N/A      | 55.86           | 82.91          | 27.05       |
|         |                        | SU   | NA | 5 927.35    | H       | X                   | PK            | 50.38          | 4.66      | N/A      | 55.04           | 68.20          | 13.16       |
|         |                        | SU   | NA | 11 588.69   | H       | X                   | PK            | 44.05          | 9.49      | N/A      | 53.54           | 74.00          | 20.46       |
|         |                        | SU   | NA | 11 589.01   | H       | X                   | AV            | 33.53          | 9.50      | N/A      | 43.03           | 54.00          | 10.97       |

**Radiated Spurious Emissions data(9 kHz ~ 40 GHz) : MIMO(CDD) & 802.11ax(HE80)**

| Band     | Tested Frequency (MHz) | Tone | RU | Freq. (MHz) | ANT Pol | EUT Position (Axis) | Detector Mode | Reading (dBuV) | TF (dB/m) | DCF (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|----------|------------------------|------|----|-------------|---------|---------------------|---------------|----------------|-----------|----------|-----------------|----------------|-------------|
| U-NII 1  | 5 210                  | 26   | 0  | 5 149.52    | H       | X                   | PK            | 50.93          | 3.39      | N/A      | 54.32           | 74.00          | 19.68       |
|          |                        | 26   | 0  | 5 149.27    | H       | X                   | AV            | 38.98          | 3.39      | N/A      | 42.37           | 54.00          | 11.63       |
|          |                        | 26   | 18 | 10 419.56   | H       | X                   | PK            | 43.09          | 10.68     | N/A      | 53.77           | 68.20          | 14.43       |
|          |                        | 996  | 67 | 5 146.99    | H       | X                   | PK            | 54.24          | 3.38      | N/A      | 57.62           | 74.00          | 16.38       |
|          |                        | 996  | 67 | 5 146.68    | H       | X                   | AV            | 44.27          | 3.37      | N/A      | 47.64           | 54.00          | 6.36        |
|          |                        | SU   | NA | 5 148.78    | H       | X                   | PK            | 56.15          | 3.38      | N/A      | 59.53           | 74.00          | 14.47       |
|          |                        | SU   | NA | 5 149.13    | H       | X                   | AV            | 45.28          | 3.39      | N/A      | 48.67           | 54.00          | 5.33        |
| U-NII 2A | 5 290                  | SU   | NA | 10 420.57   | H       | X                   | PK            | 43.31          | 10.69     | N/A      | 54.00           | 68.20          | 14.20       |
|          |                        | 26   | 36 | 5 350.52    | H       | X                   | PK            | 50.78          | 3.82      | N/A      | 54.60           | 74.00          | 19.40       |
|          |                        | 26   | 36 | 5 350.32    | H       | X                   | AV            | 40.24          | 3.82      | N/A      | 44.06           | 54.00          | 9.94        |
|          |                        | 26   | 36 | 10 654.38   | H       | X                   | PK            | 45.36          | 11.44     | N/A      | 56.80           | 74.00          | 17.20       |
|          |                        | 26   | 36 | 10 653.17   | H       | X                   | AV            | 32.29          | 11.44     | N/A      | 43.73           | 54.00          | 10.27       |
|          |                        | 996  | 67 | 5 350.07    | H       | X                   | PK            | 54.78          | 3.82      | N/A      | 58.60           | 74.00          | 15.40       |
|          |                        | 996  | 67 | 5 350.78    | H       | X                   | AV            | 44.74          | 3.82      | N/A      | 48.56           | 54.00          | 5.44        |
| U-NII 2C | 5 530                  | SU   | NA | 5 351.34    | H       | X                   | PK            | 55.28          | 3.82      | N/A      | 59.10           | 74.00          | 14.90       |
|          |                        | SU   | NA | 5 350.92    | H       | X                   | AV            | 45.53          | 3.82      | N/A      | 49.35           | 54.00          | 4.65        |
|          |                        | SU   | NA | 10 579.62   | H       | X                   | PK            | 43.72          | 11.38     | N/A      | 55.10           | 68.20          | 13.10       |
|          |                        | 26   | 0  | 5 448.30    | H       | X                   | PK            | 52.87          | 3.78      | N/A      | 56.65           | 74.00          | 17.35       |
|          |                        | 26   | 0  | 5 448.90    | H       | X                   | AV            | 43.66          | 3.78      | N/A      | 47.44           | 54.00          | 6.56        |
|          |                        | 26   | 0  | 5 468.52    | H       | X                   | PK            | 51.82          | 3.73      | N/A      | 55.55           | 68.20          | 12.65       |
|          |                        | 26   | 18 | 11 058.45   | H       | X                   | PK            | 43.89          | 11.20     | N/A      | 55.09           | 74.00          | 18.91       |
|          |                        | 26   | 18 | 11 058.50   | H       | X                   | AV            | 32.65          | 11.20     | N/A      | 43.85           | 54.00          | 10.15       |
|          |                        | 996  | 67 | 5 458.93    | H       | X                   | PK            | 56.32          | 3.76      | N/A      | 60.08           | 74.00          | 13.92       |
|          |                        | 996  | 67 | 5 459.33    | H       | X                   | AV            | 45.12          | 3.76      | N/A      | 48.88           | 54.00          | 5.12        |
|          |                        | 996  | 67 | 5 469.79    | H       | X                   | PK            | 58.86          | 3.73      | N/A      | 62.59           | 68.20          | 5.61        |
|          |                        | SU   | NA | 5 458.32    | H       | X                   | PK            | 55.92          | 3.76      | N/A      | 59.68           | 74.00          | 14.32       |
|          |                        | SU   | NA | 5 459.00    | H       | X                   | AV            | 46.04          | 3.76      | N/A      | 49.80           | 54.00          | 4.20        |
|          | 5 690                  | SU   | NA | 5 467.05    | H       | X                   | PK            | 58.70          | 3.74      | N/A      | 62.44           | 68.20          | 5.76        |
|          |                        | SU   | NA | 11 059.71   | H       | X                   | PK            | 44.34          | 11.20     | N/A      | 55.54           | 74.00          | 18.46       |
|          |                        | SU   | NA | 11 059.81   | H       | X                   | AV            | 33.58          | 11.20     | N/A      | 44.78           | 54.00          | 9.22        |
|          |                        | 26   | 18 | 11 379.26   | H       | X                   | PK            | 42.93          | 9.93      | N/A      | 52.86           | 74.00          | 21.14       |
|          |                        | 26   | 18 | 11 379.73   | H       | X                   | AV            | 32.10          | 9.93      | N/A      | 42.03           | 54.00          | 11.97       |
|          |                        | SU   | NA | 11 380.61   | H       | X                   | PK            | 44.23          | 9.93      | N/A      | 54.16           | 74.00          | 19.84       |
|          |                        | SU   | NA | 11 380.95   | H       | X                   | AV            | 33.59          | 9.93      | N/A      | 43.52           | 54.00          | 10.48       |