

3S4T TxBF

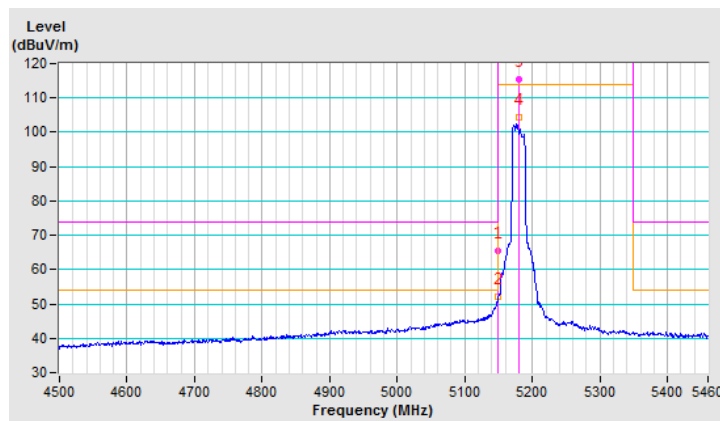
802.11ax (HE20)

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 36 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | 5150.00     | 65.3 PK                 | 74.0           | -8.7        | 2.29 H             | 296                  | 61.6             | 3.7                      |
| 2   | 5150.00     | 52.0 AV                 | 54.0           | -2.0        | 2.29 H             | 296                  | 48.3             | 3.7                      |
| 3   | *5180.00    | 115.3 PK                |                |             | 2.29 H             | 296                  | 111.7            | 3.6                      |
| 4   | *5180.00    | 104.3 AV                |                |             | 2.29 H             | 296                  | 100.7            | 3.6                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



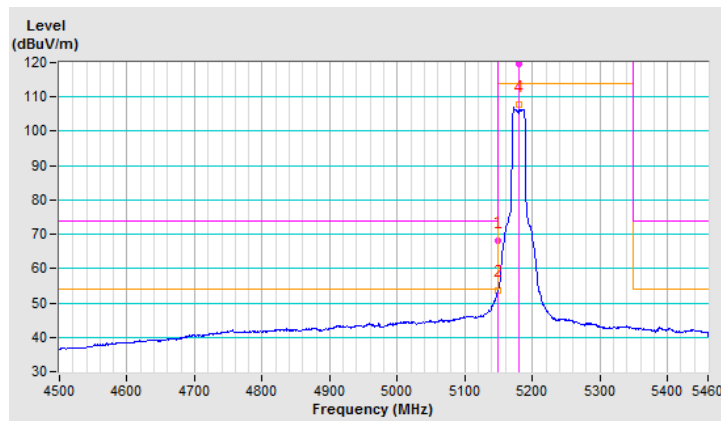
|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 36 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | 5150.00        | 68.0 PK                       | 74.0              | -6.0           | 1.63 V                   | 6                          | 64.3                   | 3.7                            |
| 2   | 5150.00        | 53.8 AV                       | 54.0              | -0.2           | 1.63 V                   | 6                          | 50.1                   | 3.7                            |
| 3   | *5180.00       | 119.5 PK                      |                   |                | 1.63 V                   | 6                          | 115.9                  | 3.6                            |
| 4   | *5180.00       | 107.7 AV                      |                   |                | 1.63 V                   | 6                          | 104.1                  | 3.6                            |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

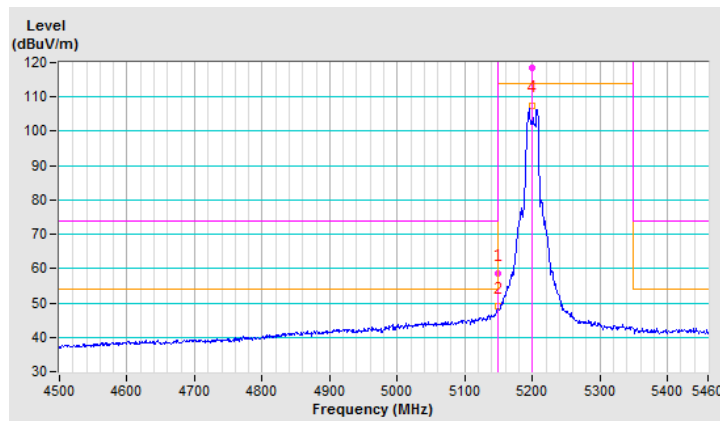


|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | 5150.00     | 58.7 PK                 | 74.0           | -15.3       | 2.27 H             | 303                  | 55.0             | 3.7                      |
| 2   | 5150.00     | 48.9 AV                 | 54.0           | -5.1        | 2.27 H             | 303                  | 45.2             | 3.7                      |
| 3   | *5200.00    | 118.4 PK                |                |             | 2.27 H             | 303                  | 114.9            | 3.5                      |
| 4   | *5200.00    | 107.6 AV                |                |             | 2.27 H             | 303                  | 104.1            | 3.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

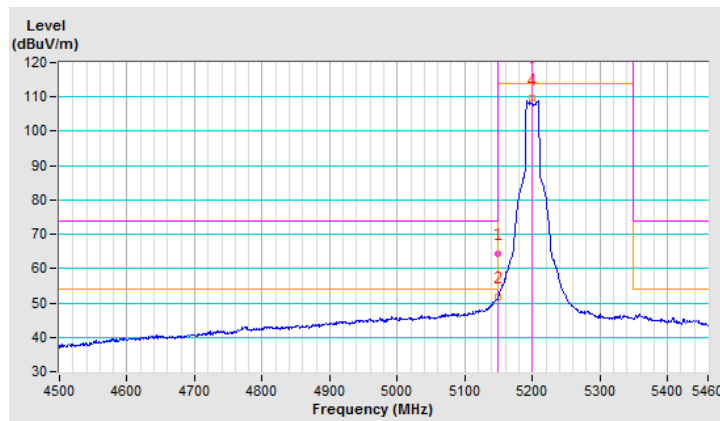


|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | 5150.00     | 64.5 PK                 | 74.0           | -9.5        | 1.63 V             | 350                  | 60.8             | 3.7                      |
| 2   | 5150.00     | 51.9 AV                 | 54.0           | -2.1        | 1.63 V             | 350                  | 48.2             | 3.7                      |
| 3   | *5200.00    | 120.8 PK                |                |             | 1.63 V             | 350                  | 117.3            | 3.5                      |
| 4   | *5200.00    | 109.6 AV                |                |             | 1.63 V             | 350                  | 106.1            | 3.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

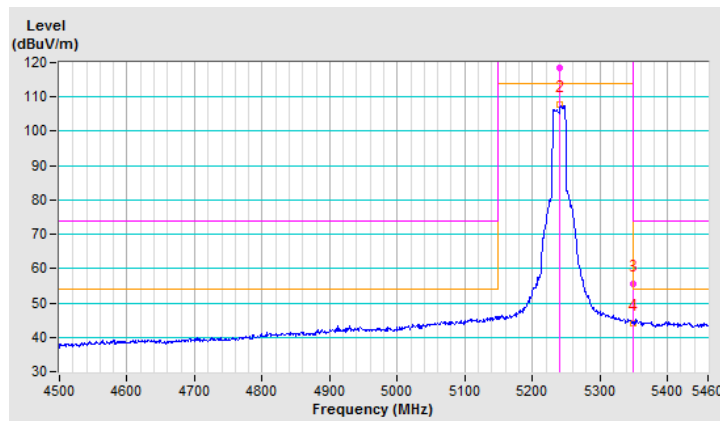


|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | *5240.00    | 118.3 PK                |                |             | 1.87 H             | 294                  | 114.8            | 3.5                      |
| 2   | *5240.00    | 107.8 AV                |                |             | 1.87 H             | 294                  | 104.3            | 3.5                      |
| 3   | 5350.00     | 55.4 PK                 | 74.0           | -18.6       | 1.87 H             | 294                  | 52.0             | 3.4                      |
| 4   | 5350.00     | 44.2 AV                 | 54.0           | -9.8        | 1.87 H             | 294                  | 40.8             | 3.4                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



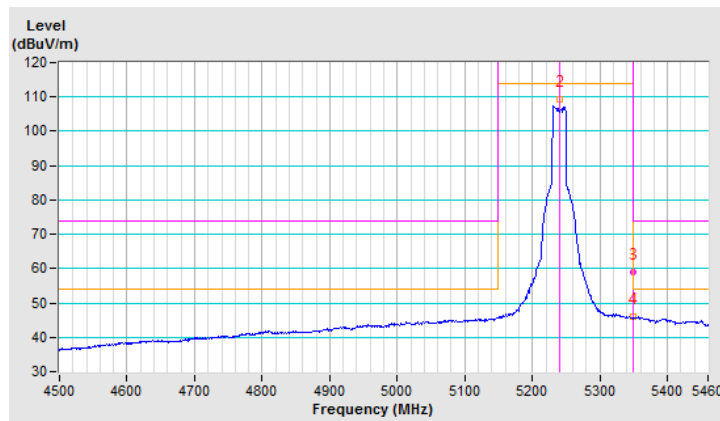
|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | *5240.00       | 121.5 PK                      |                   |                | 1.63 V                   | 353                        | 118.0                  | 3.5                            |
| 2   | *5240.00       | 109.3 AV                      |                   |                | 1.63 V                   | 353                        | 105.8                  | 3.5                            |
| 3   | 5350.00        | 58.8 PK                       | 74.0              | -15.2          | 1.63 V                   | 353                        | 55.4                   | 3.4                            |
| 4   | 5350.00        | 45.9 AV                       | 54.0              | -8.1           | 1.63 V                   | 353                        | 42.5                   | 3.4                            |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



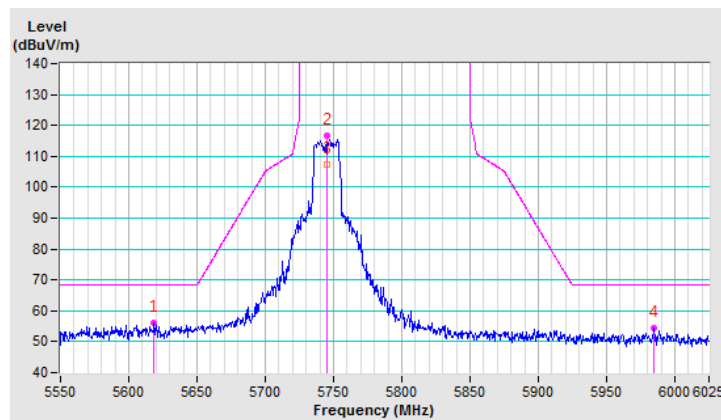
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|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5618.59    | 56.1 PK                 | 68.2           | -12.1       | 2.39 H             | 294                  | 52.3             | 3.8                      |
| 2   | *5745.00    | 116.9 PK                |                |             | 2.39 H             | 294                  | 112.9            | 4.0                      |
| 3   | *5745.00    | 107.5 AV                |                |             | 2.39 H             | 294                  | 103.5            | 4.0                      |
| 4   | #5984.67    | 54.4 PK                 | 68.2           | -13.8       | 2.39 H             | 294                  | 49.6             | 4.8                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



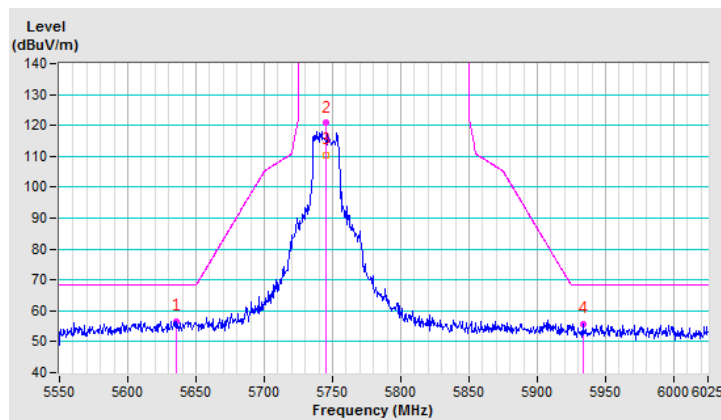
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5635.83    | 56.7 PK                 | 68.2           | -11.5       | 1.61 V             | 360                  | 52.9             | 3.8                      |
| 2   | *5745.00    | 120.8 PK                |                |             | 1.61 V             | 360                  | 116.8            | 4.0                      |
| 3   | *5745.00    | 110.5 AV                |                |             | 1.61 V             | 360                  | 106.5            | 4.0                      |
| 4   | #5933.25    | 55.8 PK                 | 68.2           | -12.4       | 1.61 V             | 360                  | 51.3             | 4.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.





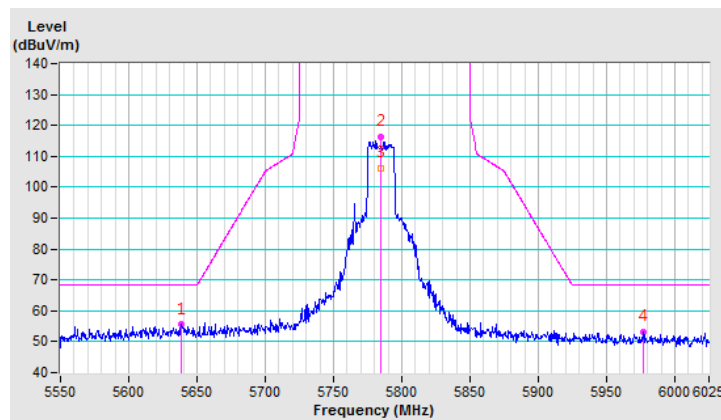
|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #5638.69       | 55.5 PK                       | 68.2              | -12.7          | 2.33 H                   | 297                        | 51.7                   | 3.8                            |
| 2   | *5785.00       | 116.4 PK                      |                   |                | 2.33 H                   | 297                        | 112.3                  | 4.1                            |
| 3   | *5785.00       | 106.3 AV                      |                   |                | 2.33 H                   | 297                        | 102.2                  | 4.1                            |
| 4   | #5976.51       | 53.1 PK                       | 68.2              | -15.1          | 2.33 H                   | 297                        | 48.4                   | 4.7                            |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



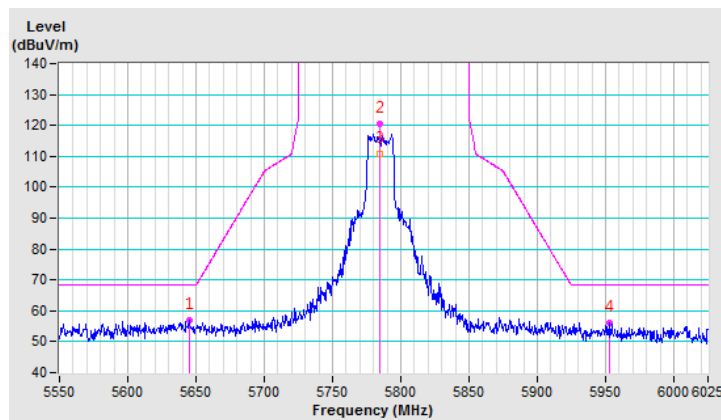
|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #5644.81       | 57.0 PK                       | 68.2              | -11.2          | 1.61 V                   | 11                         | 53.1                   | 3.9                            |
| 2   | *5785.00       | 120.5 PK                      |                   |                | 1.61 V                   | 11                         | 116.4                  | 4.1                            |
| 3   | *5785.00       | 110.8 AV                      |                   |                | 1.61 V                   | 11                         | 106.7                  | 4.1                            |
| 4   | #5952.51       | 56.3 PK                       | 68.2              | -11.9          | 1.61 V                   | 11                         | 51.7                   | 4.6                            |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



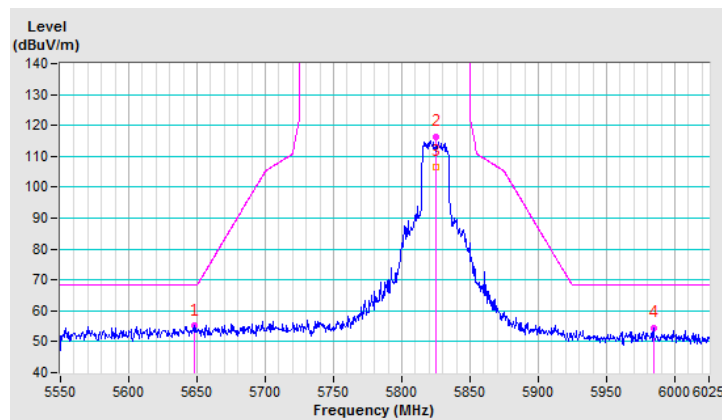
|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #5648.03       | 55.1 PK                       | 68.2              | -13.1          | 2.36 H                   | 300                        | 51.1                   | 4.0                            |
| 2   | *5825.00       | 116.2 PK                      |                   |                | 2.36 H                   | 300                        | 111.9                  | 4.3                            |
| 3   | *5825.00       | 106.4 AV                      |                   |                | 2.36 H                   | 300                        | 102.1                  | 4.3                            |
| 4   | #5984.28       | 54.5 PK                       | 68.2              | -13.7          | 2.36 H                   | 300                        | 49.7                   | 4.8                            |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



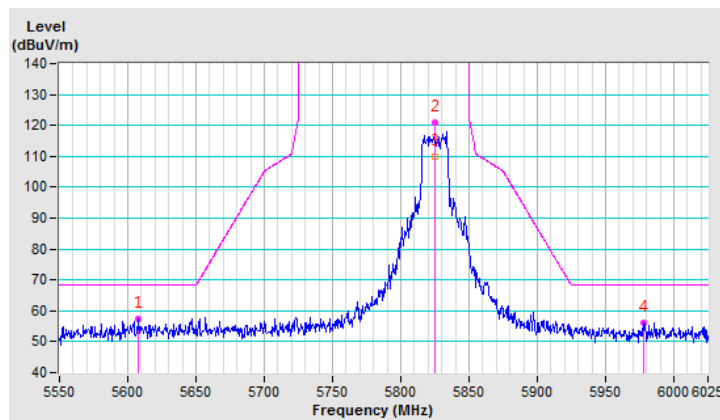
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5607.38    | 57.5 PK                 | 68.2           | -10.7       | 1.63 V             | 10                   | 53.8             | 3.7                      |
| 2   | *5825.00    | 121.1 PK                |                |             | 1.63 V             | 10                   | 116.8            | 4.3                      |
| 3   | *5825.00    | 109.8 AV                |                |             | 1.63 V             | 10                   | 105.5            | 4.3                      |
| 4   | #5977.91    | 56.1 PK                 | 68.2           | -12.1       | 1.63 V             | 10                   | 51.4             | 4.7                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



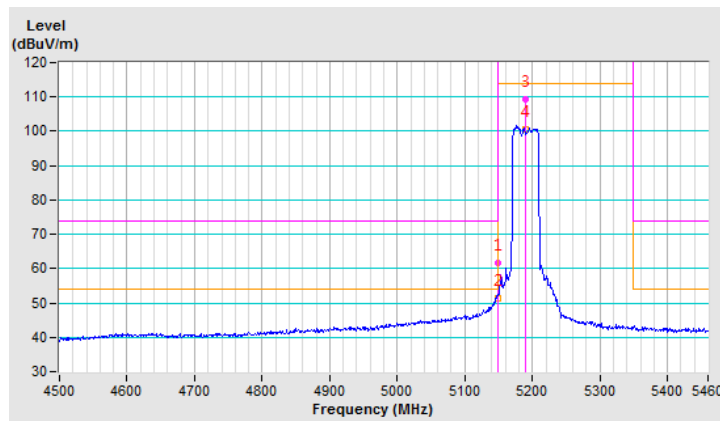
802.11ax (HE40)

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 38 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | 5150.00     | 61.7 PK                 | 74.0           | -12.3       | 2.33 H             | 294                  | 58.0             | 3.7                      |
| 2   | 5150.00     | 51.4 AV                 | 54.0           | -2.6        | 2.33 H             | 294                  | 47.7             | 3.7                      |
| 3   | *5190.00    | 109.3 PK                |                |             | 2.33 H             | 294                  | 105.7            | 3.6                      |
| 4   | *5190.00    | 100.4 AV                |                |             | 2.33 H             | 294                  | 96.8             | 3.6                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



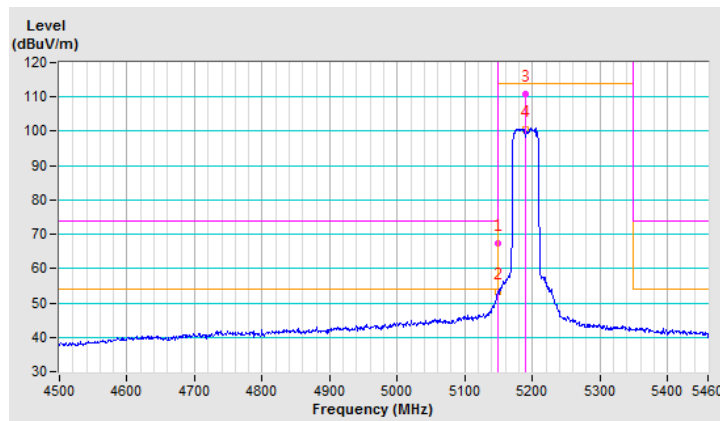
|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 38 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | 5150.00     | 67.4 PK                 | 74.0           | -6.6        | 1.46 V             | 7                    | 63.7             | 3.7                      |
| 2   | 5150.00     | 53.2 AV                 | 54.0           | -0.8        | 1.46 V             | 7                    | 49.5             | 3.7                      |
| 3   | *5190.00    | 110.9 PK                |                |             | 1.46 V             | 7                    | 107.3            | 3.6                      |
| 4   | *5190.00    | 100.5 AV                |                |             | 1.46 V             | 7                    | 96.9             | 3.6                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



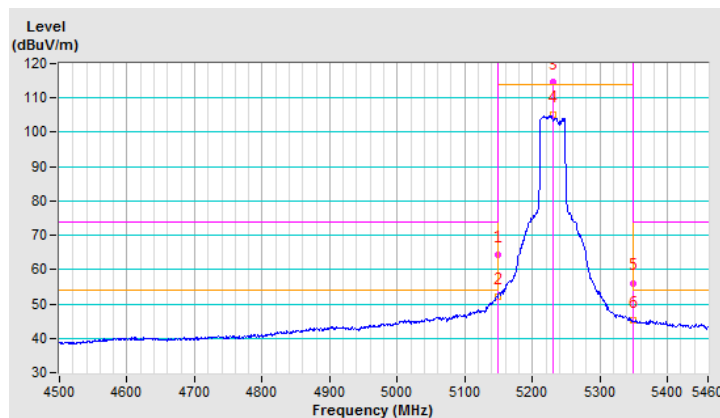
|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | 5150.00     | 64.2 PK                 | 74.0           | -9.8        | 2.34 H             | 298                  | 60.5             | 3.7                      |
| 2   | 5150.00     | 52.2 AV                 | 54.0           | -1.8        | 2.34 H             | 298                  | 48.5             | 3.7                      |
| 3   | *5230.00    | 114.7 PK                |                |             | 2.34 H             | 298                  | 111.2            | 3.5                      |
| 4   | *5230.00    | 105.2 AV                |                |             | 2.34 H             | 298                  | 101.7            | 3.5                      |
| 5   | 5350.00     | 56.1 PK                 | 74.0           | -17.9       | 2.34 H             | 298                  | 52.7             | 3.4                      |
| 6   | 5350.00     | 45.4 AV                 | 54.0           | -8.6        | 2.34 H             | 298                  | 42.0             | 3.4                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



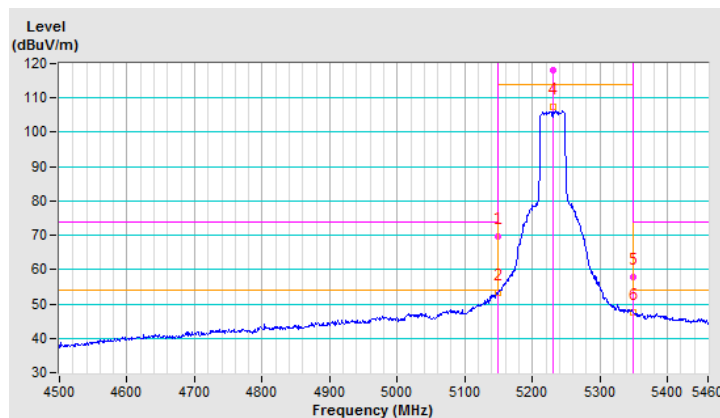
|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | 5150.00     | 69.6 PK                 | 74.0           | -4.4        | 1.28 V             | 360                  | 65.9             | 3.7                      |
| 2   | 5150.00     | 53.4 AV                 | 54.0           | -0.6        | 1.28 V             | 360                  | 49.7             | 3.7                      |
| 3   | *5230.00    | 118.0 PK                |                |             | 1.28 V             | 360                  | 114.5            | 3.5                      |
| 4   | *5230.00    | 107.4 AV                |                |             | 1.28 V             | 360                  | 103.9            | 3.5                      |
| 5   | 5350.00     | 57.9 PK                 | 74.0           | -16.1       | 1.28 V             | 360                  | 54.5             | 3.4                      |
| 6   | 5350.00     | 47.5 AV                 | 54.0           | -6.5        | 1.28 V             | 360                  | 44.1             | 3.4                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.





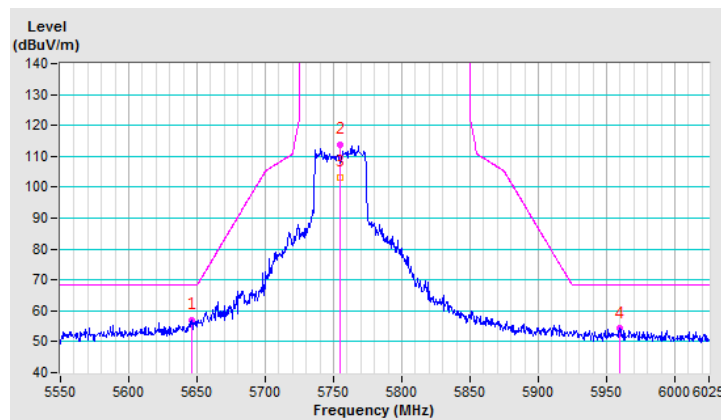
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5646.01    | 56.9 PK                 | 68.2           | -11.3       | 2.34 H             | 322                  | 53.0             | 3.9                      |
| 2   | *5755.00    | 113.9 PK                |                |             | 2.34 H             | 322                  | 109.9            | 4.0                      |
| 3   | *5755.00    | 103.2 AV                |                |             | 2.34 H             | 322                  | 99.2             | 4.0                      |
| 4   | #5959.58    | 54.2 PK                 | 68.2           | -14.0       | 2.34 H             | 322                  | 49.6             | 4.6                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



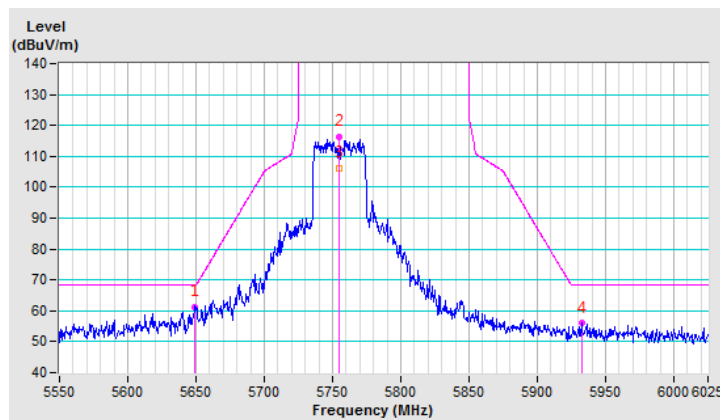
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5649.43    | 61.1 PK                 | 68.2           | -7.1        | 1.34 V             | 342                  | 57.1             | 4.0                      |
| 2   | *5755.00    | 116.2 PK                |                |             | 1.34 V             | 342                  | 112.2            | 4.0                      |
| 3   | *5755.00    | 106.2 AV                |                |             | 1.34 V             | 342                  | 102.2            | 4.0                      |
| 4   | #5932.73    | 55.9 PK                 | 68.2           | -12.3       | 1.34 V             | 342                  | 51.4             | 4.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

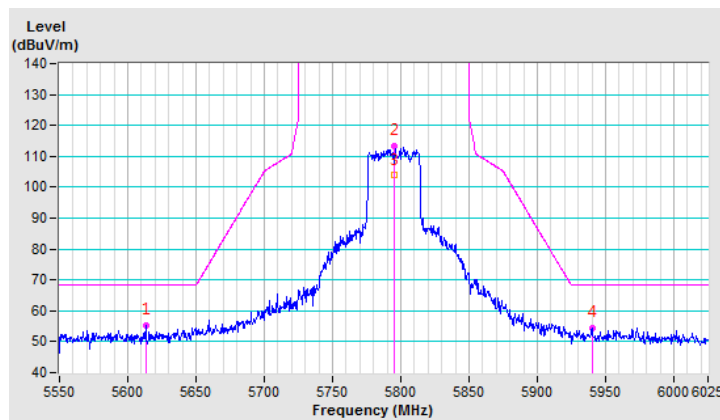


|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |             |                         |                |             |                    |                      |                  |                          |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO.   | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1   | #5613.52    | 55.2 PK                 | 68.2           | -13.0       | 2.30 H             | 323                  | 51.4             | 3.8                      |
| 2   | *5795.00    | 113.3 PK                |                |             | 2.30 H             | 323                  | 109.1            | 4.2                      |
| 3   | *5795.00    | 103.8 AV                |                |             | 2.30 H             | 323                  | 99.6             | 4.2                      |
| 4   | #5940.01    | 54.6 PK                 | 68.2           | -13.6       | 2.30 H             | 323                  | 49.9             | 4.7                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



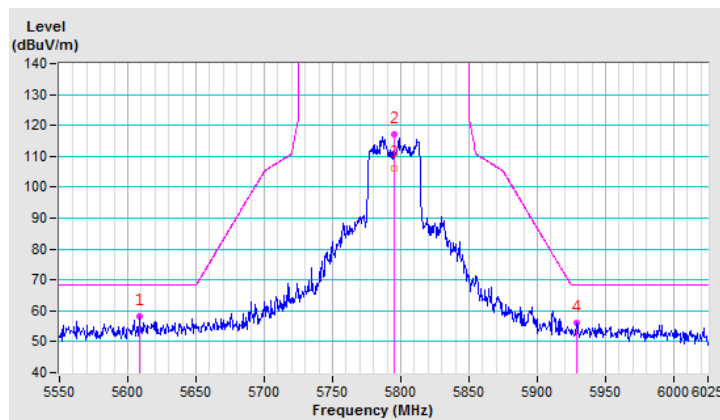
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5608.33    | 58.1 PK                 | 68.2           | -10.1       | 1.29 V             | 343                  | 54.4             | 3.7                      |
| 2   | *5795.00    | 117.0 PK                |                |             | 1.29 V             | 343                  | 112.8            | 4.2                      |
| 3   | *5795.00    | 106.2 AV                |                |             | 1.29 V             | 343                  | 102.0            | 4.2                      |
| 4   | #5928.69    | 56.1 PK                 | 68.2           | -12.1       | 1.29 V             | 343                  | 51.6             | 4.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



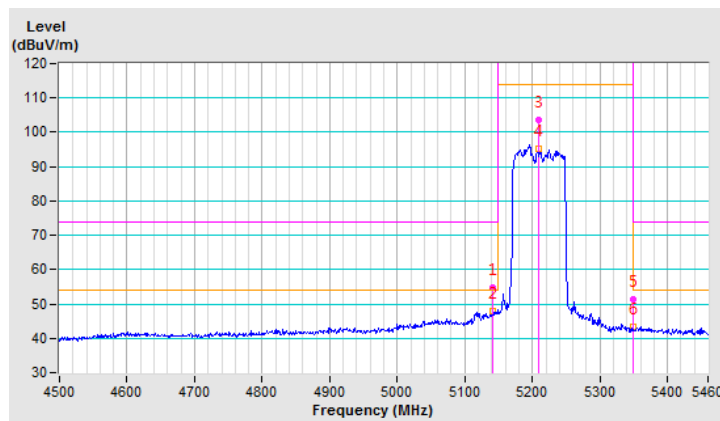
### 802.11ax (HE80)

|                        |               |                              |              |
|------------------------|---------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 42 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                |                               |                   |                |                          |                            |                        |                                |
|---|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| NO.   | FREQ.<br>(MHz) | EMISSION<br>LEVEL<br>(dBuV/m) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>HEIGHT<br>(m) | TABLE<br>ANGLE<br>(Degree) | RAW<br>VALUE<br>(dBuV) | CORRECTION<br>FACTOR<br>(dB/m) |
| 1   | 5141.10        | 54.7 PK                       | 74.0              | -19.3          | 2.37 H                   | 300                        | 51.0                   | 3.7                            |
| 2   | 5141.10        | 47.9 AV                       | 54.0              | -6.1           | 2.37 H                   | 300                        | 44.2                   | 3.7                            |
| 3   | *5210.00       | 103.5 PK                      |                   |                | 2.37 H                   | 300                        | 99.9                   | 3.6                            |
| 4   | *5210.00       | 95.3 AV                       |                   |                | 2.37 H                   | 300                        | 91.7                   | 3.6                            |
| 5   | 5350.00        | 51.5 PK                       | 74.0              | -22.5          | 2.37 H                   | 300                        | 48.1                   | 3.4                            |
| 6   | 5350.00        | 43.3 AV                       | 54.0              | -10.7          | 2.37 H                   | 300                        | 39.9                   | 3.4                            |

#### REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



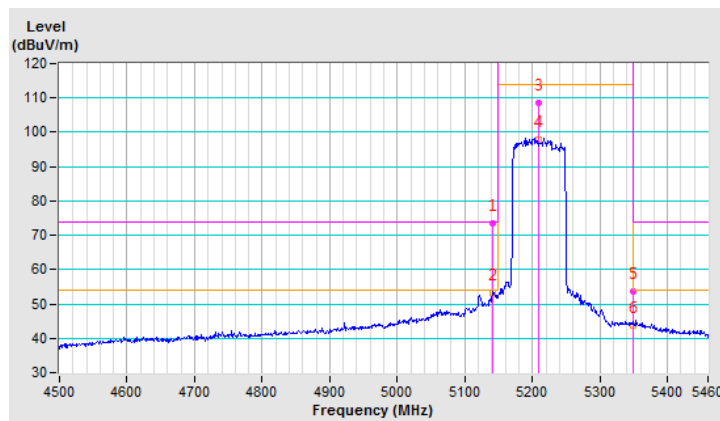
|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 42 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | 5141.10     | 73.6 PK                 | 74.0           | -0.4        | 1.43 V             | 359                  | 70.6             | 3.0                      |
| 2   | 5141.10     | 53.2 AV                 | 54.0           | -0.8        | 1.43 V             | 359                  | 50.2             | 3.0                      |
| 3   | *5210.00    | 108.6 PK                |                |             | 1.43 V             | 359                  | 105.9            | 2.7                      |
| 4   | *5210.00    | 97.8 AV                 |                |             | 1.43 V             | 359                  | 95.1             | 2.7                      |
| 5   | 5350.00     | 53.5 PK                 | 74.0           | -20.5       | 1.43 V             | 359                  | 50.9             | 2.6                      |
| 6   | 5350.00     | 43.7 AV                 | 54.0           | -10.3       | 1.43 V             | 359                  | 41.1             | 2.6                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



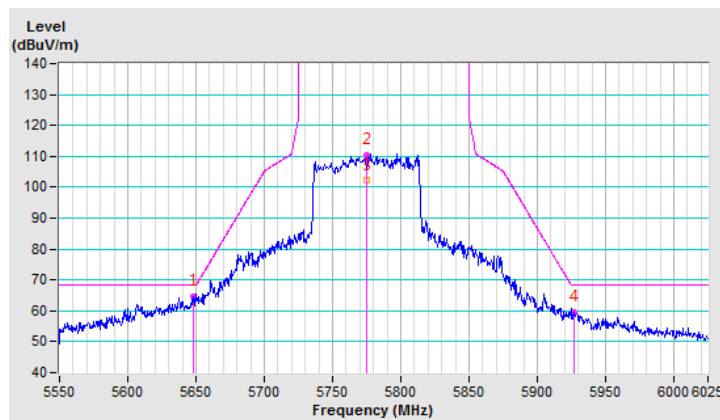
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 155 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5648.21    | 64.6 PK                 | 68.2           | -3.6        | 2.40 H             | 323                  | 60.6             | 4.0                      |
| 2   | *5775.00    | 110.4 PK                |                |             | 2.40 H             | 323                  | 106.3            | 4.1                      |
| 3   | *5775.00    | 102.1 AV                |                |             | 2.40 H             | 323                  | 98.0             | 4.1                      |
| 4   | #5927.08    | 59.7 PK                 | 68.2           | -8.5        | 2.40 H             | 323                  | 55.2             | 4.5                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



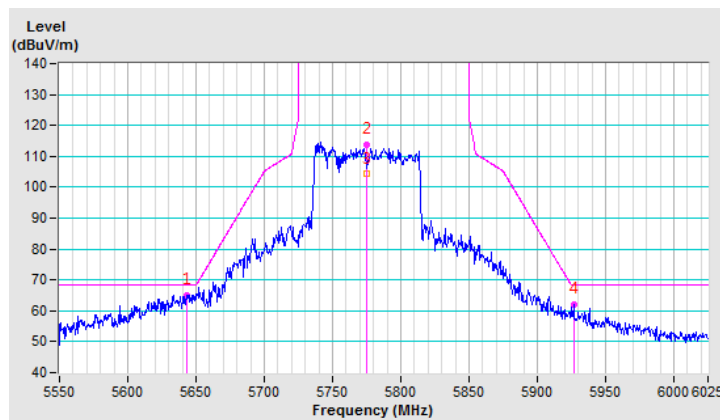
|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 155 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1   | #5643.21    | 65.2 PK                 | 68.2           | -3.0        | 1.11 V             | 358                  | 62.1             | 3.1                      |
| 2   | *5775.00    | 113.8 PK                |                |             | 1.11 V             | 358                  | 110.4            | 3.4                      |
| 3   | *5775.00    | 104.2 AV                |                |             | 1.11 V             | 358                  | 100.8            | 3.4                      |
| 4   | #5926.52    | 62.1 PK                 | 68.2           | -6.1        | 1.11 V             | 358                  | 58.2             | 3.9                      |

**REMARKS:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.





## 4.7 Frequency Stability Measurement

### 4.7.1 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or  $\pm 20$ ppm (IEEE 802.11ax specification).

### 4.7.2 Measuring Instruments and Setting

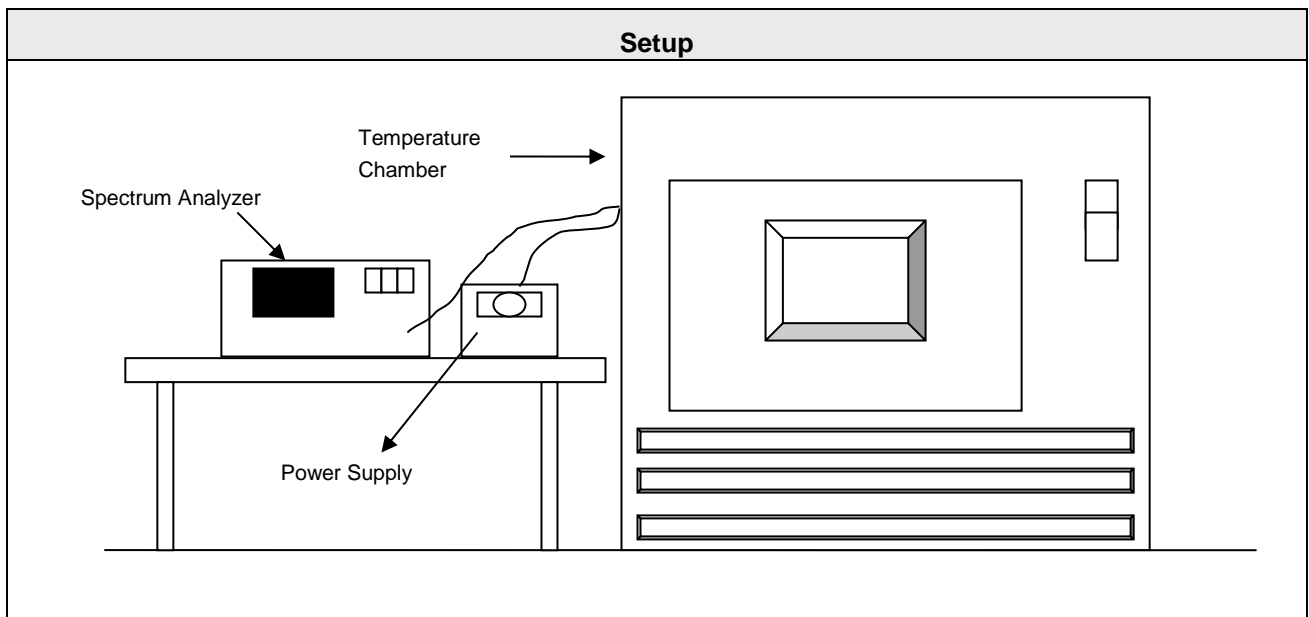
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer and receiver.

| Spectrum Parameter | Setting  |
|--------------------|--|
| Attenuation        | Auto   |
| Span Frequency     | Entire absence of modulation emissions bandwidth |
| RBW                | 10 kHz   |
| VBW                | 10 kHz   |
| Sweep Time         | Auto   |

### 4.7.3 Test Procedure

- 1 The EUT was placed inside the environmental test chamber and powered by nominal voltage.
- 2 The EUT was programmed to be in continuously un-modulation transmitting mode.
- 3 Set the spectrum analyzer span to view the entire un-modulation emissions bandwidth.
- 4 Turn the EUT on and couple its output to a spectrum analyzer.
- 5 Turn the EUT off and set the chamber to the highest temperature specified.
- 6 Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- 7 Extreme temperature rule is  $-30^{\circ}\text{C}$ ~ $50^{\circ}\text{C}$ .
- 8 Repeat step 4 and 5 with the temperature chamber set to the lowest temperature.
- 9 The test chamber was allowed to stabilize at  $+20$  degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

#### 4.7.4 Test Setup Layout



#### 4.7.5 Test Deviation

There are no deviations with the original standard.

#### 4.7.6 EUT Operating Conditions

The EUT was programmed to be in continuously un-modulation transmitting mode.

#### 4.7.7 Test Results

|               |               |          |     |
|---------------|---------------|----------|-----|
| Temperature   | 25°C          | Humidity | 60% |
| Test Engineer | Anderson Chen |          |     |

| Frequency Stability Versus Temp.   |                    |                          |            |                          |            |                          |            |                          |            |
|------------------------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
| Operating Frequency: 5180 MHz Ant1 |                    |                          |            |                          |            |                          |            |                          |            |
| TEMP. (°C)                         | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|                                    |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                                 | 120                | 5180.0169                | PASS       | 5180.0155                | PASS       | 5180.0138                | PASS       | 5180.0167                | PASS       |
| 40                                 | 120                | 5180.0192                | PASS       | 5180.0189                | PASS       | 5180.0222                | PASS       | 5180.0177                | PASS       |
| 30                                 | 120                | 5179.9794                | PASS       | 5179.9772                | PASS       | 5179.9772                | PASS       | 5179.9796                | PASS       |
| 20                                 | 120                | 5180.0077                | PASS       | 5180.0057                | PASS       | 5180.0031                | PASS       | 5180.0051                | PASS       |
| 10                                 | 120                | 5180.0131                | PASS       | 5180.0137                | PASS       | 5180.0143                | PASS       | 5180.0117                | PASS       |
| 0                                  | 120                | 5180.0166                | PASS       | 5180.0189                | PASS       | 5180.0188                | PASS       | 5180.021                 | PASS       |
| -10                                | 120                | 5179.9861                | PASS       | 5179.9862                | PASS       | 5179.9898                | PASS       | 5179.9864                | PASS       |
| -20                                | 120                | 5180.0195                | PASS       | 5180.0203                | PASS       | 5180.0223                | PASS       | 5180.0235                | PASS       |
| -30                                | 120                | 5179.9816                | PASS       | 5179.9845                | PASS       | 5179.9814                | PASS       | 5179.985                 | PASS       |
| Max. Deviation (ppm)               |                    | -3.976834                | PASS       | -4.401544                | PASS       | -4.401544                | PASS       | -3.938224                | PASS       |
| IEEE Limit (ppm)                   |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

| Frequency Stability Versus Voltage |                    |                          |            |                          |            |                          |            |                          |            |
|------------------------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
| Operating Frequency: 5180 MHz Ant1 |                    |                          |            |                          |            |                          |            |                          |            |
| TEMP. (°C)                         | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|                                    |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                                 | 138                | 5180.0257                | PASS       | 5180.024                 | PASS       | 5180.0229                | PASS       | 5180.0231                | PASS       |
|                                    | 120                | 5180.0251                | PASS       | 5180.024                 | PASS       | 5180.0237                | PASS       | 5180.0236                | PASS       |
|                                    | 102                | 5180.0255                | PASS       | 5180.0233                | PASS       | 5180.0246                | PASS       | 5180.0246                | PASS       |
| Max. Deviation (ppm)               |                    | 4.961390                 | PASS       | 4.633205                 | PASS       | 4.749035                 | PASS       | 4.749035                 | PASS       |
| IEEE Limit (ppm)                   |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5180 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5179.9886                | PASS       | 5179.9899                | PASS       | 5179.9892                | PASS       | 5179.9906                | PASS       |
| 40                   | 120                | 5179.9811                | PASS       | 5179.9828                | PASS       | 5179.9831                | PASS       | 5179.9813                | PASS       |
| 30                   | 120                | 5180.0246                | PASS       | 5180.024                 | PASS       | 5180.0209                | PASS       | 5180.0257                | PASS       |
| 20                   | 120                | 5179.9897                | PASS       | 5179.9861                | PASS       | 5179.9877                | PASS       | 5179.9871                | PASS       |
| 10                   | 120                | 5180.0136                | PASS       | 5180.0135                | PASS       | 5180.0144                | PASS       | 5180.013                 | PASS       |
| 0                    | 120                | 5180.0021                | PASS       | 5180.0035                | PASS       | 5180.0069                | PASS       | 5180.0051                | PASS       |
| -10                  | 120                | 5179.9744                | PASS       | 5179.9778                | PASS       | 5179.9749                | PASS       | 5179.9779                | PASS       |
| -20                  | 120                | 5179.98                  | PASS       | 5179.9781                | PASS       | 5179.9779                | PASS       | 5179.9777                | PASS       |
| -30                  | 120                | 5180.017                 | PASS       | 5180.02                  | PASS       | 5180.0168                | PASS       | 5180.0179                | PASS       |
| Max. Deviation (ppm) |                    | -4.942085                | PASS       | 4.633205                 | PASS       | -4.845560                | PASS       | 4.961390                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5180 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5179.9904                | PASS       | 5179.9865                | PASS       | 5179.987                 | PASS       | 5179.987                 | PASS       |
|                      | 120                | 5179.9897                | PASS       | 5179.9861                | PASS       | 5179.9877                | PASS       | 5179.9871                | PASS       |
|                      | 102                | 5179.989                 | PASS       | 5179.986                 | PASS       | 5179.9873                | PASS       | 5179.988                 | PASS       |
| Max. Deviation (ppm) |                    | -2.123552                | PASS       | -2.702703                | PASS       | -2.509653                | PASS       | -2.509653                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5180 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5180.0142                | PASS       | 5180.0166                | PASS       | 5180.0144                | PASS       | 5180.0162                | PASS       |
| 40                   | 120                | 5180.015                 | PASS       | 5180.0131                | PASS       | 5180.0131                | PASS       | 5180.0162                | PASS       |
| 30                   | 120                | 5180.0034                | PASS       | 5180.0051                | PASS       | 5180.0053                | PASS       | 5180.0067                | PASS       |
| 20                   | 120                | 5180.0023                | PASS       | 5180.0019                | PASS       | 5180.0019                | PASS       | 5179.9989                | PASS       |
| 10                   | 120                | 5180.0051                | PASS       | 5180.007                 | PASS       | 5180.0035                | PASS       | 5180.0071                | PASS       |
| 0                    | 120                | 5180.0126                | PASS       | 5180.0129                | PASS       | 5180.0123                | PASS       | 5180.0086                | PASS       |
| -10                  | 120                | 5180.0156                | PASS       | 5180.0196                | PASS       | 5180.0191                | PASS       | 5180.0191                | PASS       |
| -20                  | 120                | 5179.9967                | PASS       | 5179.9962                | PASS       | 5179.998                 | PASS       | 5179.9955                | PASS       |
| -30                  | 120                | 5179.983                 | PASS       | 5179.9812                | PASS       | 5179.9832                | PASS       | 5179.9818                | PASS       |
| Max. Deviation (ppm) |                    | -3.281853                | PASS       | -3.629344                | PASS       | -3.243243                | PASS       | -3.513514                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5180 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5180.0025                | PASS       | 5180.0015                | PASS       | 5180.0025                | PASS       | 5179.999                 | PASS       |
|                      | 120                | 5180.0023                | PASS       | 5180.0019                | PASS       | 5180.0019                | PASS       | 5179.9989                | PASS       |
|                      | 102                | 5180.0015                | PASS       | 5180.0014                | PASS       | 5180.0023                | PASS       | 5179.9984                | PASS       |
| Max. Deviation (ppm) |                    | 0.482625                 | PASS       | 0.366795                 | PASS       | 0.482625                 | PASS       | -0.308880                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5180 MHz Ant4

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5179.9825                | PASS       | 5179.9838                | PASS       | 5179.9857                | PASS       | 5179.9842                | PASS       |
| 40                   | 120                | 5179.9886                | PASS       | 5179.9917                | PASS       | 5179.9903                | PASS       | 5179.9886                | PASS       |
| 30                   | 120                | 5179.994                 | PASS       | 5179.9964                | PASS       | 5179.996                 | PASS       | 5179.9959                | PASS       |
| 20                   | 120                | 5179.986                 | PASS       | 5179.9864                | PASS       | 5179.9881                | PASS       | 5179.9892                | PASS       |
| 10                   | 120                | 5180.0152                | PASS       | 5180.0138                | PASS       | 5180.0139                | PASS       | 5180.0119                | PASS       |
| 0                    | 120                | 5180.0168                | PASS       | 5180.0172                | PASS       | 5180.0124                | PASS       | 5180.0136                | PASS       |
| -10                  | 120                | 5180.0145                | PASS       | 5180.014                 | PASS       | 5180.015                 | PASS       | 5180.0168                | PASS       |
| -20                  | 120                | 5179.9771                | PASS       | 5179.9749                | PASS       | 5179.9742                | PASS       | 5179.9722                | PASS       |
| -30                  | 120                | 5180.01                  | PASS       | 5180.0122                | PASS       | 5180.0135                | PASS       | 5180.013                 | PASS       |
| Max. Deviation (ppm) |                    | -4.420849                | PASS       | -4.845560                | PASS       | -4.980695                | PASS       | -5.366795                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5180 MHz Ant4

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5179.9859                | PASS       | 5179.9865                | PASS       | 5179.9885                | PASS       | 5179.9898                | PASS       |
|                      | 120                | 5179.986                 | PASS       | 5179.9864                | PASS       | 5179.9881                | PASS       | 5179.9892                | PASS       |
|                      | 102                | 5179.9866                | PASS       | 5179.9859                | PASS       | 5179.988                 | PASS       | 5179.9882                | PASS       |
| Max. Deviation (ppm) |                    | -2.722008                | PASS       | -2.722008                | PASS       | -2.316602                | PASS       | -2.277992                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5200 MHz Ant1

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5199.9949                | PASS       | 5199.9981                | PASS       | 5199.9988                | PASS       | 5199.9943                | PASS       |
| 40                   | 120                | 5200.0127                | PASS       | 5200.0106                | PASS       | 5200.0081                | PASS       | 5200.0093                | PASS       |
| 30                   | 120                | 5199.9788                | PASS       | 5199.977                 | PASS       | 5199.9797                | PASS       | 5199.9791                | PASS       |
| 20                   | 120                | 5200.0211                | PASS       | 5200.0176                | PASS       | 5200.0206                | PASS       | 5200.0197                | PASS       |
| 10                   | 120                | 5200.0085                | PASS       | 5200.0095                | PASS       | 5200.0087                | PASS       | 5200.0069                | PASS       |
| 0                    | 120                | 5199.9903                | PASS       | 5199.9908                | PASS       | 5199.9925                | PASS       | 5199.9918                | PASS       |
| -10                  | 120                | 5199.9865                | PASS       | 5199.9881                | PASS       | 5199.9887                | PASS       | 5199.9856                | PASS       |
| -20                  | 120                | 5199.974                 | PASS       | 5199.9755                | PASS       | 5199.976                 | PASS       | 5199.9757                | PASS       |
| -30                  | 120                | 5200.0103                | PASS       | 5200.0112                | PASS       | 5200.0111                | PASS       | 5200.011                 | PASS       |
| Max. Deviation (ppm) |                    | -5.000000                | PASS       | -4.711538                | PASS       | -4.615385                | PASS       | -4.673077                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5200 MHz Ant1

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5199.9784                | PASS       | 5199.9736                | PASS       | 5199.9721                | PASS       | 5199.9755                | PASS       |
|                      | 120                | 5199.9775                | PASS       | 5199.9733                | PASS       | 5199.9731                | PASS       | 5199.9754                | PASS       |
|                      | 102                | 5199.9768                | PASS       | 5199.9742                | PASS       | 5199.9732                | PASS       | 5199.975                 | PASS       |
| Max. Deviation (ppm) |                    | -4.461538                | PASS       | -5.134615                | PASS       | -5.365385                | PASS       | -4.807692                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5200 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5200.0151                | PASS       | 5200.0161                | PASS       | 5200.014                 | PASS       | 5200.0163                | PASS       |
| 40                   | 120                | 5200.0101                | PASS       | 5200.0089                | PASS       | 5200.0107                | PASS       | 5200.0104                | PASS       |
| 30                   | 120                | 5199.9862                | PASS       | 5199.9846                | PASS       | 5199.9847                | PASS       | 5199.984                 | PASS       |
| 20                   | 120                | 5200.0006                | PASS       | 5199.9989                | PASS       | 5199.9998                | PASS       | 5200.0016                | PASS       |
| 10                   | 120                | 5200.0126                | PASS       | 5200.0084                | PASS       | 5200.0125                | PASS       | 5200.0082                | PASS       |
| 0                    | 120                | 5200.019                 | PASS       | 5200.0196                | PASS       | 5200.0166                | PASS       | 5200.0185                | PASS       |
| -10                  | 120                | 5200.0056                | PASS       | 5200.0094                | PASS       | 5200.0086                | PASS       | 5200.006                 | PASS       |
| -20                  | 120                | 5199.9817                | PASS       | 5199.9819                | PASS       | 5199.9811                | PASS       | 5199.9809                | PASS       |
| -30                  | 120                | 5200.0113                | PASS       | 5200.0126                | PASS       | 5200.0127                | PASS       | 5200.0142                | PASS       |
| Max. Deviation (ppm) |                    | 3.653846                 | PASS       | 3.769231                 | PASS       | 3.192308                 | PASS       | -3.673077                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5200 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5200.0013                | PASS       | 5199.999                 | PASS       | 5199.9998                | PASS       | 5200.0025                | PASS       |
|                      | 120                | 5200.0006                | PASS       | 5199.9989                | PASS       | 5199.9998                | PASS       | 5200.0016                | PASS       |
|                      | 102                | 5200.0004                | PASS       | 5199.9985                | PASS       | 5199.9999                | PASS       | 5200.0008                | PASS       |
| Max. Deviation (ppm) |                    | 0.250000                 | PASS       | -0.288462                | PASS       | -0.038462                | PASS       | 0.480769                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |



## Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5199.9811                      | PASS       | 5199.9815                      | PASS       | 5199.9835                      | PASS       | 5199.9829                      | PASS       |
| 40                      | 120                      | 5200.0099                      | PASS       | 5200.0118                      | PASS       | 5200.0101                      | PASS       | 5200.0099                      | PASS       |
| 30                      | 120                      | 5199.9761                      | PASS       | 5199.9751                      | PASS       | 5199.976                       | PASS       | 5199.9718                      | PASS       |
| 20                      | 120                      | 5199.9776                      | PASS       | 5199.9762                      | PASS       | 5199.9767                      | PASS       | 5199.9792                      | PASS       |
| 10                      | 120                      | 5200.0171                      | PASS       | 5200.0204                      | PASS       | 5200.02                        | PASS       | 5200.0186                      | PASS       |
| 0                       | 120                      | 5199.9802                      | PASS       | 5199.9789                      | PASS       | 5199.9801                      | PASS       | 5199.98                        | PASS       |
| -10                     | 120                      | 5199.9959                      | PASS       | 5199.9971                      | PASS       | 5199.9983                      | PASS       | 5199.9984                      | PASS       |
| -20                     | 120                      | 5200.0038                      | PASS       | 5200.0004                      | PASS       | 5200.0004                      | PASS       | 5200.0036                      | PASS       |
| -30                     | 120                      | 5200.0232                      | PASS       | 5200.0254                      | PASS       | 5200.0253                      | PASS       | 5200.0214                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -4.596154                      | PASS       | -4.788462                      | PASS       | -4.615385                      | PASS       | -5.423077                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5199.9786                      | PASS       | 5199.9759                      | PASS       | 5199.9771                      | PASS       | 5199.9801                      | PASS       |
|                         | 120                      | 5199.9776                      | PASS       | 5199.9762                      | PASS       | 5199.9767                      | PASS       | 5199.9792                      | PASS       |
|                         | 102                      | 5199.9774                      | PASS       | 5199.9768                      | PASS       | 5199.9772                      | PASS       | 5199.9791                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -4.346154                      | PASS       | -4.634615                      | PASS       | -4.480769                      | PASS       | -4.019231                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5200 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5200.0167                      | PASS       | 5200.0188                      | PASS       | 5200.0192                      | PASS       | 5200.0192                      | PASS       |
| 40                      | 120                      | 5199.9858                      | PASS       | 5199.9872                      | PASS       | 5199.9888                      | PASS       | 5199.9893                      | PASS       |
| 30                      | 120                      | 5199.9773                      | PASS       | 5199.9802                      | PASS       | 5199.9802                      | PASS       | 5199.9784                      | PASS       |
| 20                      | 120                      | 5199.985                       | PASS       | 5199.9853                      | PASS       | 5199.982                       | PASS       | 5199.9835                      | PASS       |
| 10                      | 120                      | 5200.0082                      | PASS       | 5200.0087                      | PASS       | 5200.0068                      | PASS       | 5200.0099                      | PASS       |
| 0                       | 120                      | 5199.9778                      | PASS       | 5199.9773                      | PASS       | 5199.9791                      | PASS       | 5199.9752                      | PASS       |
| -10                     | 120                      | 5199.98                        | PASS       | 5199.9826                      | PASS       | 5199.9783                      | PASS       | 5199.9788                      | PASS       |
| -20                     | 120                      | 5199.9766                      | PASS       | 5199.9788                      | PASS       | 5199.9774                      | PASS       | 5199.9758                      | PASS       |
| -30                     | 120                      | 5200.0236                      | PASS       | 5200.022                       | PASS       | 5200.0192                      | PASS       | 5200.0202                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.538462                       | PASS       | 4.230769                       | PASS       | 3.692308                       | PASS       | -4.769231                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5200 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5199.9848                      | PASS       | 5199.9851                      | PASS       | 5199.9823                      | PASS       | 5199.9834                      | PASS       |
|                         | 120                      | 5199.985                       | PASS       | 5199.9853                      | PASS       | 5199.982                       | PASS       | 5199.9835                      | PASS       |
|                         | 102                      | 5199.9856                      | PASS       | 5199.9846                      | PASS       | 5199.9822                      | PASS       | 5199.9827                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -2.923077                      | PASS       | -2.961538                      | PASS       | -3.461538                      | PASS       | -3.326923                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5240 MHz Ant1

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5239.9941                | PASS       | 5239.9944                | PASS       | 5239.9915                | PASS       | 5239.9935                | PASS       |
| 40                   | 120                | 5239.9862                | PASS       | 5239.9848                | PASS       | 5239.985                 | PASS       | 5239.9858                | PASS       |
| 30                   | 120                | 5239.9947                | PASS       | 5239.9941                | PASS       | 5239.9956                | PASS       | 5239.9931                | PASS       |
| 20                   | 120                | 5240.0252                | PASS       | 5240.0242                | PASS       | 5240.0248                | PASS       | 5240.027                 | PASS       |
| 10                   | 120                | 5239.9754                | PASS       | 5239.9783                | PASS       | 5239.9763                | PASS       | 5239.976                 | PASS       |
| 0                    | 120                | 5239.9879                | PASS       | 5239.9884                | PASS       | 5239.9862                | PASS       | 5239.9844                | PASS       |
| -10                  | 120                | 5239.9787                | PASS       | 5239.9781                | PASS       | 5239.9811                | PASS       | 5239.9805                | PASS       |
| -20                  | 120                | 5240.0202                | PASS       | 5240.0219                | PASS       | 5240.0177                | PASS       | 5240.0191                | PASS       |
| -30                  | 120                | 5240.0129                | PASS       | 5240.0111                | PASS       | 5240.0156                | PASS       | 5240.0131                | PASS       |
| Max. Deviation (ppm) |                    | 4.809160                 | PASS       | 4.618321                 | PASS       | 4.732824                 | PASS       | 5.152672                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5240 MHz Ant1

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5240.0252                | PASS       | 5240.0245                | PASS       | 5240.0248                | PASS       | 5240.0277                | PASS       |
|                      | 120                | 5240.0252                | PASS       | 5240.0242                | PASS       | 5240.0248                | PASS       | 5240.027                 | PASS       |
|                      | 102                | 5240.0255                | PASS       | 5240.0232                | PASS       | 5240.0247                | PASS       | 5240.0272                | PASS       |
| Max. Deviation (ppm) |                    | 4.866412                 | PASS       | 4.675573                 | PASS       | 4.732824                 | PASS       | 5.286260                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5240 MHz Ant2**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5239.979                 | PASS       | 5239.9761                | PASS       | 5239.9797                | PASS       | 5239.976                 | PASS       |
| 40                   | 120                | 5240.0149                | PASS       | 5240.0188                | PASS       | 5240.018                 | PASS       | 5240.0172                | PASS       |
| 30                   | 120                | 5240.0154                | PASS       | 5240.0137                | PASS       | 5240.014                 | PASS       | 5240.0116                | PASS       |
| 20                   | 120                | 5240.0007                | PASS       | 5239.9982                | PASS       | 5239.9996                | PASS       | 5239.9986                | PASS       |
| 10                   | 120                | 5239.9984                | PASS       | 5239.9988                | PASS       | 5240                     | PASS       | 5240.0017                | PASS       |
| 0                    | 120                | 5240.0037                | PASS       | 5240.0023                | PASS       | 5240.0035                | PASS       | 5240.002                 | PASS       |
| -10                  | 120                | 5239.9729                | PASS       | 5239.974                 | PASS       | 5239.9738                | PASS       | 5239.9749                | PASS       |
| -20                  | 120                | 5240.0211                | PASS       | 5240.0214                | PASS       | 5240.0222                | PASS       | 5240.0212                | PASS       |
| -30                  | 120                | 5240.0013                | PASS       | 5240.0007                | PASS       | 5240.0002                | PASS       | 5240.0004                | PASS       |
| Max. Deviation (ppm) |                    | -5.171756                | PASS       | -4.961832                | PASS       | -5.000000                | PASS       | -4.790076                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5240 MHz Ant2**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5239.9999                | PASS       | 5239.9992                | PASS       | 5239.9988                | PASS       | 5239.9989                | PASS       |
|                      | 120                | 5240.0007                | PASS       | 5239.9982                | PASS       | 5239.9996                | PASS       | 5239.9986                | PASS       |
|                      | 102                | 5240.0007                | PASS       | 5239.9976                | PASS       | 5239.9994                | PASS       | 5239.9978                | PASS       |
| Max. Deviation (ppm) |                    | 0.133588                 | PASS       | -0.458015                | PASS       | -0.229008                | PASS       | -0.419847                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5240 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5239.9776                | PASS       | 5239.9753                | PASS       | 5239.9757                | PASS       | 5239.9762                | PASS       |
| 40                   | 120                | 5239.9785                | PASS       | 5239.9786                | PASS       | 5239.9828                | PASS       | 5239.9825                | PASS       |
| 30                   | 120                | 5239.975                 | PASS       | 5239.9725                | PASS       | 5239.9752                | PASS       | 5239.9776                | PASS       |
| 20                   | 120                | 5239.9744                | PASS       | 5239.9725                | PASS       | 5239.974                 | PASS       | 5239.9743                | PASS       |
| 10                   | 120                | 5239.9834                | PASS       | 5239.9832                | PASS       | 5239.9807                | PASS       | 5239.985                 | PASS       |
| 0                    | 120                | 5239.9823                | PASS       | 5239.9806                | PASS       | 5239.9829                | PASS       | 5239.9787                | PASS       |
| -10                  | 120                | 5239.9822                | PASS       | 5239.9821                | PASS       | 5239.9787                | PASS       | 5239.9797                | PASS       |
| -20                  | 120                | 5239.9966                | PASS       | 5239.9965                | PASS       | 5239.9959                | PASS       | 5239.9976                | PASS       |
| -30                  | 120                | 5239.9936                | PASS       | 5239.995                 | PASS       | 5239.9909                | PASS       | 5239.9914                | PASS       |
| Max. Deviation (ppm) |                    | -4.885496                | PASS       | -5.248092                | PASS       | -4.961832                | PASS       | -4.904580                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5240 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5239.9747                | PASS       | 5239.9733                | PASS       | 5239.9749                | PASS       | 5239.9741                | PASS       |
|                      | 120                | 5239.9744                | PASS       | 5239.9725                | PASS       | 5239.974                 | PASS       | 5239.9743                | PASS       |
|                      | 102                | 5239.974                 | PASS       | 5239.972                 | PASS       | 5239.9748                | PASS       | 5239.9739                | PASS       |
| Max. Deviation (ppm) |                    | -4.961832                | PASS       | -5.343511                | PASS       | -4.961832                | PASS       | -4.980916                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5240 MHz Ant4

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5240.0163                | PASS       | 5240.0126                | PASS       | 5240.0162                | PASS       | 5240.017                 | PASS       |
| 40                   | 120                | 5240.0223                | PASS       | 5240.0231                | PASS       | 5240.023                 | PASS       | 5240.0223                | PASS       |
| 30                   | 120                | 5240.013                 | PASS       | 5240.0159                | PASS       | 5240.0141                | PASS       | 5240.0116                | PASS       |
| 20                   | 120                | 5240.0137                | PASS       | 5240.0117                | PASS       | 5240.013                 | PASS       | 5240.0114                | PASS       |
| 10                   | 120                | 5240.0106                | PASS       | 5240.0068                | PASS       | 5240.009                 | PASS       | 5240.0086                | PASS       |
| 0                    | 120                | 5239.9908                | PASS       | 5239.9885                | PASS       | 5239.9875                | PASS       | 5239.9884                | PASS       |
| -10                  | 120                | 5240.0078                | PASS       | 5240.0048                | PASS       | 5240.006                 | PASS       | 5240.0071                | PASS       |
| -20                  | 120                | 5239.983                 | PASS       | 5239.9856                | PASS       | 5239.9828                | PASS       | 5239.9848                | PASS       |
| -30                  | 120                | 5240.0253                | PASS       | 5240.0228                | PASS       | 5240.0247                | PASS       | 5240.0253                | PASS       |
| Max. Deviation (ppm) |                    | 4.828244                 | PASS       | 4.408397                 | PASS       | 4.713740                 | PASS       | 4.828244                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5240 MHz Ant4

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5240.0147                | PASS       | 5240.0107                | PASS       | 5240.0121                | PASS       | 5240.0107                | PASS       |
|                      | 120                | 5240.0137                | PASS       | 5240.0117                | PASS       | 5240.013                 | PASS       | 5240.0114                | PASS       |
|                      | 102                | 5240.0137                | PASS       | 5240.0127                | PASS       | 5240.0124                | PASS       | 5240.011                 | PASS       |
| Max. Deviation (ppm) |                    | 2.805344                 | PASS       | 2.423664                 | PASS       | 2.480916                 | PASS       | 2.175573                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5745 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5745.0213                      | PASS       | 5745.0202                      | PASS       | 5745.0183                      | PASS       | 5745.0181                      | PASS       |
| 40                      | 120                      | 5745.0214                      | PASS       | 5745.0193                      | PASS       | 5745.0223                      | PASS       | 5745.0193                      | PASS       |
| 30                      | 120                      | 5744.9933                      | PASS       | 5744.9971                      | PASS       | 5744.9938                      | PASS       | 5744.9948                      | PASS       |
| 20                      | 120                      | 5744.9972                      | PASS       | 5744.9978                      | PASS       | 5744.9997                      | PASS       | 5744.9994                      | PASS       |
| 10                      | 120                      | 5744.994                       | PASS       | 5744.992                       | PASS       | 5744.9923                      | PASS       | 5744.9927                      | PASS       |
| 0                       | 120                      | 5745.0199                      | PASS       | 5745.0216                      | PASS       | 5745.0215                      | PASS       | 5745.0212                      | PASS       |
| -10                     | 120                      | 5745.0039                      | PASS       | 5745.002                       | PASS       | 5745.005                       | PASS       | 5745.0024                      | PASS       |
| -20                     | 120                      | 5744.9748                      | PASS       | 5744.9762                      | PASS       | 5744.974                       | PASS       | 5744.974                       | PASS       |
| -30                     | 120                      | 5745.0277                      | PASS       | 5745.0292                      | PASS       | 5745.0275                      | PASS       | 5745.0254                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.821584                       | PASS       | 5.082681                       | PASS       | 4.786771                       | PASS       | 4.421236                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5745 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5744.9966                      | PASS       | 5744.9981                      | PASS       | 5745.0007                      | PASS       | 5744.9998                      | PASS       |
|                         | 120                      | 5744.9972                      | PASS       | 5744.9978                      | PASS       | 5744.9997                      | PASS       | 5744.9994                      | PASS       |
|                         | 102                      | 5744.9977                      | PASS       | 5744.9971                      | PASS       | 5744.9987                      | PASS       | 5745.0005                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -0.591819                      | PASS       | -0.504787                      | PASS       | -0.226284                      | PASS       | -0.104439                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5745 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5745.0178                | PASS       | 5745.0155                | PASS       | 5745.0126                | PASS       | 5745.0174                | PASS       |
| 40                   | 120                | 5745.0182                | PASS       | 5745.0207                | PASS       | 5745.0197                | PASS       | 5745.0173                | PASS       |
| 30                   | 120                | 5745.024                 | PASS       | 5745.0262                | PASS       | 5745.0236                | PASS       | 5745.0288                | PASS       |
| 20                   | 120                | 5745.0003                | PASS       | 5745.0001                | PASS       | 5745.0022                | PASS       | 5745.0031                | PASS       |
| 10                   | 120                | 5745.0076                | PASS       | 5745.009                 | PASS       | 5745.0116                | PASS       | 5745.0078                | PASS       |
| 0                    | 120                | 5744.997                 | PASS       | 5744.9966                | PASS       | 5744.997                 | PASS       | 5744.9944                | PASS       |
| -10                  | 120                | 5744.9725                | PASS       | 5744.9745                | PASS       | 5744.9735                | PASS       | 5744.9708                | PASS       |
| -20                  | 120                | 5745.0082                | PASS       | 5745.0046                | PASS       | 5745.0093                | PASS       | 5745.0071                | PASS       |
| -30                  | 120                | 5745.0084                | PASS       | 5745.0045                | PASS       | 5745.004                 | PASS       | 5745.0089                | PASS       |
| Max. Deviation (ppm) |                    | -4.786771                | PASS       | -4.438642                | PASS       | -4.612707                | PASS       | -5.082681                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5745 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5745.0013                | PASS       | 5744.999                 | PASS       | 5745.0014                | PASS       | 5745.0031                | PASS       |
|                      | 120                | 5745.0003                | PASS       | 5745.0001                | PASS       | 5745.0022                | PASS       | 5745.0031                | PASS       |
|                      | 102                | 5745.0012                | PASS       | 5745.0005                | PASS       | 5745.0015                | PASS       | 5745.0033                | PASS       |
| Max. Deviation (ppm) |                    | 0.226284                 | PASS       | -0.174064                | PASS       | 0.382942                 | PASS       | 0.574413                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |



**Frequency Stability Versus Temp.**

Operating Frequency: 5745 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5745.0203                | PASS       | 5745.0188                | PASS       | 5745.0179                | PASS       | 5745.0161                | PASS       |
| 40                   | 120                | 5744.9776                | PASS       | 5744.9816                | PASS       | 5744.9807                | PASS       | 5744.9768                | PASS       |
| 30                   | 120                | 5745.0025                | PASS       | 5745.0028                | PASS       | 5745.0037                | PASS       | 5745.0008                | PASS       |
| 20                   | 120                | 5745.0254                | PASS       | 5745.0213                | PASS       | 5745.0247                | PASS       | 5745.0253                | PASS       |
| 10                   | 120                | 5744.9957                | PASS       | 5744.9912                | PASS       | 5744.9957                | PASS       | 5744.995                 | PASS       |
| 0                    | 120                | 5745.0279                | PASS       | 5745.0312                | PASS       | 5745.0298                | PASS       | 5745.03                  | PASS       |
| -10                  | 120                | 5745.0034                | PASS       | 5745.0059                | PASS       | 5745.0047                | PASS       | 5745.0061                | PASS       |
| -20                  | 120                | 5745.0081                | PASS       | 5745.0035                | PASS       | 5745.0056                | PASS       | 5745.0073                | PASS       |
| -30                  | 120                | 5744.98                  | PASS       | 5744.9811                | PASS       | 5744.9785                | PASS       | 5744.9816                | PASS       |
| Max. Deviation (ppm) |                    | 4.856397                 | PASS       | 5.430809                 | PASS       | 5.187119                 | PASS       | 5.221932                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5745 MHz Ant3

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5745.0252                | PASS       | 5745.0208                | PASS       | 5745.0238                | PASS       | 5745.0259                | PASS       |
|                      | 120                | 5745.0254                | PASS       | 5745.0213                | PASS       | 5745.0247                | PASS       | 5745.0253                | PASS       |
|                      | 102                | 5745.0256                | PASS       | 5745.022                 | PASS       | 5745.025                 | PASS       | 5745.0259                | PASS       |
| Max. Deviation (ppm) |                    | 4.456049                 | PASS       | 3.829417                 | PASS       | 4.351610                 | PASS       | 4.508268                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5745 MHz Ant4**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5745.0185                | PASS       | 5745.0176                | PASS       | 5745.0214                | PASS       | 5745.0166                | PASS       |
| 40                   | 120                | 5744.9748                | PASS       | 5744.9768                | PASS       | 5744.9732                | PASS       | 5744.9762                | PASS       |
| 30                   | 120                | 5744.9945                | PASS       | 5744.9962                | PASS       | 5744.9953                | PASS       | 5744.9925                | PASS       |
| 20                   | 120                | 5745.0125                | PASS       | 5745.0153                | PASS       | 5745.0121                | PASS       | 5745.0143                | PASS       |
| 10                   | 120                | 5745.0296                | PASS       | 5745.0267                | PASS       | 5745.0297                | PASS       | 5745.0303                | PASS       |
| 0                    | 120                | 5744.9905                | PASS       | 5744.9932                | PASS       | 5744.9923                | PASS       | 5744.9901                | PASS       |
| -10                  | 120                | 5744.9779                | PASS       | 5744.9733                | PASS       | 5744.9758                | PASS       | 5744.9747                | PASS       |
| -20                  | 120                | 5744.9757                | PASS       | 5744.9715                | PASS       | 5744.9734                | PASS       | 5744.9736                | PASS       |
| -30                  | 120                | 5745.0241                | PASS       | 5745.0267                | PASS       | 5745.0274                | PASS       | 5745.0267                | PASS       |
| Max. Deviation (ppm) |                    | 5.152306                 | PASS       | 4.647520                 | PASS       | 5.169713                 | PASS       | 5.274151                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5745 MHz Ant4**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5745.0116                | PASS       | 5745.0153                | PASS       | 5745.0123                | PASS       | 5745.0134                | PASS       |
|                      | 120                | 5745.0125                | PASS       | 5745.0153                | PASS       | 5745.0121                | PASS       | 5745.0143                | PASS       |
|                      | 102                | 5745.0127                | PASS       | 5745.0156                | PASS       | 5745.0129                | PASS       | 5745.0147                | PASS       |
| Max. Deviation (ppm) |                    | 2.210618                 | PASS       | 2.715405                 | PASS       | 2.245431                 | PASS       | 2.558747                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5785 MHz Ant1**

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5784.9821                      | PASS       | 5784.9843                      | PASS       | 5784.9839                      | PASS       | 5784.9804                      | PASS       |
| 40                      | 120                      | 5784.9864                      | PASS       | 5784.9905                      | PASS       | 5784.9874                      | PASS       | 5784.9903                      | PASS       |
| 30                      | 120                      | 5785.0052                      | PASS       | 5785.0042                      | PASS       | 5785.0068                      | PASS       | 5785.0053                      | PASS       |
| 20                      | 120                      | 5785.0238                      | PASS       | 5785.0204                      | PASS       | 5785.0229                      | PASS       | 5785.0216                      | PASS       |
| 10                      | 120                      | 5784.9884                      | PASS       | 5784.9847                      | PASS       | 5784.9844                      | PASS       | 5784.9874                      | PASS       |
| 0                       | 120                      | 5785.008                       | PASS       | 5785.0124                      | PASS       | 5785.0109                      | PASS       | 5785.0075                      | PASS       |
| -10                     | 120                      | 5785.0252                      | PASS       | 5785.0212                      | PASS       | 5785.0258                      | PASS       | 5785.0226                      | PASS       |
| -20                     | 120                      | 5785.0177                      | PASS       | 5785.0172                      | PASS       | 5785.0185                      | PASS       | 5785.016                       | PASS       |
| -30                     | 120                      | 5784.981                       | PASS       | 5784.9858                      | PASS       | 5784.9834                      | PASS       | 5784.986                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.356093                       | PASS       | 3.664650                       | PASS       | 4.459810                       | PASS       | 3.906655                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5785 MHz Ant1**

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5785.0242                      | PASS       | 5785.0212                      | PASS       | 5785.0229                      | PASS       | 5785.0224                      | PASS       |
|                         | 120                      | 5785.0238                      | PASS       | 5785.0204                      | PASS       | 5785.0229                      | PASS       | 5785.0216                      | PASS       |
|                         | 102                      | 5785.023                       | PASS       | 5785.0206                      | PASS       | 5785.0228                      | PASS       | 5785.021                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.183232                       | PASS       | 3.664650                       | PASS       | 3.958513                       | PASS       | 3.872083                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5785 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5784.9766                | PASS       | 5784.973                 | PASS       | 5784.9763                | PASS       | 5784.9727                | PASS       |
| 40                   | 120                | 5784.9861                | PASS       | 5784.9836                | PASS       | 5784.983                 | PASS       | 5784.9828                | PASS       |
| 30                   | 120                | 5784.9776                | PASS       | 5784.9757                | PASS       | 5784.9759                | PASS       | 5784.9786                | PASS       |
| 20                   | 120                | 5785.0008                | PASS       | 5785.0029                | PASS       | 5785.001                 | PASS       | 5784.9985                | PASS       |
| 10                   | 120                | 5785.014                 | PASS       | 5785.0136                | PASS       | 5785.0125                | PASS       | 5785.0119                | PASS       |
| 0                    | 120                | 5784.9792                | PASS       | 5784.979                 | PASS       | 5784.9794                | PASS       | 5784.9814                | PASS       |
| -10                  | 120                | 5785.0047                | PASS       | 5785.0055                | PASS       | 5785.0038                | PASS       | 5785.0046                | PASS       |
| -20                  | 120                | 5784.9727                | PASS       | 5784.9741                | PASS       | 5784.9728                | PASS       | 5784.9735                | PASS       |
| -30                  | 120                | 5785.0043                | PASS       | 5785.0067                | PASS       | 5785.0059                | PASS       | 5785.0075                | PASS       |
| Max. Deviation (ppm) |                    | -4.719101                | PASS       | -4.667243                | PASS       | -4.701815                | PASS       | -4.719101                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5785 MHz Ant2

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5785.0016                | PASS       | 5785.0034                | PASS       | 5785.0005                | PASS       | 5784.9996                | PASS       |
|                      | 120                | 5785.0008                | PASS       | 5785.0029                | PASS       | 5785.001                 | PASS       | 5784.9985                | PASS       |
|                      | 102                | 5785.0004                | PASS       | 5785.004                 | PASS       | 5785.0017                | PASS       | 5784.9989                | PASS       |
| Max. Deviation (ppm) |                    | 0.276577                 | PASS       | 0.691443                 | PASS       | 0.293863                 | PASS       | -0.259291                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5785 MHz Ant3**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5785.0107                | PASS       | 5785.0119                | PASS       | 5785.0114                | PASS       | 5785.0121                | PASS       |
| 40                   | 120                | 5784.9999                | PASS       | 5784.9995                | PASS       | 5785.0023                | PASS       | 5784.9988                | PASS       |
| 30                   | 120                | 5785.0066                | PASS       | 5785.0022                | PASS       | 5785.0032                | PASS       | 5785.0018                | PASS       |
| 20                   | 120                | 5784.9776                | PASS       | 5784.9742                | PASS       | 5784.978                 | PASS       | 5784.9752                | PASS       |
| 10                   | 120                | 5785.0054                | PASS       | 5785.0071                | PASS       | 5785.0048                | PASS       | 5785.0062                | PASS       |
| 0                    | 120                | 5785.0016                | PASS       | 5784.9995                | PASS       | 5784.9982                | PASS       | 5784.9996                | PASS       |
| -10                  | 120                | 5784.9732                | PASS       | 5784.9763                | PASS       | 5784.9766                | PASS       | 5784.9757                | PASS       |
| -20                  | 120                | 5784.9877                | PASS       | 5784.9866                | PASS       | 5784.9851                | PASS       | 5784.9875                | PASS       |
| -30                  | 120                | 5784.9759                | PASS       | 5784.9743                | PASS       | 5784.9762                | PASS       | 5784.9756                | PASS       |
| Max. Deviation (ppm) |                    | -4.632671                | PASS       | -4.459810                | PASS       | -4.114088                | PASS       | -4.286949                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5785 MHz Ant3**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5784.978                 | PASS       | 5784.975                 | PASS       | 5784.9776                | PASS       | 5784.9751                | PASS       |
|                      | 120                | 5784.9776                | PASS       | 5784.9742                | PASS       | 5784.978                 | PASS       | 5784.9752                | PASS       |
|                      | 102                | 5784.9774                | PASS       | 5784.9734                | PASS       | 5784.9782                | PASS       | 5784.9744                | PASS       |
| Max. Deviation (ppm) |                    | -3.906655                | PASS       | -4.598099                | PASS       | -3.872083                | PASS       | -4.425238                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5785 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5785.0247                      | PASS       | 5785.0229                      | PASS       | 5785.0278                      | PASS       | 5785.0247                      | PASS       |
| 40                      | 120                      | 5785.0267                      | PASS       | 5785.0253                      | PASS       | 5785.0228                      | PASS       | 5785.0265                      | PASS       |
| 30                      | 120                      | 5784.9788                      | PASS       | 5784.9736                      | PASS       | 5784.975                       | PASS       | 5784.9742                      | PASS       |
| 20                      | 120                      | 5784.9878                      | PASS       | 5784.9882                      | PASS       | 5784.9863                      | PASS       | 5784.9855                      | PASS       |
| 10                      | 120                      | 5785.0072                      | PASS       | 5785.006                       | PASS       | 5785.0074                      | PASS       | 5785.0079                      | PASS       |
| 0                       | 120                      | 5785.0077                      | PASS       | 5785.0094                      | PASS       | 5785.0081                      | PASS       | 5785.0055                      | PASS       |
| -10                     | 120                      | 5785.0303                      | PASS       | 5785.0273                      | PASS       | 5785.0285                      | PASS       | 5785.0264                      | PASS       |
| -20                     | 120                      | 5785.0294                      | PASS       | 5785.0264                      | PASS       | 5785.0264                      | PASS       | 5785.0267                      | PASS       |
| -30                     | 120                      | 5785.0083                      | PASS       | 5785.0089                      | PASS       | 5785.0059                      | PASS       | 5785.0053                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.237684                       | PASS       | 4.719101                       | PASS       | 4.926534                       | PASS       | 4.615385                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5785 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5784.988                       | PASS       | 5784.9874                      | PASS       | 5784.9858                      | PASS       | 5784.9867                      | PASS       |
|                         | 120                      | 5784.9878                      | PASS       | 5784.9882                      | PASS       | 5784.9863                      | PASS       | 5784.9855                      | PASS       |
|                         | 102                      | 5784.9869                      | PASS       | 5784.9871                      | PASS       | 5784.9874                      | PASS       | 5784.985                       | PASS       |
| Max. Deviation<br>(ppm) |                          | -2.264477                      | PASS       | -2.229905                      | PASS       | -2.454624                      | PASS       | -2.592913                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5825 MHz Ant1**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5824.9957                | PASS       | 5824.9976                | PASS       | 5824.9978                | PASS       | 5824.995                 | PASS       |
| 40                   | 120                | 5825.0245                | PASS       | 5825.0215                | PASS       | 5825.0215                | PASS       | 5825.0245                | PASS       |
| 30                   | 120                | 5825.0244                | PASS       | 5825.0194                | PASS       | 5825.0207                | PASS       | 5825.024                 | PASS       |
| 20                   | 120                | 5824.9745                | PASS       | 5824.9733                | PASS       | 5824.9739                | PASS       | 5824.9721                | PASS       |
| 10                   | 120                | 5824.9702                | PASS       | 5824.9731                | PASS       | 5824.9745                | PASS       | 5824.9729                | PASS       |
| 0                    | 120                | 5824.9849                | PASS       | 5824.9813                | PASS       | 5824.9823                | PASS       | 5824.9792                | PASS       |
| -10                  | 120                | 5825.0164                | PASS       | 5825.0188                | PASS       | 5825.016                 | PASS       | 5825.0181                | PASS       |
| -20                  | 120                | 5824.9893                | PASS       | 5824.9853                | PASS       | 5824.9861                | PASS       | 5824.9907                | PASS       |
| -30                  | 120                | 5825.0118                | PASS       | 5825.0156                | PASS       | 5825.0152                | PASS       | 5825.0161                | PASS       |
| Max. Deviation (ppm) |                    | -5.115880                | PASS       | -4.618026                | PASS       | -4.480687                | PASS       | -4.789700                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5825 MHz Ant1**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5824.9743                | PASS       | 5824.9722                | PASS       | 5824.9738                | PASS       | 5824.9716                | PASS       |
|                      | 120                | 5824.9745                | PASS       | 5824.9733                | PASS       | 5824.9739                | PASS       | 5824.9721                | PASS       |
|                      | 102                | 5824.9743                | PASS       | 5824.9741                | PASS       | 5824.9743                | PASS       | 5824.9719                | PASS       |
| Max. Deviation (ppm) |                    | -4.412017                | PASS       | -4.772532                | PASS       | -4.497854                | PASS       | -4.875536                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5825 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5825.0033                      | PASS       | 5825.0063                      | PASS       | 5825.0069                      | PASS       | 5825.0053                      | PASS       |
| 40                      | 120                      | 5825.0061                      | PASS       | 5825.0027                      | PASS       | 5825.0055                      | PASS       | 5825.0027                      | PASS       |
| 30                      | 120                      | 5824.9884                      | PASS       | 5824.9879                      | PASS       | 5824.9867                      | PASS       | 5824.9893                      | PASS       |
| 20                      | 120                      | 5824.9941                      | PASS       | 5824.9949                      | PASS       | 5824.9902                      | PASS       | 5824.9915                      | PASS       |
| 10                      | 120                      | 5824.9843                      | PASS       | 5824.9856                      | PASS       | 5824.9847                      | PASS       | 5824.9836                      | PASS       |
| 0                       | 120                      | 5824.9945                      | PASS       | 5824.992                       | PASS       | 5824.9917                      | PASS       | 5824.9937                      | PASS       |
| -10                     | 120                      | 5825.0012                      | PASS       | 5825.0038                      | PASS       | 5825.0001                      | PASS       | 5825.0015                      | PASS       |
| -20                     | 120                      | 5825.0049                      | PASS       | 5825.0008                      | PASS       | 5825.0018                      | PASS       | 5825.0013                      | PASS       |
| -30                     | 120                      | 5824.9854                      | PASS       | 5824.9835                      | PASS       | 5824.9828                      | PASS       | 5824.9859                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -2.695279                      | PASS       | -2.832618                      | PASS       | -2.952790                      | PASS       | -2.815451                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5825 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5824.9948                      | PASS       | 5824.9939                      | PASS       | 5824.99                        | PASS       | 5824.9924                      | PASS       |
|                         | 120                      | 5824.9941                      | PASS       | 5824.9949                      | PASS       | 5824.9902                      | PASS       | 5824.9915                      | PASS       |
|                         | 102                      | 5824.9933                      | PASS       | 5824.9942                      | PASS       | 5824.9901                      | PASS       | 5824.9906                      | PASS       |
| Max. Deviation<br>(ppm) |                          | -1.150215                      | PASS       | -1.047210                      | PASS       | -1.716738                      | PASS       | -1.613734                      | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |



**Frequency Stability Versus Temp.**

Operating Frequency: **5825 MHz Ant3**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5824.9951                | PASS       | 5824.9924                | PASS       | 5824.9948                | PASS       | 5824.9943                | PASS       |
| 40                   | 120                | 5825.0174                | PASS       | 5825.0166                | PASS       | 5825.0135                | PASS       | 5825.0187                | PASS       |
| 30                   | 120                | 5824.974                 | PASS       | 5824.9733                | PASS       | 5824.9763                | PASS       | 5824.9743                | PASS       |
| 20                   | 120                | 5825.0138                | PASS       | 5825.0148                | PASS       | 5825.0159                | PASS       | 5825.0117                | PASS       |
| 10                   | 120                | 5825.0202                | PASS       | 5825.0233                | PASS       | 5825.0241                | PASS       | 5825.0215                | PASS       |
| 0                    | 120                | 5824.9808                | PASS       | 5824.9772                | PASS       | 5824.9808                | PASS       | 5824.9821                | PASS       |
| -10                  | 120                | 5825.0036                | PASS       | 5825.0042                | PASS       | 5825.0078                | PASS       | 5825.0076                | PASS       |
| -20                  | 120                | 5824.9968                | PASS       | 5824.994                 | PASS       | 5824.9973                | PASS       | 5824.9963                | PASS       |
| -30                  | 120                | 5825.0079                | PASS       | 5825.0066                | PASS       | 5825.0091                | PASS       | 5825.0069                | PASS       |
| Max. Deviation (ppm) |                    | -4.463519                | PASS       | -4.583691                | PASS       | -4.068670                | PASS       | -4.412017                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5825 MHz Ant3**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5825.0137                | PASS       | 5825.0145                | PASS       | 5825.0156                | PASS       | 5825.0118                | PASS       |
|                      | 120                | 5825.0138                | PASS       | 5825.0148                | PASS       | 5825.0159                | PASS       | 5825.0117                | PASS       |
|                      | 102                | 5825.0149                | PASS       | 5825.0149                | PASS       | 5825.0163                | PASS       | 5825.0123                | PASS       |
| Max. Deviation (ppm) |                    | 2.557940                 | PASS       | 2.557940                 | PASS       | 2.798283                 | PASS       | 2.111588                 | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5825 MHz Ant4**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 50                   | 120                | 5824.9914                | PASS       | 5824.9913                | PASS       | 5824.9866                | PASS       | 5824.9886                | PASS       |
| 40                   | 120                | 5824.9908                | PASS       | 5824.9903                | PASS       | 5824.9909                | PASS       | 5824.99                  | PASS       |
| 30                   | 120                | 5824.996                 | PASS       | 5824.9964                | PASS       | 5824.998                 | PASS       | 5824.9962                | PASS       |
| 20                   | 120                | 5824.9774                | PASS       | 5824.9803                | PASS       | 5824.9771                | PASS       | 5824.977                 | PASS       |
| 10                   | 120                | 5825.0257                | PASS       | 5825.0218                | PASS       | 5825.0245                | PASS       | 5825.0223                | PASS       |
| 0                    | 120                | 5824.9829                | PASS       | 5824.9792                | PASS       | 5824.9781                | PASS       | 5824.9807                | PASS       |
| -10                  | 120                | 5825.0077                | PASS       | 5825.0036                | PASS       | 5825.0041                | PASS       | 5825.0083                | PASS       |
| -20                  | 120                | 5824.9705                | PASS       | 5824.9685                | PASS       | 5824.9733                | PASS       | 5824.9695                | PASS       |
| -30                  | 120                | 5824.9748                | PASS       | 5824.9765                | PASS       | 5824.9751                | PASS       | 5824.9767                | PASS       |
| Max. Deviation (ppm) |                    | -5.064378                | PASS       | -5.407725                | PASS       | -4.583691                | PASS       | -5.236052                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5825 MHz Ant4**

| TEMP. (°C)           | POWER SUPPLY (Vac) | 0 MINUTE                 |            | 2 MINUTES                |            | 5 MINUTES                |            | 10 MINUTES               |            |
|----------------------|--------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|
|                      |                    | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail | Measured Frequency (MHz) | Pass/ Fail |
| 20                   | 138                | 5824.9778                | PASS       | 5824.9797                | PASS       | 5824.9774                | PASS       | 5824.9767                | PASS       |
|                      | 120                | 5824.9774                | PASS       | 5824.9803                | PASS       | 5824.9771                | PASS       | 5824.977                 | PASS       |
|                      | 102                | 5824.9765                | PASS       | 5824.9793                | PASS       | 5824.9776                | PASS       | 5824.976                 | PASS       |
| Max. Deviation (ppm) |                    | -4.034335                | PASS       | -3.553648                | PASS       | -3.931330                | PASS       | -4.120172                | PASS       |
| IEEE Limit (ppm)     |                    | ±20ppm                   |            |                          |            |                          |            |                          |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5190.002                       | PASS       | 5190.0047                      | PASS       | 5190.002                       | PASS       | 5190.0029                      | PASS       |
| 40                      | 120                      | 5189.9773                      | PASS       | 5189.9764                      | PASS       | 5189.9776                      | PASS       | 5189.9779                      | PASS       |
| 30                      | 120                      | 5190.0038                      | PASS       | 5190.0047                      | PASS       | 5190.0018                      | PASS       | 5190.0018                      | PASS       |
| 20                      | 120                      | 5190.0237                      | PASS       | 5190.0245                      | PASS       | 5190.0243                      | PASS       | 5190.0263                      | PASS       |
| 10                      | 120                      | 5190.0024                      | PASS       | 5190.0046                      | PASS       | 5190.0062                      | PASS       | 5190.0064                      | PASS       |
| 0                       | 120                      | 5190.02                        | PASS       | 5190.0202                      | PASS       | 5190.0203                      | PASS       | 5190.0176                      | PASS       |
| -10                     | 120                      | 5189.9877                      | PASS       | 5189.9862                      | PASS       | 5189.9875                      | PASS       | 5189.984                       | PASS       |
| -20                     | 120                      | 5189.9887                      | PASS       | 5189.9906                      | PASS       | 5189.9903                      | PASS       | 5189.9875                      | PASS       |
| -30                     | 120                      | 5190.0027                      | PASS       | 5190.0016                      | PASS       | 5190.0026                      | PASS       | 5190.0047                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.566474                       | PASS       | 4.720617                       | PASS       | 4.682081                       | PASS       | 5.067437                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5190.0236                      | PASS       | 5190.0243                      | PASS       | 5190.0237                      | PASS       | 5190.0268                      | PASS       |
|                         | 120                      | 5190.0237                      | PASS       | 5190.0245                      | PASS       | 5190.0243                      | PASS       | 5190.0263                      | PASS       |
|                         | 102                      | 5190.0246                      | PASS       | 5190.0255                      | PASS       | 5190.0253                      | PASS       | 5190.0253                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.739884                       | PASS       | 4.913295                       | PASS       | 4.874759                       | PASS       | 5.163776                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5190 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5190.0074                      | PASS       | 5190.0076                      | PASS       | 5190.0063                      | PASS       | 5190.0072                      | PASS       |
| 40                      | 120                      | 5189.9822                      | PASS       | 5189.9827                      | PASS       | 5189.9824                      | PASS       | 5189.9858                      | PASS       |
| 30                      | 120                      | 5190.0166                      | PASS       | 5190.0144                      | PASS       | 5190.015                       | PASS       | 5190.0173                      | PASS       |
| 20                      | 120                      | 5190.0232                      | PASS       | 5190.0224                      | PASS       | 5190.0205                      | PASS       | 5190.0224                      | PASS       |
| 10                      | 120                      | 5189.9958                      | PASS       | 5189.9981                      | PASS       | 5189.9978                      | PASS       | 5189.9992                      | PASS       |
| 0                       | 120                      | 5189.9738                      | PASS       | 5189.9734                      | PASS       | 5189.9769                      | PASS       | 5189.9757                      | PASS       |
| -10                     | 120                      | 5189.9854                      | PASS       | 5189.9828                      | PASS       | 5189.986                       | PASS       | 5189.982                       | PASS       |
| -20                     | 120                      | 5190.0198                      | PASS       | 5190.0155                      | PASS       | 5190.0149                      | PASS       | 5190.0188                      | PASS       |
| -30                     | 120                      | 5189.9845                      | PASS       | 5189.9845                      | PASS       | 5189.9857                      | PASS       | 5189.9886                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.048170                       | PASS       | 5.125241                       | PASS       | 4.450867                       | PASS       | 4.682081                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5190 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5190.0237                      | PASS       | 5190.0217                      | PASS       | 5190.02                        | PASS       | 5190.0219                      | PASS       |
|                         | 120                      | 5190.0232                      | PASS       | 5190.0224                      | PASS       | 5190.0205                      | PASS       | 5190.0224                      | PASS       |
|                         | 102                      | 5190.0229                      | PASS       | 5190.0229                      | PASS       | 5190.0205                      | PASS       | 5190.0226                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.566474                       | PASS       | 4.412331                       | PASS       | 3.949904                       | PASS       | 4.354528                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5190 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5189.9858                      | PASS       | 5189.9858                      | PASS       | 5189.9865                      | PASS       | 5189.9833                      | PASS       |
| 40                      | 120                      | 5190.0246                      | PASS       | 5190.0231                      | PASS       | 5190.0199                      | PASS       | 5190.0239                      | PASS       |
| 30                      | 120                      | 5190.0014                      | PASS       | 5190.0043                      | PASS       | 5190.0023                      | PASS       | 5190.0018                      | PASS       |
| 20                      | 120                      | 5189.9925                      | PASS       | 5189.9918                      | PASS       | 5189.9915                      | PASS       | 5189.9935                      | PASS       |
| 10                      | 120                      | 5189.9761                      | PASS       | 5189.9738                      | PASS       | 5189.9765                      | PASS       | 5189.9772                      | PASS       |
| 0                       | 120                      | 5190.0138                      | PASS       | 5190.0159                      | PASS       | 5190.0163                      | PASS       | 5190.0127                      | PASS       |
| -10                     | 120                      | 5190.0012                      | PASS       | 5190.0004                      | PASS       | 5189.9972                      | PASS       | 5190.0015                      | PASS       |
| -20                     | 120                      | 5190.0039                      | PASS       | 5190.0004                      | PASS       | 5190.0034                      | PASS       | 5190.0008                      | PASS       |
| -30                     | 120                      | 5189.9951                      | PASS       | 5189.9943                      | PASS       | 5189.9941                      | PASS       | 5189.9929                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.739884                       | PASS       | 5.048170                       | PASS       | 4.527938                       | PASS       | 4.605010                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5190 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5189.9923                      | PASS       | 5189.9912                      | PASS       | 5189.992                       | PASS       | 5189.9927                      | PASS       |
|                         | 120                      | 5189.9925                      | PASS       | 5189.9918                      | PASS       | 5189.9915                      | PASS       | 5189.9935                      | PASS       |
|                         | 102                      | 5189.9923                      | PASS       | 5189.9923                      | PASS       | 5189.9922                      | PASS       | 5189.9937                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.483622                       | PASS       | 1.695568                       | PASS       | 1.637765                       | PASS       | 1.406551                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5190 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5189.9762                      | PASS       | 5189.9754                      | PASS       | 5189.9771                      | PASS       | 5189.9767                      | PASS       |
| 40                      | 120                      | 5190.0056                      | PASS       | 5190.0053                      | PASS       | 5190.0084                      | PASS       | 5190.0064                      | PASS       |
| 30                      | 120                      | 5189.9984                      | PASS       | 5189.9967                      | PASS       | 5189.9969                      | PASS       | 5189.9952                      | PASS       |
| 20                      | 120                      | 5189.9808                      | PASS       | 5189.9775                      | PASS       | 5189.9786                      | PASS       | 5189.9765                      | PASS       |
| 10                      | 120                      | 5190.0218                      | PASS       | 5190.0213                      | PASS       | 5190.0187                      | PASS       | 5190.0207                      | PASS       |
| 0                       | 120                      | 5190.0063                      | PASS       | 5190.0061                      | PASS       | 5190.0085                      | PASS       | 5190.0051                      | PASS       |
| -10                     | 120                      | 5189.9727                      | PASS       | 5189.9766                      | PASS       | 5189.976                       | PASS       | 5189.9756                      | PASS       |
| -20                     | 120                      | 5189.9873                      | PASS       | 5189.9894                      | PASS       | 5189.9855                      | PASS       | 5189.9858                      | PASS       |
| -30                     | 120                      | 5189.976                       | PASS       | 5189.9778                      | PASS       | 5189.9797                      | PASS       | 5189.9802                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.260116                       | PASS       | 4.739884                       | PASS       | 4.624277                       | PASS       | 4.701349                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5190 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5189.9811                      | PASS       | 5189.9783                      | PASS       | 5189.9792                      | PASS       | 5189.9768                      | PASS       |
|                         | 120                      | 5189.9808                      | PASS       | 5189.9775                      | PASS       | 5189.9786                      | PASS       | 5189.9765                      | PASS       |
|                         | 102                      | 5189.9798                      | PASS       | 5189.9779                      | PASS       | 5189.9777                      | PASS       | 5189.9762                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 3.892100                       | PASS       | 4.335260                       | PASS       | 4.296724                       | PASS       | 4.585742                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5229.9786                      | PASS       | 5229.9787                      | PASS       | 5229.9821                      | PASS       | 5229.9819                      | PASS       |
| 40                      | 120                      | 5229.9922                      | PASS       | 5229.9941                      | PASS       | 5229.9913                      | PASS       | 5229.9922                      | PASS       |
| 30                      | 120                      | 5230.0101                      | PASS       | 5230.0116                      | PASS       | 5230.0077                      | PASS       | 5230.0092                      | PASS       |
| 20                      | 120                      | 5229.9926                      | PASS       | 5229.9919                      | PASS       | 5229.992                       | PASS       | 5229.9908                      | PASS       |
| 10                      | 120                      | 5230.021                       | PASS       | 5230.0211                      | PASS       | 5230.02                        | PASS       | 5230.0198                      | PASS       |
| 0                       | 120                      | 5229.9784                      | PASS       | 5229.9759                      | PASS       | 5229.9746                      | PASS       | 5229.9798                      | PASS       |
| -10                     | 120                      | 5230.0106                      | PASS       | 5230.0121                      | PASS       | 5230.0153                      | PASS       | 5230.011                       | PASS       |
| -20                     | 120                      | 5229.9899                      | PASS       | 5229.9875                      | PASS       | 5229.9912                      | PASS       | 5229.989                       | PASS       |
| -30                     | 120                      | 5230.0084                      | PASS       | 5230.006                       | PASS       | 5230.0043                      | PASS       | 5230.0044                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.130019                       | PASS       | 4.608031                       | PASS       | 4.856597                       | PASS       | 3.862333                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5229.9919                      | PASS       | 5229.9913                      | PASS       | 5229.9917                      | PASS       | 5229.9905                      | PASS       |
|                         | 120                      | 5229.9926                      | PASS       | 5229.9919                      | PASS       | 5229.992                       | PASS       | 5229.9908                      | PASS       |
|                         | 102                      | 5229.9921                      | PASS       | 5229.992                       | PASS       | 5229.991                       | PASS       | 5229.9905                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.548757                       | PASS       | 1.663480                       | PASS       | 1.720841                       | PASS       | 1.816444                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5230                           | PASS       | 5230.0011                      | PASS       | 5229.9978                      | PASS       | 5229.9983                      | PASS       |
| 40                      | 120                      | 5230.0179                      | PASS       | 5230.0164                      | PASS       | 5230.0159                      | PASS       | 5230.0185                      | PASS       |
| 30                      | 120                      | 5229.9828                      | PASS       | 5229.9806                      | PASS       | 5229.9813                      | PASS       | 5229.9796                      | PASS       |
| 20                      | 120                      | 5230.0248                      | PASS       | 5230.0244                      | PASS       | 5230.0255                      | PASS       | 5230.0223                      | PASS       |
| 10                      | 120                      | 5230.0238                      | PASS       | 5230.0268                      | PASS       | 5230.026                       | PASS       | 5230.0256                      | PASS       |
| 0                       | 120                      | 5230.0234                      | PASS       | 5230.0263                      | PASS       | 5230.0278                      | PASS       | 5230.0261                      | PASS       |
| -10                     | 120                      | 5230.0193                      | PASS       | 5230.0177                      | PASS       | 5230.0217                      | PASS       | 5230.0205                      | PASS       |
| -20                     | 120                      | 5229.9839                      | PASS       | 5229.9834                      | PASS       | 5229.9819                      | PASS       | 5229.9841                      | PASS       |
| -30                     | 120                      | 5230.0234                      | PASS       | 5230.0211                      | PASS       | 5230.0241                      | PASS       | 5230.0229                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.741874                       | PASS       | 5.124283                       | PASS       | 5.315488                       | PASS       | 4.990440                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5230.0243                      | PASS       | 5230.0253                      | PASS       | 5230.0251                      | PASS       | 5230.022                       | PASS       |
|                         | 120                      | 5230.0248                      | PASS       | 5230.0244                      | PASS       | 5230.0255                      | PASS       | 5230.0223                      | PASS       |
|                         | 102                      | 5230.0252                      | PASS       | 5230.0249                      | PASS       | 5230.0254                      | PASS       | 5230.0232                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.818356                       | PASS       | 4.837476                       | PASS       | 4.875717                       | PASS       | 4.435946                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |



**Frequency Stability Versus Temp.**

Operating Frequency: 5230 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5230.0223                      | PASS       | 5230.0209                      | PASS       | 5230.0255                      | PASS       | 5230.0231                      | PASS       |
| 40                      | 120                      | 5230.0257                      | PASS       | 5230.0235                      | PASS       | 5230.0246                      | PASS       | 5230.0211                      | PASS       |
| 30                      | 120                      | 5229.9825                      | PASS       | 5229.9821                      | PASS       | 5229.9815                      | PASS       | 5229.9834                      | PASS       |
| 20                      | 120                      | 5230.0172                      | PASS       | 5230.0206                      | PASS       | 5230.0166                      | PASS       | 5230.0165                      | PASS       |
| 10                      | 120                      | 5230.0061                      | PASS       | 5230.0038                      | PASS       | 5230.0029                      | PASS       | 5230.0046                      | PASS       |
| 0                       | 120                      | 5230.0211                      | PASS       | 5230.0203                      | PASS       | 5230.0186                      | PASS       | 5230.0183                      | PASS       |
| -10                     | 120                      | 5229.9992                      | PASS       | 5229.9999                      | PASS       | 5229.9987                      | PASS       | 5229.9992                      | PASS       |
| -20                     | 120                      | 5229.9915                      | PASS       | 5229.9897                      | PASS       | 5229.993                       | PASS       | 5229.9902                      | PASS       |
| -30                     | 120                      | 5229.9834                      | PASS       | 5229.9812                      | PASS       | 5229.9858                      | PASS       | 5229.9854                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.913958                       | PASS       | 4.493308                       | PASS       | 4.875717                       | PASS       | 4.416826                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5230 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5230.0164                      | PASS       | 5230.0204                      | PASS       | 5230.0161                      | PASS       | 5230.0169                      | PASS       |
|                         | 120                      | 5230.0172                      | PASS       | 5230.0206                      | PASS       | 5230.0166                      | PASS       | 5230.0165                      | PASS       |
|                         | 102                      | 5230.0168                      | PASS       | 5230.0208                      | PASS       | 5230.0168                      | PASS       | 5230.0163                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 3.288719                       | PASS       | 3.977055                       | PASS       | 3.212237                       | PASS       | 3.231358                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5230 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5230.026                       | PASS       | 5230.0253                      | PASS       | 5230.0234                      | PASS       | 5230.0242                      | PASS       |
| 40                      | 120                      | 5230.0102                      | PASS       | 5230.0087                      | PASS       | 5230.0107                      | PASS       | 5230.0116                      | PASS       |
| 30                      | 120                      | 5230.0022                      | PASS       | 5229.9993                      | PASS       | 5230.0026                      | PASS       | 5229.999                       | PASS       |
| 20                      | 120                      | 5229.9862                      | PASS       | 5229.9852                      | PASS       | 5229.9849                      | PASS       | 5229.9877                      | PASS       |
| 10                      | 120                      | 5230.0191                      | PASS       | 5230.0174                      | PASS       | 5230.0167                      | PASS       | 5230.0194                      | PASS       |
| 0                       | 120                      | 5230.0047                      | PASS       | 5230.0042                      | PASS       | 5230.0014                      | PASS       | 5230.0019                      | PASS       |
| -10                     | 120                      | 5230.0219                      | PASS       | 5230.0215                      | PASS       | 5230.0241                      | PASS       | 5230.0239                      | PASS       |
| -20                     | 120                      | 5229.9805                      | PASS       | 5229.982                       | PASS       | 5229.9827                      | PASS       | 5229.9828                      | PASS       |
| -30                     | 120                      | 5229.9807                      | PASS       | 5229.9806                      | PASS       | 5229.9779                      | PASS       | 5229.9828                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.971319                       | PASS       | 4.837476                       | PASS       | 4.608031                       | PASS       | 4.627151                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5230 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5229.9869                      | PASS       | 5229.9855                      | PASS       | 5229.9844                      | PASS       | 5229.9886                      | PASS       |
|                         | 120                      | 5229.9862                      | PASS       | 5229.9852                      | PASS       | 5229.9849                      | PASS       | 5229.9877                      | PASS       |
|                         | 102                      | 5229.986                       | PASS       | 5229.9856                      | PASS       | 5229.9856                      | PASS       | 5229.9882                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.676864                       | PASS       | 2.829828                       | PASS       | 2.982792                       | PASS       | 2.351816                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5754.9841                      | PASS       | 5754.9822                      | PASS       | 5754.9854                      | PASS       | 5754.9829                      | PASS       |
| 40                      | 120                      | 5754.97                        | PASS       | 5754.9705                      | PASS       | 5754.9717                      | PASS       | 5754.9728                      | PASS       |
| 30                      | 120                      | 5754.9727                      | PASS       | 5754.9703                      | PASS       | 5754.9735                      | PASS       | 5754.9726                      | PASS       |
| 20                      | 120                      | 5754.9907                      | PASS       | 5754.9912                      | PASS       | 5754.9904                      | PASS       | 5754.9893                      | PASS       |
| 10                      | 120                      | 5755.0215                      | PASS       | 5755.0227                      | PASS       | 5755.0261                      | PASS       | 5755.0226                      | PASS       |
| 0                       | 120                      | 5755.0132                      | PASS       | 5755.0121                      | PASS       | 5755.0127                      | PASS       | 5755.0144                      | PASS       |
| -10                     | 120                      | 5754.9998                      | PASS       | 5755.0028                      | PASS       | 5755.0025                      | PASS       | 5755.0029                      | PASS       |
| -20                     | 120                      | 5754.998                       | PASS       | 5754.9967                      | PASS       | 5755.0005                      | PASS       | 5754.9993                      | PASS       |
| -30                     | 120                      | 5755.0136                      | PASS       | 5755.0138                      | PASS       | 5755.0129                      | PASS       | 5755.0166                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.212858                       | PASS       | 5.160730                       | PASS       | 4.917463                       | PASS       | 4.761077                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5754.9907                      | PASS       | 5754.9922                      | PASS       | 5754.9899                      | PASS       | 5754.9884                      | PASS       |
|                         | 120                      | 5754.9907                      | PASS       | 5754.9912                      | PASS       | 5754.9904                      | PASS       | 5754.9893                      | PASS       |
|                         | 102                      | 5754.9916                      | PASS       | 5754.9906                      | PASS       | 5754.9905                      | PASS       | 5754.9892                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.615986                       | PASS       | 1.633362                       | PASS       | 1.754996                       | PASS       | 2.015639                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5755.0009                      | PASS       | 5755.001                       | PASS       | 5755.0049                      | PASS       | 5755.0047                      | PASS       |
| 40                      | 120                      | 5754.98                        | PASS       | 5754.9825                      | PASS       | 5754.9798                      | PASS       | 5754.9821                      | PASS       |
| 30                      | 120                      | 5754.9747                      | PASS       | 5754.9735                      | PASS       | 5754.975                       | PASS       | 5754.9748                      | PASS       |
| 20                      | 120                      | 5754.9829                      | PASS       | 5754.9829                      | PASS       | 5754.9797                      | PASS       | 5754.9817                      | PASS       |
| 10                      | 120                      | 5755.0134                      | PASS       | 5755.0125                      | PASS       | 5755.0131                      | PASS       | 5755.0132                      | PASS       |
| 0                       | 120                      | 5755.0218                      | PASS       | 5755.0241                      | PASS       | 5755.0205                      | PASS       | 5755.0239                      | PASS       |
| -10                     | 120                      | 5755.0084                      | PASS       | 5755.0093                      | PASS       | 5755.0115                      | PASS       | 5755.0058                      | PASS       |
| -20                     | 120                      | 5754.9897                      | PASS       | 5754.9933                      | PASS       | 5754.989                       | PASS       | 5754.9932                      | PASS       |
| -30                     | 120                      | 5754.9933                      | PASS       | 5754.9929                      | PASS       | 5754.9958                      | PASS       | 5754.9946                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.396177                       | PASS       | 4.604692                       | PASS       | 4.344049                       | PASS       | 4.378801                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5754.9837                      | PASS       | 5754.9837                      | PASS       | 5754.9789                      | PASS       | 5754.9819                      | PASS       |
|                         | 120                      | 5754.9829                      | PASS       | 5754.9829                      | PASS       | 5754.9797                      | PASS       | 5754.9817                      | PASS       |
|                         | 102                      | 5754.9831                      | PASS       | 5754.9837                      | PASS       | 5754.9806                      | PASS       | 5754.9807                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.971329                       | PASS       | 2.971329                       | PASS       | 3.666377                       | PASS       | 3.353606                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: **5755 MHz Ant3**

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5754.992                       | PASS       | 5754.9929                      | PASS       | 5754.9939                      | PASS       | 5754.9938                      | PASS       |
| 40                      | 120                      | 5754.9717                      | PASS       | 5754.9728                      | PASS       | 5754.971                       | PASS       | 5754.97                        | PASS       |
| 30                      | 120                      | 5755.0252                      | PASS       | 5755.0287                      | PASS       | 5755.0262                      | PASS       | 5755.0265                      | PASS       |
| 20                      | 120                      | 5754.9912                      | PASS       | 5754.9881                      | PASS       | 5754.9874                      | PASS       | 5754.9918                      | PASS       |
| 10                      | 120                      | 5755.0223                      | PASS       | 5755.0224                      | PASS       | 5755.0219                      | PASS       | 5755.021                       | PASS       |
| 0                       | 120                      | 5755.0025                      | PASS       | 5755.003                       | PASS       | 5755.0059                      | PASS       | 5755.0054                      | PASS       |
| -10                     | 120                      | 5755.0164                      | PASS       | 5755.0125                      | PASS       | 5755.0138                      | PASS       | 5755.0121                      | PASS       |
| -20                     | 120                      | 5755.0273                      | PASS       | 5755.0232                      | PASS       | 5755.0225                      | PASS       | 5755.0242                      | PASS       |
| -30                     | 120                      | 5754.9761                      | PASS       | 5754.9749                      | PASS       | 5754.9765                      | PASS       | 5754.9747                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.917463                       | PASS       | 4.986968                       | PASS       | 5.039096                       | PASS       | 5.212858                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: **5755 MHz Ant3**

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5754.9912                      | PASS       | 5754.987                       | PASS       | 5754.9867                      | PASS       | 5754.9923                      | PASS       |
|                         | 120                      | 5754.9912                      | PASS       | 5754.9881                      | PASS       | 5754.9874                      | PASS       | 5754.9918                      | PASS       |
|                         | 102                      | 5754.9916                      | PASS       | 5754.9889                      | PASS       | 5754.9875                      | PASS       | 5754.9927                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.529105                       | PASS       | 2.258905                       | PASS       | 2.311034                       | PASS       | 1.424848                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5755 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5755.0215                      | PASS       | 5755.0208                      | PASS       | 5755.0236                      | PASS       | 5755.0227                      | PASS       |
| 40                      | 120                      | 5754.9855                      | PASS       | 5754.9867                      | PASS       | 5754.9865                      | PASS       | 5754.9878                      | PASS       |
| 30                      | 120                      | 5755.0142                      | PASS       | 5755.0114                      | PASS       | 5755.0092                      | PASS       | 5755.0141                      | PASS       |
| 20                      | 120                      | 5755.0072                      | PASS       | 5755.0066                      | PASS       | 5755.0062                      | PASS       | 5755.0055                      | PASS       |
| 10                      | 120                      | 5754.9882                      | PASS       | 5754.9896                      | PASS       | 5754.9909                      | PASS       | 5754.9918                      | PASS       |
| 0                       | 120                      | 5755.0158                      | PASS       | 5755.0149                      | PASS       | 5755.0147                      | PASS       | 5755.0184                      | PASS       |
| -10                     | 120                      | 5754.9975                      | PASS       | 5754.9969                      | PASS       | 5754.9956                      | PASS       | 5754.9985                      | PASS       |
| -20                     | 120                      | 5754.9828                      | PASS       | 5754.9841                      | PASS       | 5754.9852                      | PASS       | 5754.9814                      | PASS       |
| -30                     | 120                      | 5754.9738                      | PASS       | 5754.9703                      | PASS       | 5754.9717                      | PASS       | 5754.9756                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.552563                       | PASS       | 5.160730                       | PASS       | 4.917463                       | PASS       | 4.239791                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5755 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5755.0076                      | PASS       | 5755.0072                      | PASS       | 5755.0066                      | PASS       | 5755.0064                      | PASS       |
|                         | 120                      | 5755.0072                      | PASS       | 5755.0066                      | PASS       | 5755.0062                      | PASS       | 5755.0055                      | PASS       |
|                         | 102                      | 5755.0077                      | PASS       | 5755.0071                      | PASS       | 5755.0064                      | PASS       | 5755.0055                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.337967                       | PASS       | 1.251086                       | PASS       | 1.146829                       | PASS       | 1.112076                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5795 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5794.9965                      | PASS       | 5794.9987                      | PASS       | 5794.9938                      | PASS       | 5794.9959                      | PASS       |
| 40                      | 120                      | 5795.0172                      | PASS       | 5795.0137                      | PASS       | 5795.0185                      | PASS       | 5795.0156                      | PASS       |
| 30                      | 120                      | 5794.9745                      | PASS       | 5794.9745                      | PASS       | 5794.9757                      | PASS       | 5794.9753                      | PASS       |
| 20                      | 120                      | 5795.0229                      | PASS       | 5795.0218                      | PASS       | 5795.023                       | PASS       | 5795.0225                      | PASS       |
| 10                      | 120                      | 5795.0005                      | PASS       | 5795.0023                      | PASS       | 5795.0018                      | PASS       | 5795.0042                      | PASS       |
| 0                       | 120                      | 5795.0272                      | PASS       | 5795.0263                      | PASS       | 5795.0255                      | PASS       | 5795.0267                      | PASS       |
| -10                     | 120                      | 5795.003                       | PASS       | 5795.0079                      | PASS       | 5795.0027                      | PASS       | 5795.0025                      | PASS       |
| -20                     | 120                      | 5795.012                       | PASS       | 5795.0117                      | PASS       | 5795.0085                      | PASS       | 5795.0095                      | PASS       |
| -30                     | 120                      | 5794.9775                      | PASS       | 5794.9745                      | PASS       | 5794.9764                      | PASS       | 5794.978                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.693701                       | PASS       | 4.538395                       | PASS       | 4.400345                       | PASS       | 4.607420                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5795 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5795.0222                      | PASS       | 5795.0206                      | PASS       | 5795.0224                      | PASS       | 5795.0236                      | PASS       |
|                         | 120                      | 5795.0229                      | PASS       | 5795.0218                      | PASS       | 5795.023                       | PASS       | 5795.0225                      | PASS       |
|                         | 102                      | 5795.0238                      | PASS       | 5795.0228                      | PASS       | 5795.0219                      | PASS       | 5795.0236                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.106989                       | PASS       | 3.934426                       | PASS       | 3.968939                       | PASS       | 4.072476                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5795 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5795.0133                      | PASS       | 5795.014                       | PASS       | 5795.0127                      | PASS       | 5795.0138                      | PASS       |
| 40                      | 120                      | 5795.0283                      | PASS       | 5795.0275                      | PASS       | 5795.0249                      | PASS       | 5795.0262                      | PASS       |
| 30                      | 120                      | 5795.0069                      | PASS       | 5795.0064                      | PASS       | 5795.0081                      | PASS       | 5795.0049                      | PASS       |
| 20                      | 120                      | 5794.9946                      | PASS       | 5794.9962                      | PASS       | 5794.9954                      | PASS       | 5794.996                       | PASS       |
| 10                      | 120                      | 5795.0007                      | PASS       | 5794.9962                      | PASS       | 5794.9983                      | PASS       | 5794.9965                      | PASS       |
| 0                       | 120                      | 5794.9717                      | PASS       | 5794.973                       | PASS       | 5794.9762                      | PASS       | 5794.9754                      | PASS       |
| -10                     | 120                      | 5794.9754                      | PASS       | 5794.9762                      | PASS       | 5794.9787                      | PASS       | 5794.9767                      | PASS       |
| -20                     | 120                      | 5794.9874                      | PASS       | 5794.9851                      | PASS       | 5794.9889                      | PASS       | 5794.9849                      | PASS       |
| -30                     | 120                      | 5794.9944                      | PASS       | 5794.9953                      | PASS       | 5794.9966                      | PASS       | 5794.9974                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.883520                       | PASS       | 4.745470                       | PASS       | 4.296808                       | PASS       | 4.521139                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5795 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5794.9942                      | PASS       | 5794.9953                      | PASS       | 5794.9957                      | PASS       | 5794.9951                      | PASS       |
|                         | 120                      | 5794.9946                      | PASS       | 5794.9962                      | PASS       | 5794.9954                      | PASS       | 5794.996                       | PASS       |
|                         | 102                      | 5794.9945                      | PASS       | 5794.9952                      | PASS       | 5794.9963                      | PASS       | 5794.9961                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.000863                       | PASS       | 0.828300                       | PASS       | 0.793788                       | PASS       | 0.845557                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |



**Frequency Stability Versus Temp.**

Operating Frequency: 5795 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5795.0252                      | PASS       | 5795.028                       | PASS       | 5795.0242                      | PASS       | 5795.0283                      | PASS       |
| 40                      | 120                      | 5795.0291                      | PASS       | 5795.0289                      | PASS       | 5795.0249                      | PASS       | 5795.0242                      | PASS       |
| 30                      | 120                      | 5795.0125                      | PASS       | 5795.012                       | PASS       | 5795.0143                      | PASS       | 5795.0144                      | PASS       |
| 20                      | 120                      | 5794.9804                      | PASS       | 5794.9822                      | PASS       | 5794.9791                      | PASS       | 5794.981                       | PASS       |
| 10                      | 120                      | 5795.0054                      | PASS       | 5795.0052                      | PASS       | 5795.0044                      | PASS       | 5795.0009                      | PASS       |
| 0                       | 120                      | 5794.9927                      | PASS       | 5794.9966                      | PASS       | 5794.994                       | PASS       | 5794.9942                      | PASS       |
| -10                     | 120                      | 5794.9753                      | PASS       | 5794.9805                      | PASS       | 5794.9782                      | PASS       | 5794.9787                      | PASS       |
| -20                     | 120                      | 5795.0143                      | PASS       | 5795.0143                      | PASS       | 5795.0149                      | PASS       | 5795.0166                      | PASS       |
| -30                     | 120                      | 5794.9976                      | PASS       | 5794.9955                      | PASS       | 5794.9974                      | PASS       | 5794.9945                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.021570                       | PASS       | 4.987058                       | PASS       | 4.296808                       | PASS       | 4.883520                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5795 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5794.9812                      | PASS       | 5794.9824                      | PASS       | 5794.9781                      | PASS       | 5794.9814                      | PASS       |
|                         | 120                      | 5794.9804                      | PASS       | 5794.9822                      | PASS       | 5794.9791                      | PASS       | 5794.981                       | PASS       |
|                         | 102                      | 5794.9804                      | PASS       | 5794.982                       | PASS       | 5794.9784                      | PASS       | 5794.9801                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 3.382226                       | PASS       | 3.106126                       | PASS       | 3.779120                       | PASS       | 3.433995                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5795 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5795.0134                      | PASS       | 5795.0143                      | PASS       | 5795.0154                      | PASS       | 5795.0149                      | PASS       |
| 40                      | 120                      | 5794.9843                      | PASS       | 5794.9848                      | PASS       | 5794.9825                      | PASS       | 5794.9836                      | PASS       |
| 30                      | 120                      | 5795.0254                      | PASS       | 5795.0222                      | PASS       | 5795.0261                      | PASS       | 5795.0256                      | PASS       |
| 20                      | 120                      | 5794.9971                      | PASS       | 5794.9957                      | PASS       | 5794.9973                      | PASS       | 5794.9961                      | PASS       |
| 10                      | 120                      | 5795.0006                      | PASS       | 5795.0029                      | PASS       | 5794.9995                      | PASS       | 5795.0021                      | PASS       |
| 0                       | 120                      | 5795.0218                      | PASS       | 5795.024                       | PASS       | 5795.0195                      | PASS       | 5795.0197                      | PASS       |
| -10                     | 120                      | 5795.015                       | PASS       | 5795.0178                      | PASS       | 5795.0139                      | PASS       | 5795.0175                      | PASS       |
| -20                     | 120                      | 5794.987                       | PASS       | 5794.9883                      | PASS       | 5794.9891                      | PASS       | 5794.9911                      | PASS       |
| -30                     | 120                      | 5795.0282                      | PASS       | 5795.024                       | PASS       | 5795.023                       | PASS       | 5795.0232                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.866264                       | PASS       | 4.141501                       | PASS       | 4.503883                       | PASS       | 4.417601                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5795 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5794.9961                      | PASS       | 5794.9966                      | PASS       | 5794.9982                      | PASS       | 5794.9956                      | PASS       |
|                         | 120                      | 5794.9971                      | PASS       | 5794.9957                      | PASS       | 5794.9973                      | PASS       | 5794.9961                      | PASS       |
|                         | 102                      | 5794.9972                      | PASS       | 5794.9968                      | PASS       | 5794.9976                      | PASS       | 5794.9954                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 0.672994                       | PASS       | 0.742019                       | PASS       | 0.465919                       | PASS       | 0.793788                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5210.0008                      | PASS       | 5210.0008                      | PASS       | 5209.9973                      | PASS       | 5210.0007                      | PASS       |
| 40                      | 120                      | 5210.0206                      | PASS       | 5210.0199                      | PASS       | 5210.0211                      | PASS       | 5210.0205                      | PASS       |
| 30                      | 120                      | 5210.0085                      | PASS       | 5210.0086                      | PASS       | 5210.0124                      | PASS       | 5210.0107                      | PASS       |
| 20                      | 120                      | 5209.9863                      | PASS       | 5209.9871                      | PASS       | 5209.9895                      | PASS       | 5209.9908                      | PASS       |
| 10                      | 120                      | 5209.9781                      | PASS       | 5209.9738                      | PASS       | 5209.9757                      | PASS       | 5209.9751                      | PASS       |
| 0                       | 120                      | 5210.0053                      | PASS       | 5210.0012                      | PASS       | 5210.004                       | PASS       | 5210.0029                      | PASS       |
| -10                     | 120                      | 5209.9854                      | PASS       | 5209.9877                      | PASS       | 5209.9869                      | PASS       | 5209.9873                      | PASS       |
| -20                     | 120                      | 5210.0234                      | PASS       | 5210.0223                      | PASS       | 5210.0236                      | PASS       | 5210.0227                      | PASS       |
| -30                     | 120                      | 5209.9774                      | PASS       | 5209.9741                      | PASS       | 5209.978                       | PASS       | 5209.977                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.491363                       | PASS       | 5.028791                       | PASS       | 4.664107                       | PASS       | 4.779271                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5209.9854                      | PASS       | 5209.9875                      | PASS       | 5209.9893                      | PASS       | 5209.9913                      | PASS       |
|                         | 120                      | 5209.9863                      | PASS       | 5209.9871                      | PASS       | 5209.9895                      | PASS       | 5209.9908                      | PASS       |
|                         | 102                      | 5209.986                       | PASS       | 5209.9875                      | PASS       | 5209.9893                      | PASS       | 5209.9905                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.802303                       | PASS       | 2.476008                       | PASS       | 2.053743                       | PASS       | 1.823417                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5209.9917                      | PASS       | 5209.9956                      | PASS       | 5209.9938                      | PASS       | 5209.9954                      | PASS       |
| 40                      | 120                      | 5209.9872                      | PASS       | 5209.9842                      | PASS       | 5209.9854                      | PASS       | 5209.9853                      | PASS       |
| 30                      | 120                      | 5209.9847                      | PASS       | 5209.9818                      | PASS       | 5209.9858                      | PASS       | 5209.9846                      | PASS       |
| 20                      | 120                      | 5210.0142                      | PASS       | 5210.0101                      | PASS       | 5210.0101                      | PASS       | 5210.0139                      | PASS       |
| 10                      | 120                      | 5209.9953                      | PASS       | 5209.9967                      | PASS       | 5209.9957                      | PASS       | 5209.9947                      | PASS       |
| 0                       | 120                      | 5209.9867                      | PASS       | 5209.9892                      | PASS       | 5209.9901                      | PASS       | 5209.9893                      | PASS       |
| -10                     | 120                      | 5209.9844                      | PASS       | 5209.985                       | PASS       | 5209.9849                      | PASS       | 5209.9824                      | PASS       |
| -20                     | 120                      | 5210.0117                      | PASS       | 5210.0121                      | PASS       | 5210.0085                      | PASS       | 5210.0092                      | PASS       |
| -30                     | 120                      | 5210.0015                      | PASS       | 5210.0007                      | PASS       | 5209.9991                      | PASS       | 5210.0001                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.994242                       | PASS       | 3.493282                       | PASS       | 2.898273                       | PASS       | 3.378119                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5210.0135                      | PASS       | 5210.0101                      | PASS       | 5210.0111                      | PASS       | 5210.013                       | PASS       |
|                         | 120                      | 5210.0142                      | PASS       | 5210.0101                      | PASS       | 5210.0101                      | PASS       | 5210.0139                      | PASS       |
|                         | 102                      | 5210.0147                      | PASS       | 5210.0105                      | PASS       | 5210.0095                      | PASS       | 5210.0142                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.821497                       | PASS       | 2.015355                       | PASS       | 2.130518                       | PASS       | 2.725528                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5210 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5209.996                       | PASS       | 5209.9991                      | PASS       | 5209.9979                      | PASS       | 5209.9942                      | PASS       |
| 40                      | 120                      | 5210.0222                      | PASS       | 5210.0185                      | PASS       | 5210.0212                      | PASS       | 5210.0199                      | PASS       |
| 30                      | 120                      | 5210.0209                      | PASS       | 5210.0242                      | PASS       | 5210.0244                      | PASS       | 5210.023                       | PASS       |
| 20                      | 120                      | 5210.0161                      | PASS       | 5210.0149                      | PASS       | 5210.0156                      | PASS       | 5210.0163                      | PASS       |
| 10                      | 120                      | 5210.0252                      | PASS       | 5210.0237                      | PASS       | 5210.025                       | PASS       | 5210.026                       | PASS       |
| 0                       | 120                      | 5210.016                       | PASS       | 5210.0167                      | PASS       | 5210.0153                      | PASS       | 5210.0197                      | PASS       |
| -10                     | 120                      | 5210.0248                      | PASS       | 5210.0255                      | PASS       | 5210.0241                      | PASS       | 5210.0244                      | PASS       |
| -20                     | 120                      | 5210.0081                      | PASS       | 5210.0079                      | PASS       | 5210.0043                      | PASS       | 5210.0063                      | PASS       |
| -30                     | 120                      | 5210.0057                      | PASS       | 5210.0088                      | PASS       | 5210.0053                      | PASS       | 5210.0048                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.836852                       | PASS       | 4.894434                       | PASS       | 4.798464                       | PASS       | 4.990403                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5210 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5210.0153                      | PASS       | 5210.0154                      | PASS       | 5210.0151                      | PASS       | 5210.0158                      | PASS       |
|                         | 120                      | 5210.0161                      | PASS       | 5210.0149                      | PASS       | 5210.0156                      | PASS       | 5210.0163                      | PASS       |
|                         | 102                      | 5210.0171                      | PASS       | 5210.0155                      | PASS       | 5210.0158                      | PASS       | 5210.0162                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 3.282150                       | PASS       | 2.975048                       | PASS       | 3.032630                       | PASS       | 3.128599                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Temp.**

Operating Frequency: 5210 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5209.9831                      | PASS       | 5209.9861                      | PASS       | 5209.983                       | PASS       | 5209.9873                      | PASS       |
| 40                      | 120                      | 5209.9726                      | PASS       | 5209.9771                      | PASS       | 5209.9727                      | PASS       | 5209.9724                      | PASS       |
| 30                      | 120                      | 5210.0244                      | PASS       | 5210.0247                      | PASS       | 5210.0232                      | PASS       | 5210.0239                      | PASS       |
| 20                      | 120                      | 5209.9883                      | PASS       | 5209.9856                      | PASS       | 5209.9871                      | PASS       | 5209.9875                      | PASS       |
| 10                      | 120                      | 5210.0237                      | PASS       | 5210.0242                      | PASS       | 5210.0251                      | PASS       | 5210.0227                      | PASS       |
| 0                       | 120                      | 5210.0244                      | PASS       | 5210.0254                      | PASS       | 5210.0237                      | PASS       | 5210.0232                      | PASS       |
| -10                     | 120                      | 5209.9805                      | PASS       | 5209.9771                      | PASS       | 5209.9804                      | PASS       | 5209.9807                      | PASS       |
| -20                     | 120                      | 5209.9881                      | PASS       | 5209.9878                      | PASS       | 5209.99                        | PASS       | 5209.9856                      | PASS       |
| -30                     | 120                      | 5210.0054                      | PASS       | 5210.0101                      | PASS       | 5210.0073                      | PASS       | 5210.0104                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.259117                       | PASS       | 4.875240                       | PASS       | 5.239923                       | PASS       | 5.297505                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

**Frequency Stability Versus Voltage**

Operating Frequency: 5210 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5209.9891                      | PASS       | 5209.9863                      | PASS       | 5209.9861                      | PASS       | 5209.9872                      | PASS       |
|                         | 120                      | 5209.9883                      | PASS       | 5209.9856                      | PASS       | 5209.9871                      | PASS       | 5209.9875                      | PASS       |
|                         | 102                      | 5209.9874                      | PASS       | 5209.9866                      | PASS       | 5209.9875                      | PASS       | 5209.9876                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.418426                       | PASS       | 2.763916                       | PASS       | 2.667946                       | PASS       | 2.456814                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5774.9895                      | PASS       | 5774.9898                      | PASS       | 5774.9873                      | PASS       | 5774.9868                      | PASS       |
| 40                      | 120                      | 5775.0154                      | PASS       | 5775.0139                      | PASS       | 5775.0122                      | PASS       | 5775.0126                      | PASS       |
| 30                      | 120                      | 5775.0243                      | PASS       | 5775.0232                      | PASS       | 5775.0221                      | PASS       | 5775.0227                      | PASS       |
| 20                      | 120                      | 5775.031                       | PASS       | 5775.031                       | PASS       | 5775.0277                      | PASS       | 5775.0274                      | PASS       |
| 10                      | 120                      | 5774.9943                      | PASS       | 5774.9971                      | PASS       | 5774.9975                      | PASS       | 5774.9972                      | PASS       |
| 0                       | 120                      | 5774.9902                      | PASS       | 5774.9909                      | PASS       | 5774.9873                      | PASS       | 5774.9902                      | PASS       |
| -10                     | 120                      | 5775.0031                      | PASS       | 5775.0034                      | PASS       | 5775.0054                      | PASS       | 5775.0029                      | PASS       |
| -20                     | 120                      | 5774.9834                      | PASS       | 5774.9797                      | PASS       | 5774.9831                      | PASS       | 5774.9816                      | PASS       |
| -30                     | 120                      | 5774.9926                      | PASS       | 5774.9918                      | PASS       | 5774.9884                      | PASS       | 5774.991                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.367965                       | PASS       | 5.367965                       | PASS       | 4.796537                       | PASS       | 4.744589                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Ant1

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5775.032                       | PASS       | 5775.031                       | PASS       | 5775.0272                      | PASS       | 5775.0268                      | PASS       |
|                         | 120                      | 5775.031                       | PASS       | 5775.031                       | PASS       | 5775.0277                      | PASS       | 5775.0274                      | PASS       |
|                         | 102                      | 5775.0311                      | PASS       | 5775.0299                      | PASS       | 5775.0268                      | PASS       | 5775.0278                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.541126                       | PASS       | 5.367965                       | PASS       | 4.796537                       | PASS       | 4.813853                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5775.0128                      | PASS       | 5775.0162                      | PASS       | 5775.0153                      | PASS       | 5775.0134                      | PASS       |
| 40                      | 120                      | 5774.9738                      | PASS       | 5774.9718                      | PASS       | 5774.971                       | PASS       | 5774.9722                      | PASS       |
| 30                      | 120                      | 5775.0245                      | PASS       | 5775.024                       | PASS       | 5775.0253                      | PASS       | 5775.0246                      | PASS       |
| 20                      | 120                      | 5775.0139                      | PASS       | 5775.0157                      | PASS       | 5775.0152                      | PASS       | 5775.0173                      | PASS       |
| 10                      | 120                      | 5774.9991                      | PASS       | 5774.9942                      | PASS       | 5774.9943                      | PASS       | 5774.9966                      | PASS       |
| 0                       | 120                      | 5774.9803                      | PASS       | 5774.9823                      | PASS       | 5774.9816                      | PASS       | 5774.9805                      | PASS       |
| -10                     | 120                      | 5775.0148                      | PASS       | 5775.0189                      | PASS       | 5775.017                       | PASS       | 5775.0175                      | PASS       |
| -20                     | 120                      | 5775.0122                      | PASS       | 5775.0127                      | PASS       | 5775.0149                      | PASS       | 5775.0125                      | PASS       |
| -30                     | 120                      | 5774.9937                      | PASS       | 5774.9946                      | PASS       | 5774.9927                      | PASS       | 5774.9899                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.536797                       | PASS       | 4.883117                       | PASS       | 5.021645                       | PASS       | 4.813853                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Ant2

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5775.0133                      | PASS       | 5775.0155                      | PASS       | 5775.0158                      | PASS       | 5775.0175                      | PASS       |
|                         | 120                      | 5775.0139                      | PASS       | 5775.0157                      | PASS       | 5775.0152                      | PASS       | 5775.0173                      | PASS       |
|                         | 102                      | 5775.0137                      | PASS       | 5775.0168                      | PASS       | 5775.0152                      | PASS       | 5775.0164                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 2.406926                       | PASS       | 2.909091                       | PASS       | 2.735931                       | PASS       | 3.030303                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |



## Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5775.03                        | PASS       | 5775.0291                      | PASS       | 5775.0275                      | PASS       | 5775.029                       | PASS       |
| 40                      | 120                      | 5774.9801                      | PASS       | 5774.9824                      | PASS       | 5774.9809                      | PASS       | 5774.978                       | PASS       |
| 30                      | 120                      | 5774.9729                      | PASS       | 5774.9735                      | PASS       | 5774.9722                      | PASS       | 5774.9725                      | PASS       |
| 20                      | 120                      | 5775.029                       | PASS       | 5775.0269                      | PASS       | 5775.025                       | PASS       | 5775.0259                      | PASS       |
| 10                      | 120                      | 5775.0029                      | PASS       | 5775.0006                      | PASS       | 5775.0028                      | PASS       | 5774.9998                      | PASS       |
| 0                       | 120                      | 5774.9984                      | PASS       | 5774.9984                      | PASS       | 5775.0001                      | PASS       | 5774.9984                      | PASS       |
| -10                     | 120                      | 5774.9836                      | PASS       | 5774.9833                      | PASS       | 5774.9797                      | PASS       | 5774.9791                      | PASS       |
| -20                     | 120                      | 5774.9915                      | PASS       | 5774.9906                      | PASS       | 5774.9893                      | PASS       | 5774.9876                      | PASS       |
| -30                     | 120                      | 5774.9736                      | PASS       | 5774.9745                      | PASS       | 5774.9757                      | PASS       | 5774.9732                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.194805                       | PASS       | 5.038961                       | PASS       | 4.813853                       | PASS       | 5.021645                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Ant3

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5775.0284                      | PASS       | 5775.0262                      | PASS       | 5775.0239                      | PASS       | 5775.0263                      | PASS       |
|                         | 120                      | 5775.029                       | PASS       | 5775.0269                      | PASS       | 5775.025                       | PASS       | 5775.0259                      | PASS       |
|                         | 102                      | 5775.0301                      | PASS       | 5775.0266                      | PASS       | 5775.0245                      | PASS       | 5775.0248                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 5.212121                       | PASS       | 4.658009                       | PASS       | 4.329004                       | PASS       | 4.554113                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Temp.

Operating Frequency: 5775 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 50                      | 120                      | 5774.9742                      | PASS       | 5774.9731                      | PASS       | 5774.9746                      | PASS       | 5774.9727                      | PASS       |
| 40                      | 120                      | 5775.0219                      | PASS       | 5775.02                        | PASS       | 5775.0194                      | PASS       | 5775.021                       | PASS       |
| 30                      | 120                      | 5774.9736                      | PASS       | 5774.9739                      | PASS       | 5774.9731                      | PASS       | 5774.975                       | PASS       |
| 20                      | 120                      | 5774.9888                      | PASS       | 5774.9935                      | PASS       | 5774.9883                      | PASS       | 5774.9901                      | PASS       |
| 10                      | 120                      | 5775.0238                      | PASS       | 5775.0261                      | PASS       | 5775.0226                      | PASS       | 5775.0252                      | PASS       |
| 0                       | 120                      | 5775.0265                      | PASS       | 5775.0242                      | PASS       | 5775.0271                      | PASS       | 5775.0282                      | PASS       |
| -10                     | 120                      | 5774.9749                      | PASS       | 5774.9738                      | PASS       | 5774.9757                      | PASS       | 5774.9736                      | PASS       |
| -20                     | 120                      | 5774.9738                      | PASS       | 5774.9786                      | PASS       | 5774.9747                      | PASS       | 5774.9793                      | PASS       |
| -30                     | 120                      | 5775.0166                      | PASS       | 5775.013                       | PASS       | 5775.0159                      | PASS       | 5775.016                       | PASS       |
| Max. Deviation<br>(ppm) |                          | 4.588745                       | PASS       | 4.658009                       | PASS       | 4.692641                       | PASS       | 4.883117                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## Frequency Stability Versus Voltage

Operating Frequency: 5775 MHz Ant4

| TEMP.<br>(°C)           | POWER<br>SUPPLY<br>(Vac) | 0 MINUTE                       |            | 2 MINUTES                      |            | 5 MINUTES                      |            | 10 MINUTES                     |            |
|-------------------------|--------------------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|--------------------------------|------------|
|                         |                          | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail | Measured<br>Frequency<br>(MHz) | Pass/ Fail |
| 20                      | 138                      | 5774.9892                      | PASS       | 5774.9945                      | PASS       | 5774.9892                      | PASS       | 5774.991                       | PASS       |
|                         | 120                      | 5774.9888                      | PASS       | 5774.9935                      | PASS       | 5774.9883                      | PASS       | 5774.9901                      | PASS       |
|                         | 102                      | 5774.9898                      | PASS       | 5774.9925                      | PASS       | 5774.9891                      | PASS       | 5774.9903                      | PASS       |
| Max. Deviation<br>(ppm) |                          | 1.939394                       | PASS       | 1.298701                       | PASS       | 2.025974                       | PASS       | 1.714286                       | PASS       |
| IEEE Limit<br>(ppm)     |                          | ±20ppm                         |            |                                |            |                                |            |                                |            |

## 5 Test Instruments

| DESCRIPTION & MANUFACTURER   | MODEL NO.               | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|--|-------------------------|------------|-----------------|------------------|
| Test Receiver<br>R&S   | ESCS 30                 | 847124/029 | Oct. 23, 2019   | Oct. 22, 2020    |
| Line-Impedance<br>Stabilization Network (for<br>EUT)<br>R&S        | ESH3-Z5                 | 848773/004 | Oct. 23, 2019   | Oct. 22, 2020    |
| Line-Impedance<br>Stabilization Network<br>(for Peripheral)<br>R&S | ESH3-Z5                 | 835239/001 | Mar. 17, 2019   | Mar. 16, 2020    |
| 50 ohms Terminator   | 50                      | 3          | Oct. 23, 2019   | Oct. 22, 2020    |
| RF Cable   | 5D-FB                   | COCCAB-001 | Sep. 27, 2019   | Sep. 26, 2020    |
| Fixed attenuator<br>EMCI   | STI02-2200-10           | 003        | Mar. 14, 2019   | Mar. 13, 2020    |
| Software<br>BVADT  | BVADT_Cond_<br>V7.3.7.4 | NA         | NA              | NA               |

### Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 1.
3. Tested Date: Feb. 19, 2020

For 1S4T CDD Bandedge test:

| DESCRIPTION & MANUFACTURER             | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|--|----------------------|-------------|-----------------|------------------|
| Test Receiver<br>Keysight              | N9038A               | MY54450088  | July 03, 2019   | July 02, 2020    |
| Horn_Antenna<br>SCHWARZBECK            | BBHA9120-D           | 9120D-406   | Nov. 24, 2019   | Nov. 23, 2020    |
| Pre-Amplifier<br>EMCI                  | EMC12630SE           | 980384      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                               | EMC104-SM-SM-1200    | 160922      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                               | EMC104-SM-SM-2000    | 180601      | June 10, 2019   | June 09, 2020    |
| RF Cable                               | EMC104-SM-SM-6000    | 180602      | June 10, 2019   | June 09, 2020    |
| Spectrum Analyzer<br>Keysight          | N9030A               | MY54490679  | July 17, 2019   | July 16, 2020    |
| Pre-Amplifier<br>EMCI                  | EMC184045SE          | 980387      | Jan. 28, 2019   | Jan. 27, 2020    |
| Horn_Antenna<br>SCHWARZBECK            | BBHA 9170            | BBHA9170519 | Nov. 24, 2019   | Nov. 23, 2020    |
| RF Cable                               | EMC102-KM-KM-1200    | 160924      | Jan. 28, 2019   | Jan. 27, 2020    |
| RF Cable                               | EMC102-KM-KM-1200    | 160925      | Jan. 28, 2019   | Jan. 27, 2020    |
| Software                               | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Antenna Tower & Turn Table<br>Max-Full | MF-7802              | MF780208406 | NA              | NA               |
| Boresight Antenna Fixture              | FBA-01               | FBA-SIP01   | NA              | NA               |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz
4. Tested Date: Jan. 09, 2020

For other test items

| DESCRIPTION & MANUFACTURER              | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|---|----------------------|-------------|-----------------|------------------|
| Test Receiver<br>Keysight               | N9038A               | MY54450088  | July 03, 2019   | July 02, 2020    |
| Pre-Amplifier<br>EMCI                   | EMC001340            | 980142      | May 30, 2019    | May 29, 2020     |
| Loop Antenna<br>Electro-Metrics         | EM-6879              | 269         | Sep. 16, 2019   | Sep. 15, 2020    |
| RF Cable                                | NA                   | LOOPCAB-001 | Jan. 08, 2020   | Jan. 07, 2021    |
| RF Cable                                | NA                   | LOOPCAB-002 | Jan. 08, 2020   | Jan. 07, 2021    |
| Pre-Amplifier<br>Mini-Circuits          | ZFL-1000VH2B         | AMP-ZFL-05  | Apr. 30, 2019   | Apr. 29, 2020    |
| Trilog Broadband Antenna<br>SCHWARZBECK | VULB 9168            | 9168-361    | Nov. 11, 2019   | Nov. 10, 2020    |
| RF Cable                                | 8D                   | 966-3-1     | Mar. 18, 2019   | Mar. 17, 2020    |
| RF Cable                                | 8D                   | 966-3-2     | Mar. 18, 2019   | Mar. 17, 2020    |
| RF Cable                                | 8D                   | 966-3-3     | Mar. 18, 2019   | Mar. 17, 2020    |
| Fixed attenuator<br>Mini-Circuits       | UNAT-5+              | PAD-3m-3-01 | Sep. 26, 2019   | Sep. 25, 2020    |
| Horn_Antenna<br>SCHWARZBECK             | BBHA9120-D           | 9120D-406   | Nov. 24, 2019   | Nov. 23, 2020    |
| Pre-Amplifier<br>EMCI                   | EMC12630SE           | 980384      | Jan. 15, 2020   | Jan. 14, 2021    |
| RF Cable                                | EMC104-SM-SM-1200    | 160922      | Jan. 15, 2020   | Jan. 14, 2021    |
| RF Cable                                | EMC104-SM-SM-2000    | 180601      | June 10, 2019   | June 09, 2020    |
| RF Cable                                | EMC104-SM-SM-6000    | 180602      | June 10, 2019   | June 09, 2020    |
| Spectrum Analyzer<br>Keysight           | N9030A               | MY54490679  | July 17, 2019   | July 16, 2020    |
| Pre-Amplifier<br>EMCI                   | EMC184045SE          | 980387      | Jan. 15, 2020   | Jan. 14, 2021    |
| Horn_Antenna<br>SCHWARZBECK             | BBHA 9170            | BBHA9170519 | Nov. 24, 2019   | Nov. 23, 2020    |
| RF Cable                                | EMC102-KM-KM-1200    | 160924      | Jan. 15, 2020   | Jan. 14, 2021    |
| RF Cable                                | EMC102-KM-KM-4500    | 181205      | Aug. 26, 2019   | Aug. 25, 2020    |
| Software                                | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Antenna Tower & Turn Table<br>Max-Full  | MF-7802              | MF780208406 | NA              | NA               |
| Boresight Antenna Fixture               | FBA-01               | FBA-SIP01   | NA              | NA               |
| Spectrum Analyzer<br>R&S                | FSV40                | 100964      | June 04, 2019   | June 03, 2020    |
| Power meter<br>Anritsu                  | ML2495A              | 1014008     | May 13, 2019    | May 12, 2020     |
| Power sensor<br>Anritsu                 | MA2411B              | 0917122     | May 13, 2019    | May 12, 2020     |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz
4. Tested Date: Jan. 25 to Feb. 22, 2020

## Appendix - Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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