

# 2J6B86BGff

4× 5GNR MIMO, 4× 2.4/5.0/6.0 GHz ISM MIMO and GNSS  
Screw Mount

## Key Features

### Cable 1 - 4: 5GNR

- 617-960 MHz
- 1427-2690 MHz
- 3300-5000 MHz
- 5150-5925 MHz

### Cable 5 - 8: 2.4/5.0/6.0 GHz ISM

- 2410-2490 MHz
- 4920-7125 MHz

### Cable 9: GPS/GLONASS/QZSS/Galileo

- 1575-1606 MHz

Screw Mount

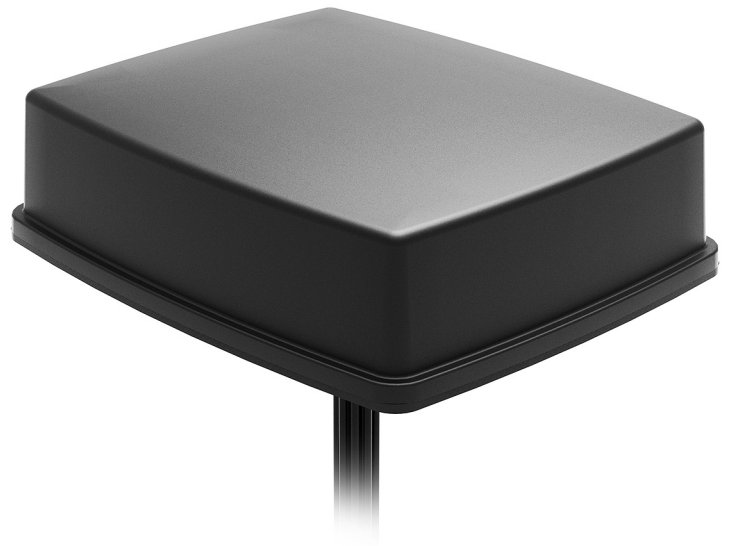
High Performance

Ground Plane Independent

Customizable Cable and Connector

Dimensions: 199 × 167 × 53 mm

Certificates: IP67, IP69



## 1. Antenna and electrical specifications

Cable 1

| Parameters           | 5G NR Antenna                                                                                       |                                                                                                                                                                                 |                                 |                      |
|----------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| Technologies         | 5G, 4G, 3G and 2G                                                                                   |                                                                                                                                                                                 |                                 |                      |
| Standards            | 5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G                                   |                                                                                                                                                                                 |                                 |                      |
| Frequency (MHz)      | 617-960                                                                                             | 1427-2690                                                                                                                                                                       | 3300-5000                       | 5150-5925            |
| Band (MHz)           | 600, 700, 850, 900                                                                                  | 1500, 1600, 1700, 1800,<br>1900, 2000, 2100, 2300,<br>2500, 2600                                                                                                                | 3300, 3500, 3600,<br>3700, 4500 | 5200, 5500, 5800     |
| 5G NR Bands          | n5, n8, 12, n20, n28, n71,<br>n81, n82, n83,                                                        | n1, n2, n3, n7, n25, n34,<br>n38, n39, n40, n41, n50,<br>n51, n66, n70, n74, n75,<br>n76, n80, n84, n86                                                                         | n77, n78, n79                   |                      |
| 4G LTE Bands         | B5, B6, B8, B12, B13, B14,<br>B17, B18, B19, B20, B26,<br>B27, B28, B29, B44, B67,<br>B68, B71, B85 | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B23, B24,<br>B25, B30, B32, B33, B34,<br>B35, B36, B37, B38, B39,<br>B40, B41, B45, B50, B51,<br>B65, B66, B69, B70, B74,<br>B75, B76 | B22, B42, B43, B48,<br>B49, B52 | B46, B47, B252, B255 |
| 3G CELL Bands        | B5, B6, B8, B12, B13, B14,<br>B19, B20, B26                                                         | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B25, B32,<br>B33, B34, B35, B36, B37,<br>B38, B39, B40                                                                                | B22                             |                      |
| 2G CELL Bands        | 710, 750, 810T, 850, 900P,<br>900E, 900R                                                            | 1800DCS, 1900PCS                                                                                                                                                                |                                 |                      |
| CDMA CELL Bands      | BC0, BC2, BC3, BC7, BC9,<br>BC10, BC12, BC18, BC19                                                  | BC1, BC4, BC6, BC8,<br>BC13, BC14, BC15, BC16,<br>BC20, BC21                                                                                                                    |                                 |                      |
| Return Loss (dB)     | ~-14.2                                                                                              | ~-15.4                                                                                                                                                                          | ~-18.3                          | ~-9.2                |
| VSWR                 | ~1.6:1                                                                                              | ~1.6:1                                                                                                                                                                          | ~1.3:1                          | ~2.1:1               |
| Efficiency (%)       | ~40.0                                                                                               | ~45.7                                                                                                                                                                           | ~44.2                           | ~36.8                |
| Peak Gain (dBi)      | ~3.0                                                                                                | ~5.0                                                                                                                                                                            | ~4.6                            | ~5.0                 |
| Average Gain (dB)    | ~-4.1                                                                                               | ~-3.4                                                                                                                                                                           | ~-3.6                           | ~-4.4                |
| Impedance (Ohm)      | 50                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Polarisation         | Linear                                                                                              |                                                                                                                                                                                 |                                 |                      |
| Radiation Pattern    | Omni-Directional                                                                                    |                                                                                                                                                                                 |                                 |                      |
| Max. Input Power (W) | 25                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Connector Type       | SMA-Male Standard (Other Connectors Available)                                                      |                                                                                                                                                                                 |                                 |                      |
| Cable Length         | 300 cm Standard (Any Cable Length Available)                                                        |                                                                                                                                                                                 |                                 |                      |
| Cable Type           | D302 Standard (Other Cables Available)                                                              |                                                                                                                                                                                 |                                 |                      |

Cable 2

| Parameters           | 5G NR Antenna                                                                                       |                                                                                                                                                                                 |                                 |                      |
|----------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| Technologies         | 5G, 4G, 3G and 2G                                                                                   |                                                                                                                                                                                 |                                 |                      |
| Standards            | 5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G                                   |                                                                                                                                                                                 |                                 |                      |
| Frequency (MHz)      | 617-960                                                                                             | 1427-2690                                                                                                                                                                       | 3300-5000                       | 5150-5925            |
| Band (MHz)           | 600, 700, 850, 900                                                                                  | 1500, 1600, 1700, 1800,<br>1900, 2000, 2100, 2300,<br>2500, 2600                                                                                                                | 3300, 3500, 3600,<br>3700, 4500 | 5200, 5500, 5800     |
| 5G NR Bands          | n5, n8, 12, n20, n28, n71,<br>n81, n82, n83,                                                        | n1, n2, n3, n7, n25, n34,<br>n38, n39, n40, n41, n50,<br>n51, n66, n70, n74, n75,<br>n76, n80, n84, n86                                                                         | n77, n78, n79                   |                      |
| 4G LTE Bands         | B5, B6, B8, B12, B13, B14,<br>B17, B18, B19, B20, B26,<br>B27, B28, B29, B44, B67,<br>B68, B71, B85 | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B23, B24,<br>B25, B30, B32, B33, B34,<br>B35, B36, B37, B38, B39,<br>B40, B41, B45, B50, B51,<br>B65, B66, B69, B70, B74,<br>B75, B76 | B22, B42, B43, B48,<br>B49, B52 | B46, B47, B252, B255 |
| 3G CELL Bands        | B5, B6, B8, B12, B13, B14,<br>B19, B20, B26                                                         | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B25, B32,<br>B33, B34, B35, B36, B37,<br>B38, B39, B40                                                                                | B22                             |                      |
| 2G CELL Bands        | 710, 750, 810T, 850, 900P,<br>900E, 900R                                                            | 1800DCS, 1900PCS                                                                                                                                                                |                                 |                      |
| CDMA CELL Bands      | BC0, BC2, BC3, BC7, BC9,<br>BC10, BC12, BC18, BC19                                                  | BC1, BC4, BC6, BC8,<br>BC13, BC14, BC15, BC16,<br>BC20, BC21                                                                                                                    |                                 |                      |
| Return Loss (dB)     | ~-12.8                                                                                              | ~-15.3                                                                                                                                                                          | ~-18.5                          | ~-10.8               |
| VSWR                 | ~1.9:1                                                                                              | ~1.6:1                                                                                                                                                                          | ~1.4:1                          | ~1.9:1               |
| Efficiency (%)       | ~34.1                                                                                               | ~48.2                                                                                                                                                                           | ~43.7                           | ~37.8                |
| Peak Gain (dBi)      | ~1.1                                                                                                | ~4.8                                                                                                                                                                            | ~5.1                            | ~5.0                 |
| Average Gain (dB)    | ~-4.8                                                                                               | ~-3.2                                                                                                                                                                           | ~-3.6                           | ~-4.3                |
| Impedance (Ohm)      | 50                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Polarisation         | Linear                                                                                              |                                                                                                                                                                                 |                                 |                      |
| Radiation Pattern    | Omni-Directional                                                                                    |                                                                                                                                                                                 |                                 |                      |
| Max. Input Power (W) | 25                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Connector Type       | SMA-Male Standard (Other Connectors Available)                                                      |                                                                                                                                                                                 |                                 |                      |
| Cable Length         | 300 cm Standard (Any Cable Length Available)                                                        |                                                                                                                                                                                 |                                 |                      |
| Cable Type           | D302 Standard (Other Cables Available)                                                              |                                                                                                                                                                                 |                                 |                      |

**Cable 3**

| Parameters           | 5G NR Antenna                                                                                       |                                                                                                                                                                                 |                                 |                      |
|----------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| Technologies         | 5G, 4G, 3G and 2G                                                                                   |                                                                                                                                                                                 |                                 |                      |
| Standards            | 5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G                                   |                                                                                                                                                                                 |                                 |                      |
| Frequency (MHz)      | 617-960                                                                                             | 1427-2690                                                                                                                                                                       | 3300-5000                       | 5150-5925            |
| Band (MHz)           | 600, 700, 850, 900                                                                                  | 1500, 1600, 1700, 1800,<br>1900, 2000, 2100, 2300,<br>2500, 2600                                                                                                                | 3300, 3500, 3600,<br>3700, 4500 | 5200, 5500, 5800     |
| 5G NR Bands          | n5, n8, 12, n20, n28, n71,<br>n81, n82, n83,                                                        | n1, n2, n3, n7, n25, n34,<br>n38, n39, n40, n41, n50,<br>n51, n66, n70, n74, n75,<br>n76, n80, n84, n86                                                                         | n77, n78, n79                   |                      |
| 4G LTE Bands         | B5, B6, B8, B12, B13, B14,<br>B17, B18, B19, B20, B26,<br>B27, B28, B29, B44, B67,<br>B68, B71, B85 | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B23, B24,<br>B25, B30, B32, B33, B34,<br>B35, B36, B37, B38, B39,<br>B40, B41, B45, B50, B51,<br>B65, B66, B69, B70, B74,<br>B75, B76 | B22, B42, B43, B48,<br>B49, B52 | B46, B47, B252, B255 |
| 3G CELL Bands        | B5, B6, B8, B12, B13, B14,<br>B19, B20, B26                                                         | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B25, B32,<br>B33, B34, B35, B36, B37,<br>B38, B39, B40                                                                                | B22                             |                      |
| 2G CELL Bands        | 710, 750, 810T, 850, 900P,<br>900E, 900R                                                            | 1800DCS, 1900PCS                                                                                                                                                                |                                 |                      |
| CDMA CELL Bands      | BC0, BC2, BC3, BC7, BC9,<br>BC10, BC12, BC18, BC19                                                  | BC1, BC4, BC6, BC8,<br>BC13, BC14, BC15, BC16,<br>BC20, BC21                                                                                                                    |                                 |                      |
| Return Loss (dB)     | ~-12.7                                                                                              | ~-14.6                                                                                                                                                                          | ~-19.7                          | ~-13.5               |
| VSWR                 | ~1.9:1                                                                                              | ~1.6:1                                                                                                                                                                          | ~1.3:1                          | ~1.6:1               |
| Efficiency (%)       | ~36.4                                                                                               | ~45.6                                                                                                                                                                           | ~41.2                           | ~38.7                |
| Peak Gain (dBi)      | ~3.0                                                                                                | ~4.9                                                                                                                                                                            | ~4.5                            | ~4.8                 |
| Average Gain (dB)    | ~-4.4                                                                                               | ~-3.5                                                                                                                                                                           | ~-3.9                           | ~-4.1                |
| Impedance (Ohm)      | 50                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Polarisation         | Linear                                                                                              |                                                                                                                                                                                 |                                 |                      |
| Radiation Pattern    | Omni-Directional                                                                                    |                                                                                                                                                                                 |                                 |                      |
| Max. Input Power (W) | 25                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Connector Type       | SMA-Male Standard (Other Connectors Available)                                                      |                                                                                                                                                                                 |                                 |                      |
| Cable Length         | 300 cm Standard (Any Cable Length Available)                                                        |                                                                                                                                                                                 |                                 |                      |
| Cable Type           | D302 Standard (Other Cables Available)                                                              |                                                                                                                                                                                 |                                 |                      |

**Cable 4**

| Parameters           | 5G NR Antenna                                                                                       |                                                                                                                                                                                 |                                 |                      |
|----------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| Technologies         | 5G, 4G, 3G and 2G                                                                                   |                                                                                                                                                                                 |                                 |                      |
| Standards            | 5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G                                   |                                                                                                                                                                                 |                                 |                      |
| Frequency (MHz)      | 617-960                                                                                             | 1427-2690                                                                                                                                                                       | 3300-5000                       | 5150-5925            |
| Band (MHz)           | 600, 700, 850, 900                                                                                  | 1500, 1600, 1700, 1800,<br>1900, 2000, 2100, 2300,<br>2500, 2600                                                                                                                | 3300, 3500, 3600,<br>3700, 4500 | 5200, 5500, 5800     |
| 5G NR Bands          | n5, n8, 12, n20, n28, n71,<br>n81, n82, n83,                                                        | n1, n2, n3, n7, n25, n34,<br>n38, n39, n40, n41, n50,<br>n51, n66, n70, n74, n75,<br>n76, n80, n84, n86                                                                         | n77, n78, n79                   |                      |
| 4G LTE Bands         | B5, B6, B8, B12, B13, B14,<br>B17, B18, B19, B20, B26,<br>B27, B28, B29, B44, B67,<br>B68, B71, B85 | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B23, B24,<br>B25, B30, B32, B33, B34,<br>B35, B36, B37, B38, B39,<br>B40, B41, B45, B50, B51,<br>B65, B66, B69, B70, B74,<br>B75, B76 | B22, B42, B43, B48,<br>B49, B52 | B46, B47, B252, B255 |
| 3G CELL Bands        | B5, B6, B8, B12, B13, B14,<br>B19, B20, B26                                                         | B1, B2, B3, B4, B7, B9,<br>B10, B11, B21, B25, B32,<br>B33, B34, B35, B36, B37,<br>B38, B39, B40                                                                                | B22                             |                      |
| 2G CELL Bands        | 710, 750, 810T, 850, 900P,<br>900E, 900R                                                            | 1800DCS, 1900PCS                                                                                                                                                                |                                 |                      |
| CDMA CELL Bands      | BC0, BC2, BC3, BC7, BC9,<br>BC10, BC12, BC18, BC19                                                  | BC1, BC4, BC6, BC8,<br>BC13, BC14, BC15, BC16,<br>BC20, BC21                                                                                                                    |                                 |                      |
| Return Loss (dB)     | ~-11.8                                                                                              | ~-15.4                                                                                                                                                                          | ~-20.5                          | ~-12.8               |
| VSWR                 | ~1.9:1                                                                                              | ~1.5:1                                                                                                                                                                          | ~1.3:1                          | ~1.6:1               |
| Efficiency (%)       | ~35.8                                                                                               | ~55.4                                                                                                                                                                           | ~51.0                           | ~44.6                |
| Peak Gain (dBi)      | ~2.3                                                                                                | ~5.1                                                                                                                                                                            | ~5.2                            | ~5.0                 |
| Average Gain (dB)    | ~-4.5                                                                                               | ~-2.6                                                                                                                                                                           | ~-2.9                           | ~-3.5                |
| Impedance (Ohm)      | 50                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Polarisation         | Linear                                                                                              |                                                                                                                                                                                 |                                 |                      |
| Radiation Pattern    | Omni-Directional                                                                                    |                                                                                                                                                                                 |                                 |                      |
| Max. Input Power (W) | 25                                                                                                  |                                                                                                                                                                                 |                                 |                      |
| Connector Type       | SMA-Male Standard (Other Connectors Available)                                                      |                                                                                                                                                                                 |                                 |                      |
| Cable Length         | 300 cm Standard (Any Cable Length Available)                                                        |                                                                                                                                                                                 |                                 |                      |
| Cable Type           | D302 Standard (Other Cables Available)                                                              |                                                                                                                                                                                 |                                 |                      |

**Antenna Measurement Conditions:**

Mounted on Metal Plate of 30 x 30 cm

100 cm of Cable D302

Measured in Certified CTIA 3D Anechoic Chamber

Cable 5

| Parameters           | 2.4/5.0/6.0 GHz ISM Antenna                       |           |           |
|----------------------|---------------------------------------------------|-----------|-----------|
| Standards            | WiFi, BT, ZigBee, ISM, Sigfox, LoRa               |           |           |
| Band (MHz)           | 2.4GHz                                            | 5.0 GHz   | 6.0GHz    |
| Frequency (MHz)      | 2410-2490                                         | 4920-5925 | 5925-7125 |
| Return Loss (dB)     | ~-13.9                                            | ~-23.7    | ~-14.1    |
| VSWR                 | ~1.5:1                                            | ~1.2:1    | ~1.5:1    |
| Efficiency (%)       | ~55.6                                             | ~51.9     | ~37.5     |
| Peak Gain (dBi)      | ~4.3                                              | ~6.7      | ~6.3      |
| Average Gain (dB)    | ~-2.6                                             | ~-2.8     | ~-3.2     |
| Impedance (Ohm)      | 50                                                |           |           |
| Polarisation         | Linear                                            |           |           |
| Radiation Pattern    | Omni-Directional                                  |           |           |
| Max. Input Power (W) | 25                                                |           |           |
| Connector Type       | SMA-Male-RP Standard (Other Connectors Available) |           |           |
| Cable Length         | 300 cm Standard (Any Cable Length Available)      |           |           |
| Cable Type           | D302 Standard (Other Cables Available)            |           |           |

Cable 6

| Parameters           | 2.4/5.0/6.0 GHz ISM Antenna                       |           |           |
|----------------------|---------------------------------------------------|-----------|-----------|
| Standards            | WiFi, BT, ZigBee, ISM, Sigfox, LoRa               |           |           |
| Band (MHz)           | 2.4 GHz                                           | 5.0 GHz   | 6.0 GHz   |
| Frequency (MHz)      | 2410-2490                                         | 4920-5925 | 5925-7125 |
| Return Loss (dB)     | ~-14.9                                            | ~-21.6    | ~-14.1    |
| VSWR                 | ~1.5:1                                            | ~1.2:1    | ~1.6:1    |
| Efficiency (%)       | ~50.0                                             | ~49.7     | ~41.1     |
| Peak Gain (dBi)      | ~4.1                                              | ~6.8      | ~6.1      |
| Average Gain (dB)    | ~-3.0                                             | ~-3.0     | ~-2.8     |
| Impedance (Ohm)      | 50                                                |           |           |
| Polarisation         | Linear                                            |           |           |
| Radiation Pattern    | Omni-Directional                                  |           |           |
| Max. Input Power (W) | 25                                                |           |           |
| Connector Type       | SMA-Male-RP Standard (Other Connectors Available) |           |           |
| Cable Length         | 300 cm Standard (Any Cable Length Available)      |           |           |
| Cable Type           | D302 Standard (Other Cables Available)            |           |           |

**Cable 7**

| Parameters                  | 2.4/5.0/6.0 GHz ISM Antenna                       |           |           |
|-----------------------------|---------------------------------------------------|-----------|-----------|
| <b>Standards</b>            | WiFi, BT, ZigBee, ISM, Sigfox, LoRa               |           |           |
| <b>Band (MHz)</b>           | 2.4GHz                                            | 5.0 GHz   | 6.0GHz    |
| <b>Frequency (MHz)</b>      | 2410-2490                                         | 4920-5925 | 5925-7125 |
| <b>Return Loss (dB)</b>     | ~-14.1                                            | ~-22.4    | ~-14.2    |
| <b>VSWR</b>                 | ~1.5:1                                            | ~1.2:1    | ~1.6:1    |
| <b>Efficiency (%)</b>       | ~58.0                                             | ~49.7     | ~36.5     |
| <b>Peak Gain (dBi)</b>      | ~4.4                                              | ~6.7      | ~5.6      |
| <b>Average Gain (dB)</b>    | ~-2.4                                             | ~-3.0     | ~-3.3     |
| <b>Impedance (Ohm)</b>      | 50                                                |           |           |
| <b>Polarisation</b>         | Linear                                            |           |           |
| <b>Radiation Pattern</b>    | Omni-Directional                                  |           |           |
| <b>Max. Input Power (W)</b> | 25                                                |           |           |
| <b>Connector Type</b>       | SMA-Male-RP Standard (Other Connectors Available) |           |           |
| <b>Cable Length</b>         | 300 cm Standard (Any Cable Length Available)      |           |           |
| <b>Cable Type</b>           | D302 Standard (Other Cables Available)            |           |           |

**Cable 8**

| Parameters                  | 2.4/5.0/6.0 GHz ISM Antenna                       |           |           |
|-----------------------------|---------------------------------------------------|-----------|-----------|
| <b>Standards</b>            | WiFi, BT, ZigBee, ISM, Sigfox, LoRa               |           |           |
| <b>Band (MHz)</b>           | 2.4 GHz                                           | 5.0 GHz   | 6.0 GHz   |
| <b>Frequency (MHz)</b>      | 2410-2490                                         | 4920-5925 | 5925-7125 |
| <b>Return Loss (dB)</b>     | ~-13.3                                            | ~-18.5    | ~-15.2    |
| <b>VSWR</b>                 | ~1.6:1                                            | ~1.3:1    | ~1.5:1    |
| <b>Efficiency (%)</b>       | ~52.2                                             | ~44.0     | ~33.8     |
| <b>Peak Gain (dBi)</b>      | ~4.2                                              | ~8.0      | ~6.6      |
| <b>Average Gain (dB)</b>    | ~-2.8                                             | ~-3.6     | ~-3.6     |
| <b>Impedance (Ohm)</b>      | 50                                                |           |           |
| <b>Polarisation</b>         | Linear                                            |           |           |
| <b>Radiation Pattern</b>    | Omni-Directional                                  |           |           |
| <b>Max. Input Power (W)</b> | 25                                                |           |           |
| <b>Connector Type</b>       | SMA-Male-RP Standard (Other Connectors Available) |           |           |
| <b>Cable Length</b>         | 300 cm Standard (Any Cable Length Available)      |           |           |
| <b>Cable Type</b>           | D302 Standard (Other Cables Available)            |           |           |

**Antenna Measurement Conditions:**

Mounted on Metal Plate of 30 x 30 cm

100 cm of Cable D302

Measured in Certified CTIA 3D Anechoic Chamber

Cable 9

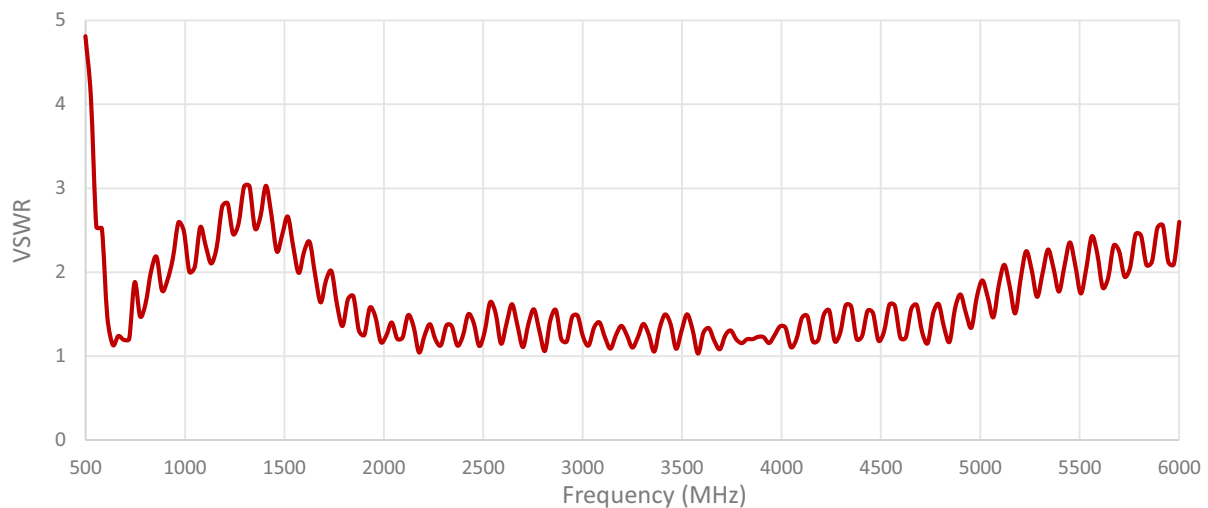
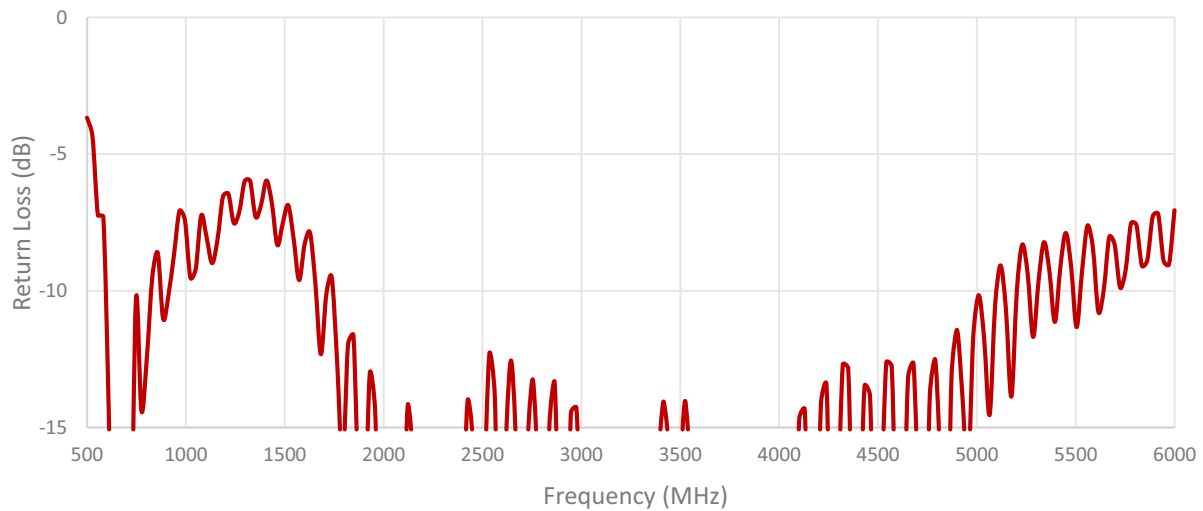
| Parameters                 | GPS/GLONASS Antenna                            |           |
|----------------------------|------------------------------------------------|-----------|
| Standards                  | GPS/QZSS/Galileo                               | GLONASS   |
| Bands (MHz)                | 1575                                           | 1602      |
| Frequency (MHz)            | 1575.42                                        | 1598-1606 |
| Passive Gain (dBi)         | ~4.5                                           | ~5.0      |
| Impedance (Ohms)           | 50                                             |           |
| Radiation Pattern          | Hemispherical                                  |           |
| Voltage Range (V)          | 1.5 - 3.6                                      |           |
| Active Gain (dB)           | 28 @ 2.7 V                                     |           |
| Noise Figure (dB)          | 1.8 @ 2.7 V                                    |           |
| Current Consumption (mA)   | 9 @ 2.7 V                                      |           |
| Power Consumption (mW)     | 24.3 @ 2.7 V                                   |           |
| Saw Filter Type            | Pre-Filter                                     |           |
| Out of Band Rejection (dB) | ~43                                            |           |
| ESD Protection (kV)        | 6                                              |           |
| Connector Type             | SMA-Male Standard (Other Connectors Available) |           |
| Cable Length               | 300 cm Standard (Any Cable Length Available)   |           |
| Cable Type                 | LL100 Standard (Other Cables Available)        |           |

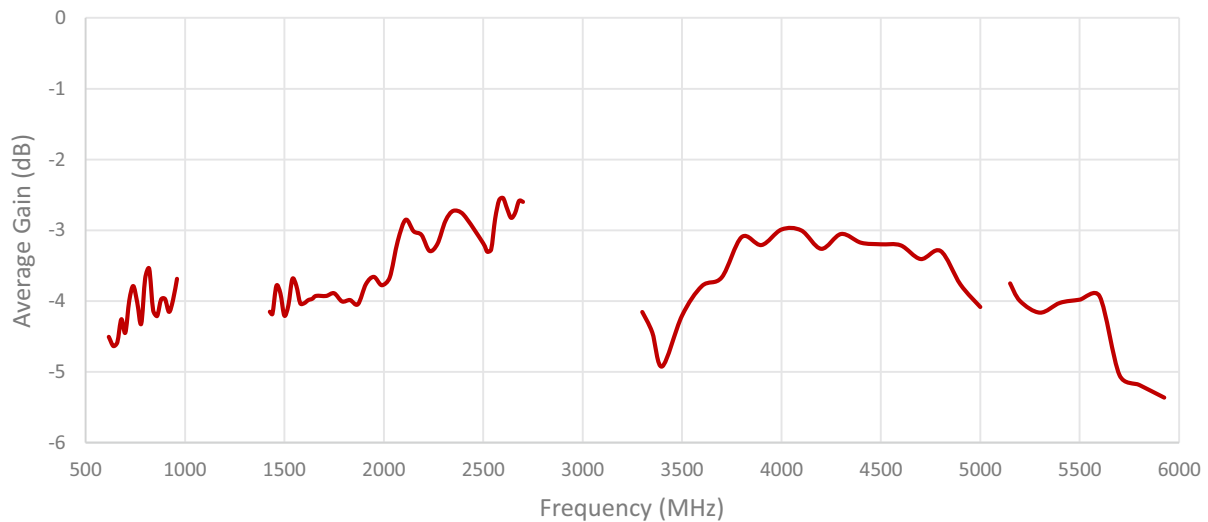
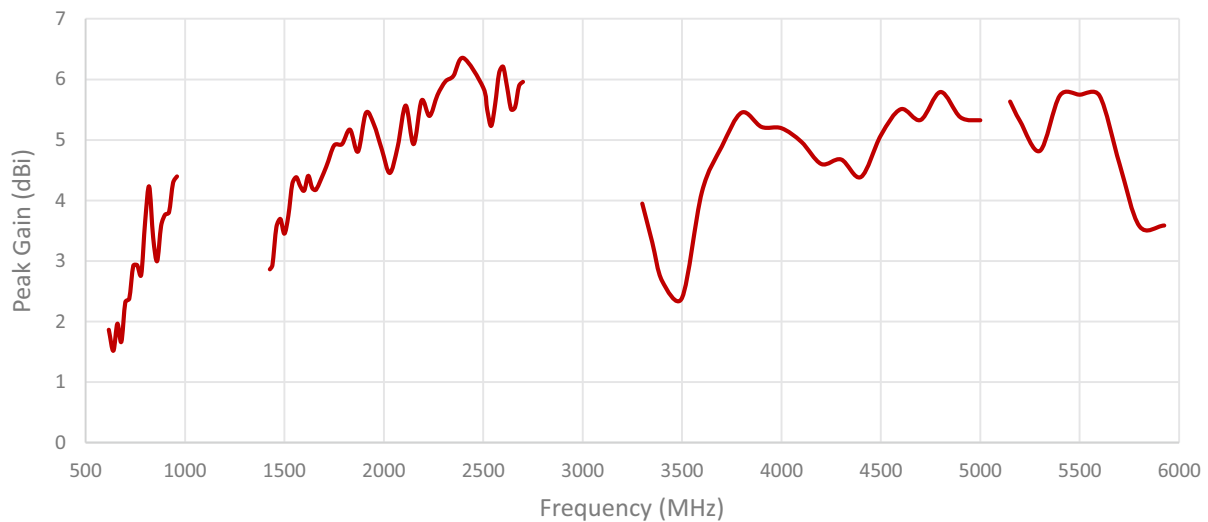
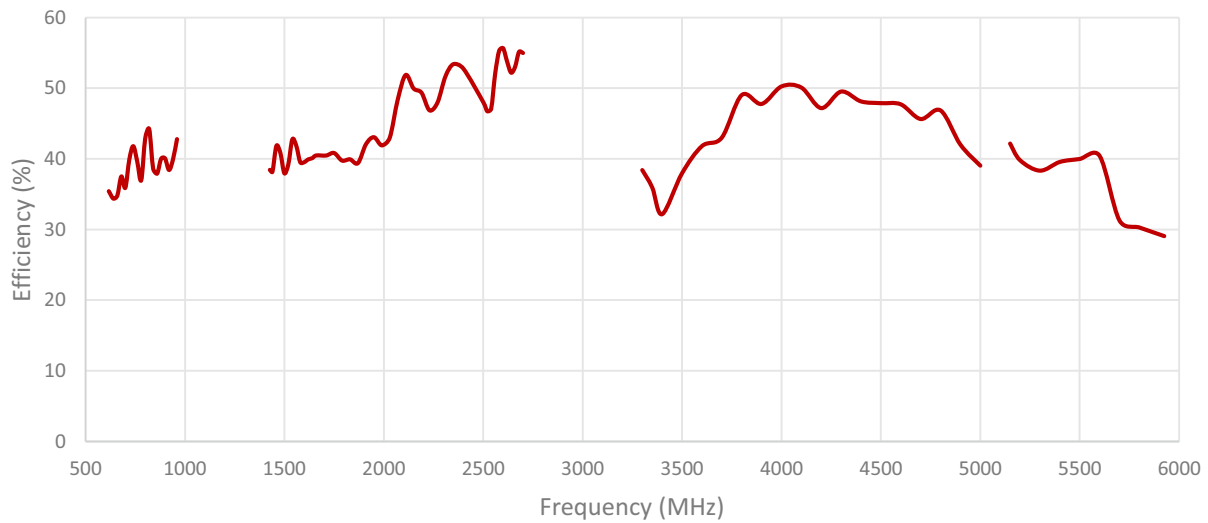
## 2. Mechanical and environmental specifications

| Specifications            | 2J6B86BGff     |
|---------------------------|----------------|
| Mounting Type             | Screw Mount    |
| Dimensions (mm)           | 199 × 167 × 53 |
| Tighten Torque (Nm)       | 6 Nm           |
| Radome Type               | ASA            |
| Radome color              | Black, White   |
| Operating Temperature (C) | -40 to +85     |
| Storage Temperature (C)   | -40 to +85     |
| Substance Compliance      | RoHS           |
| Certificates              | IP67, IP69     |

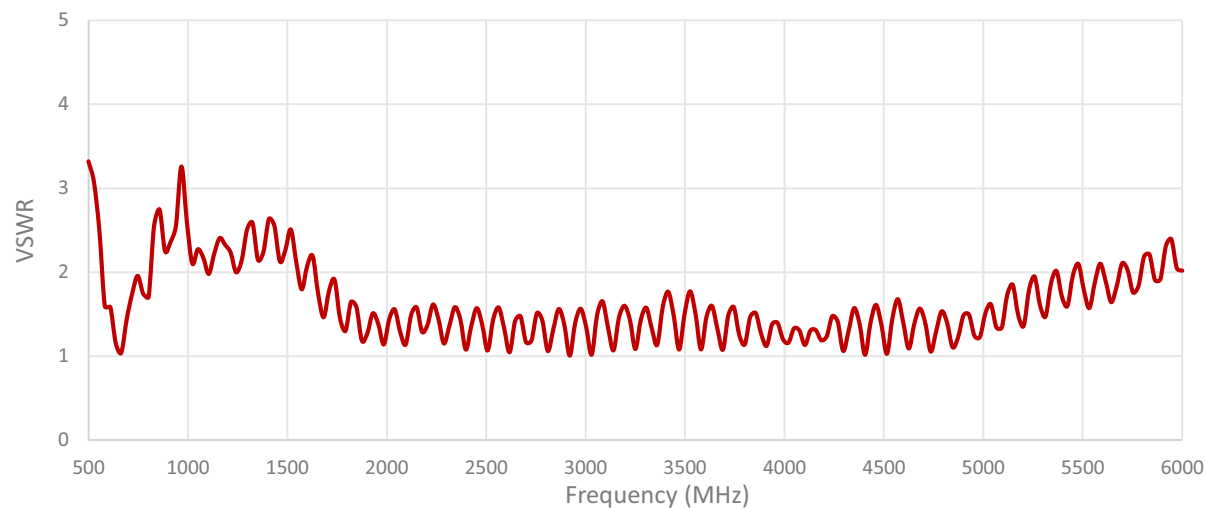
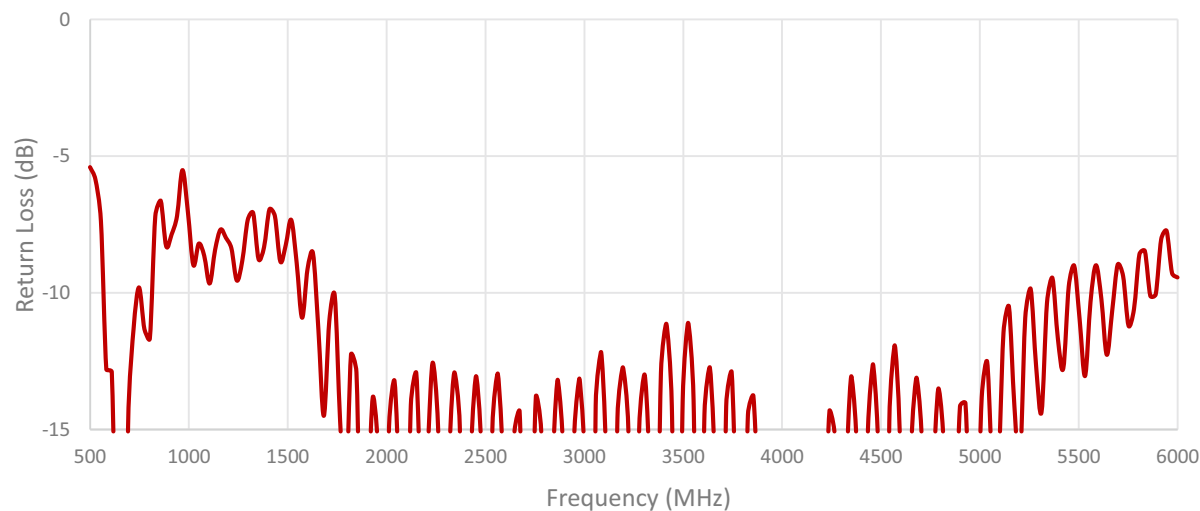
## 3. Antenna parameters

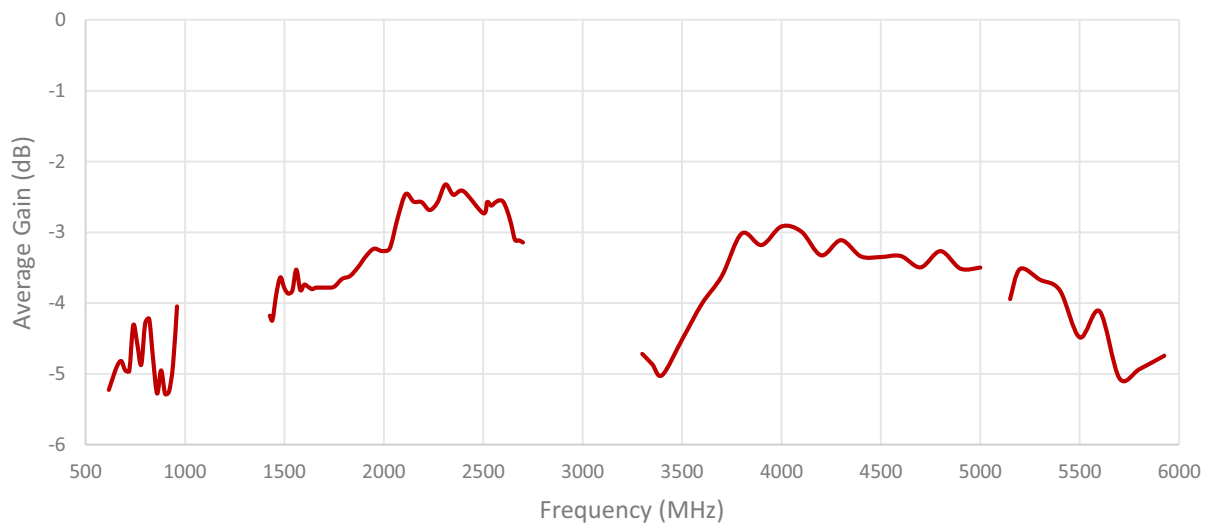
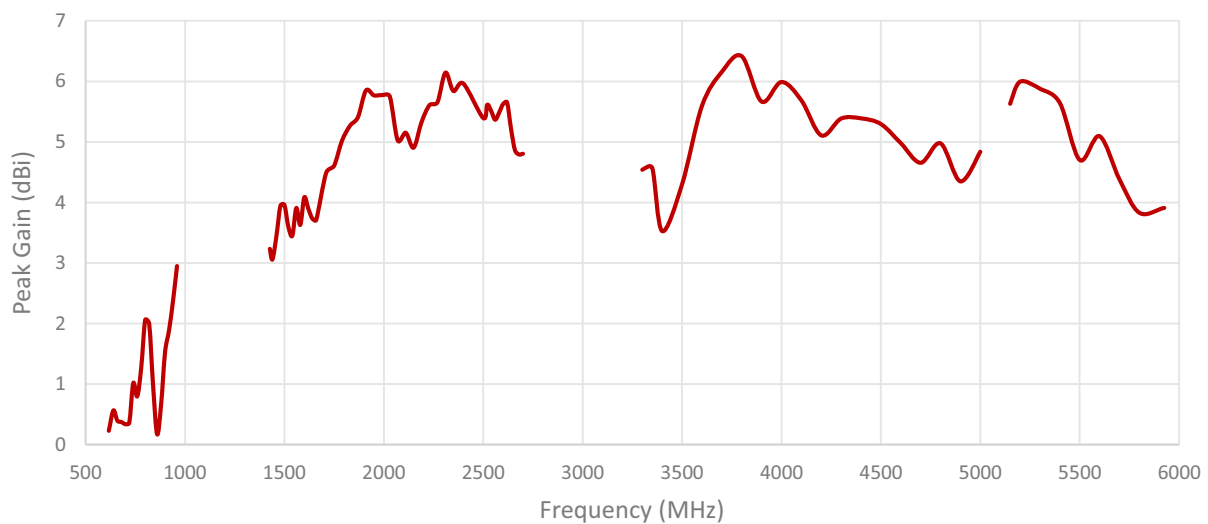
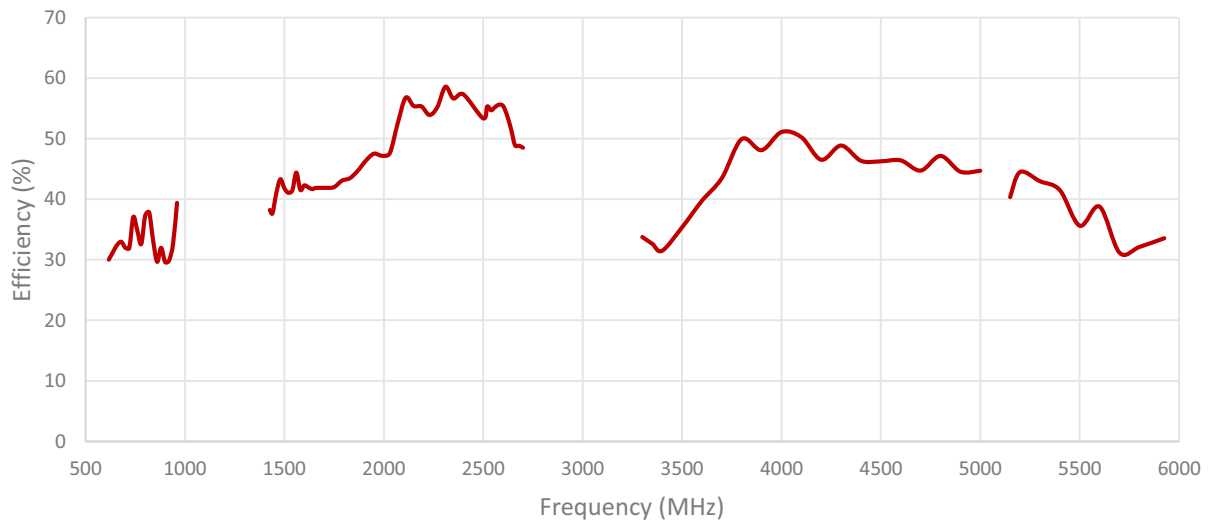
Cable 1: 5GNR



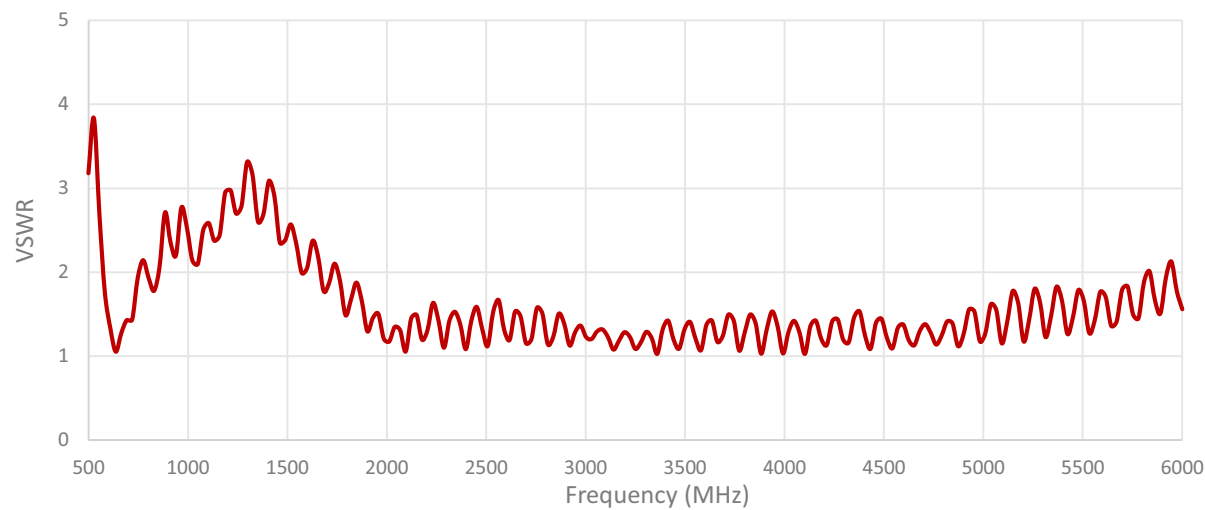
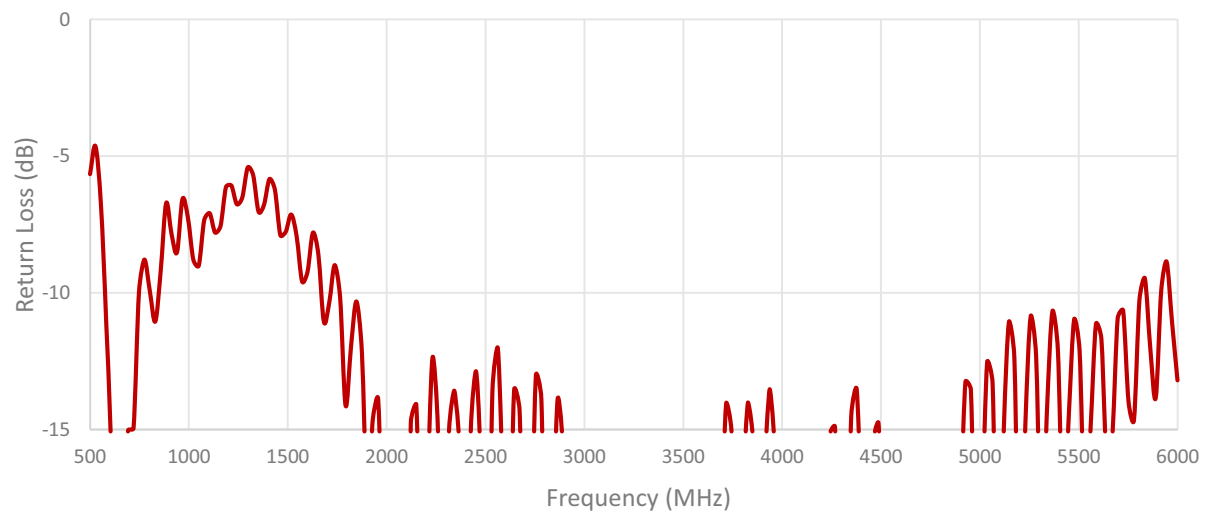


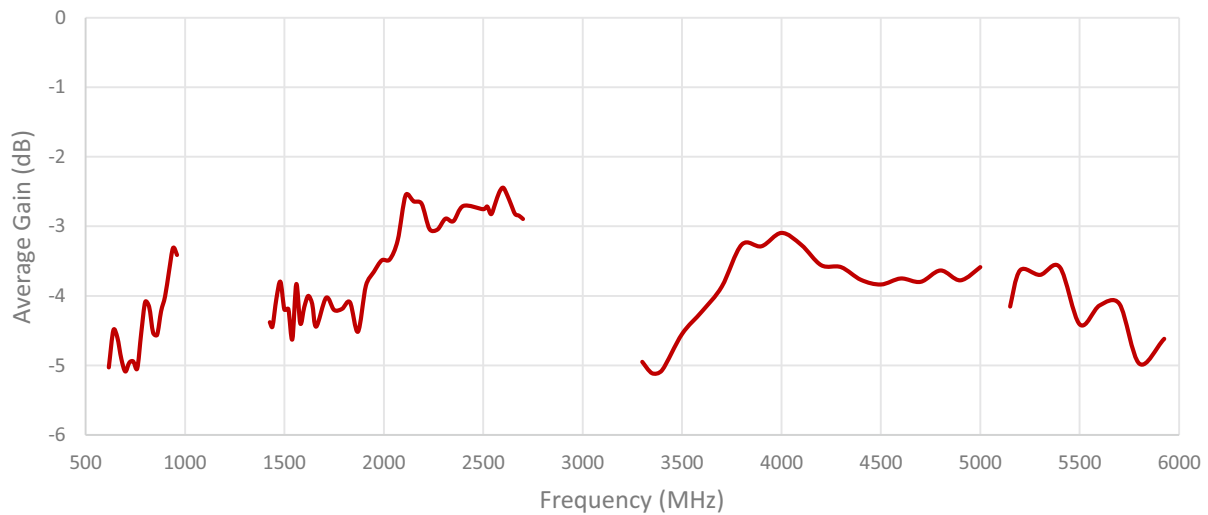
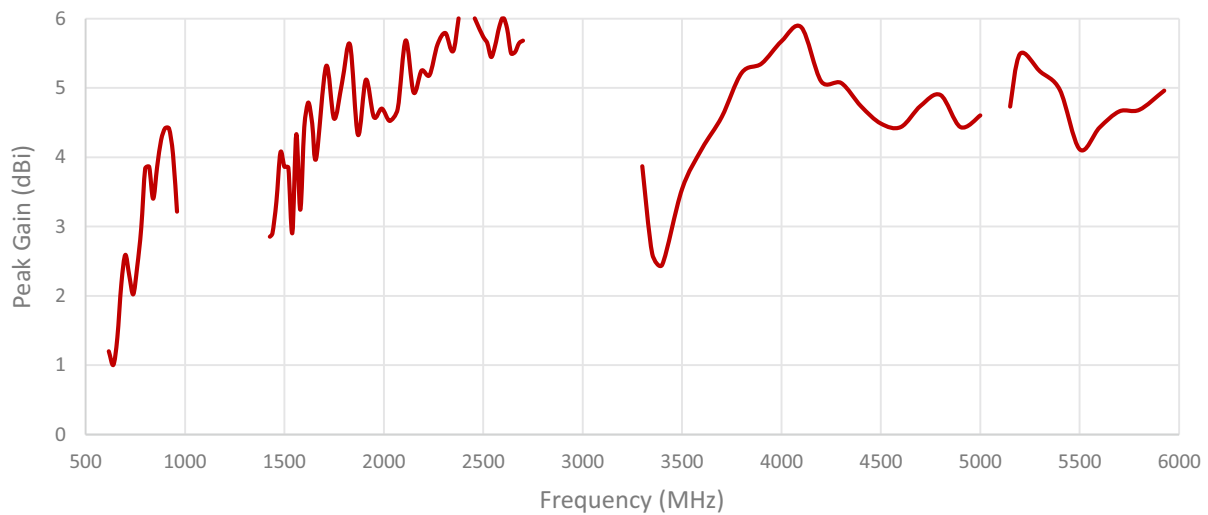
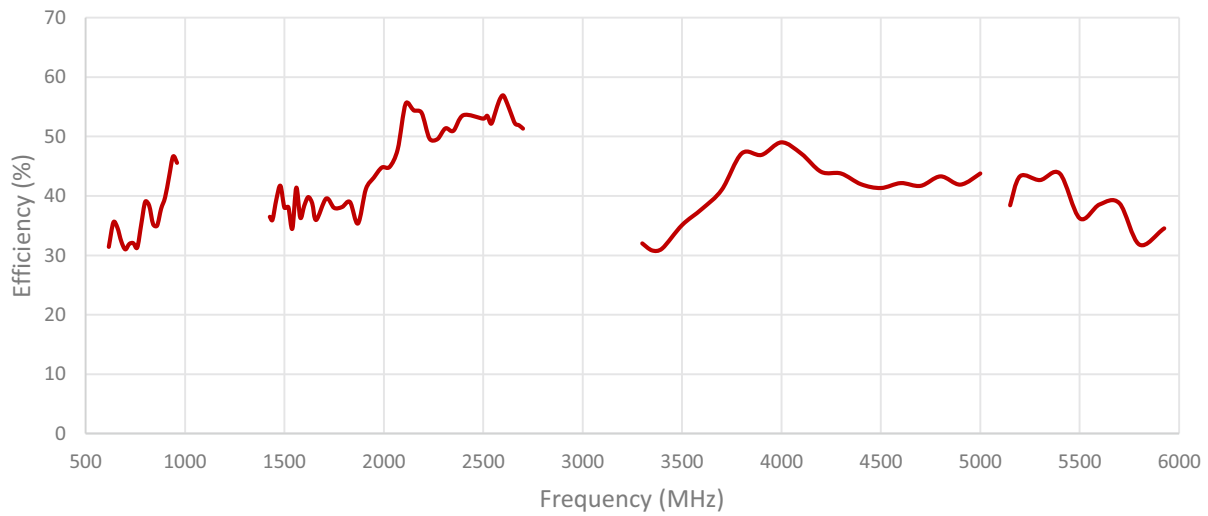
Cable 2: 5GNR



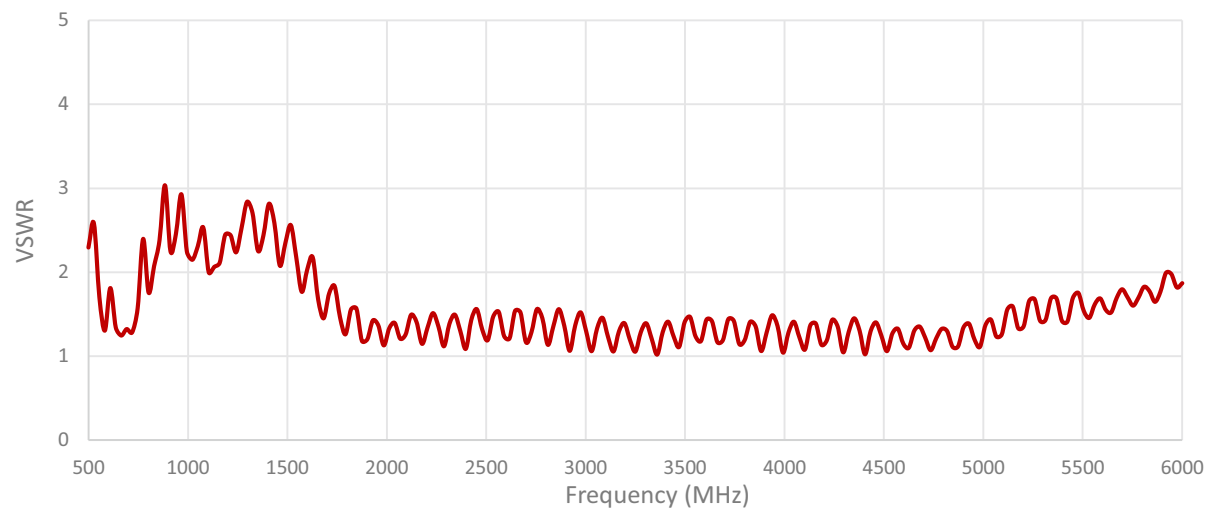
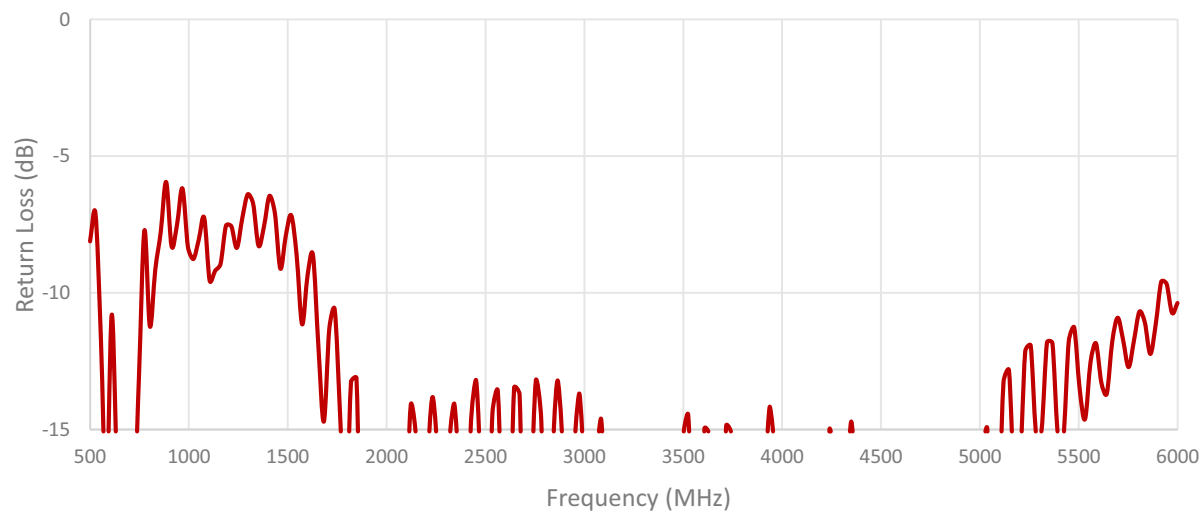


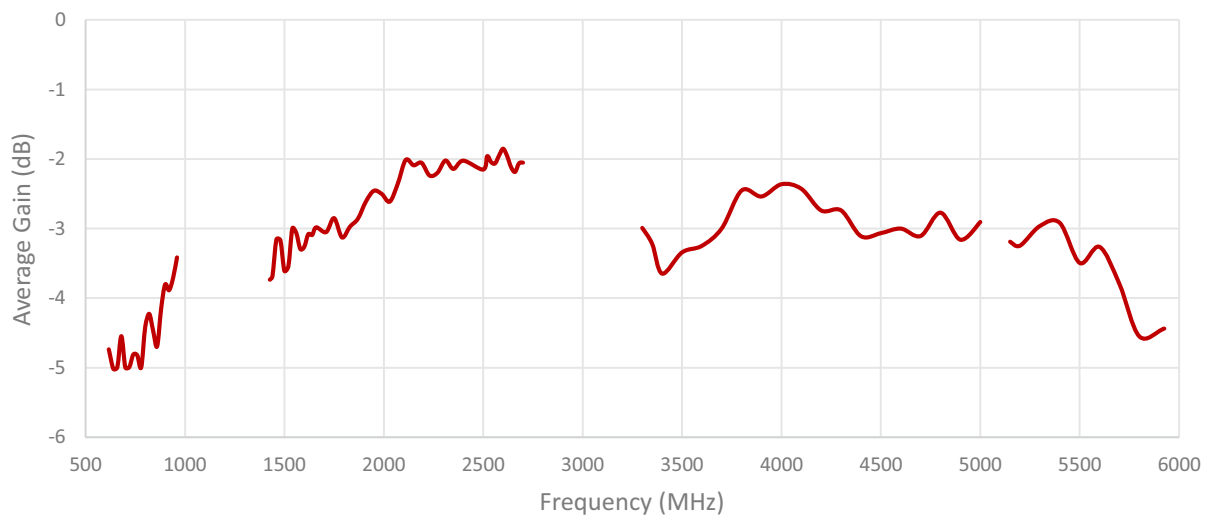
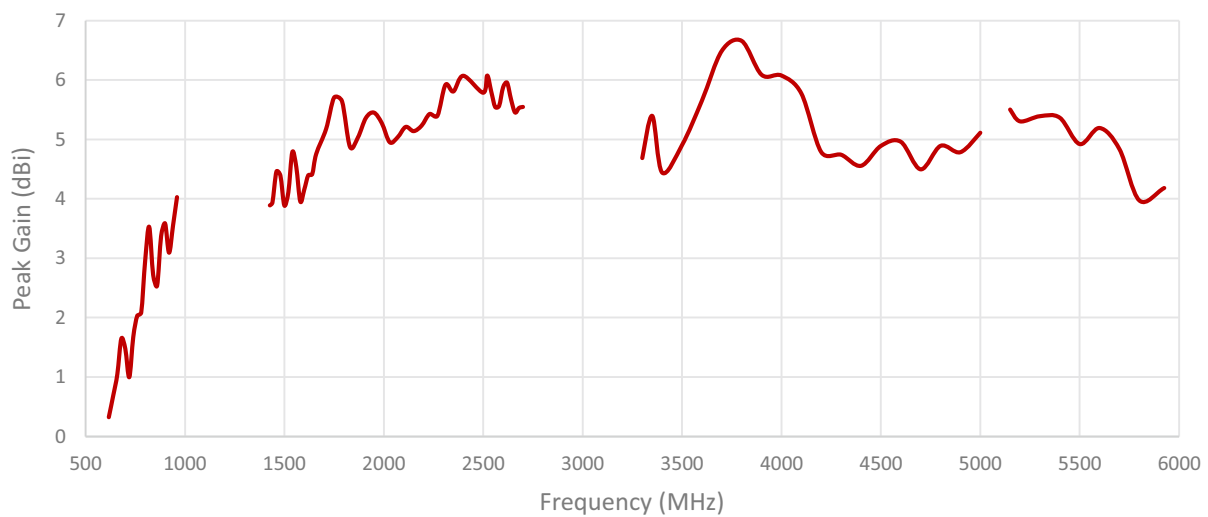
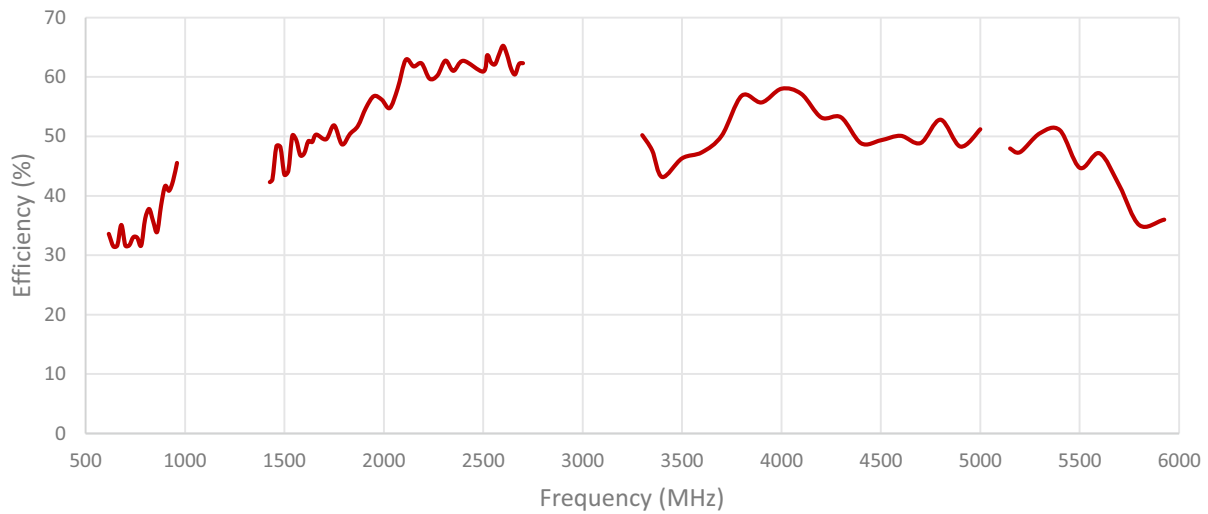
Cable 3: 5GNR



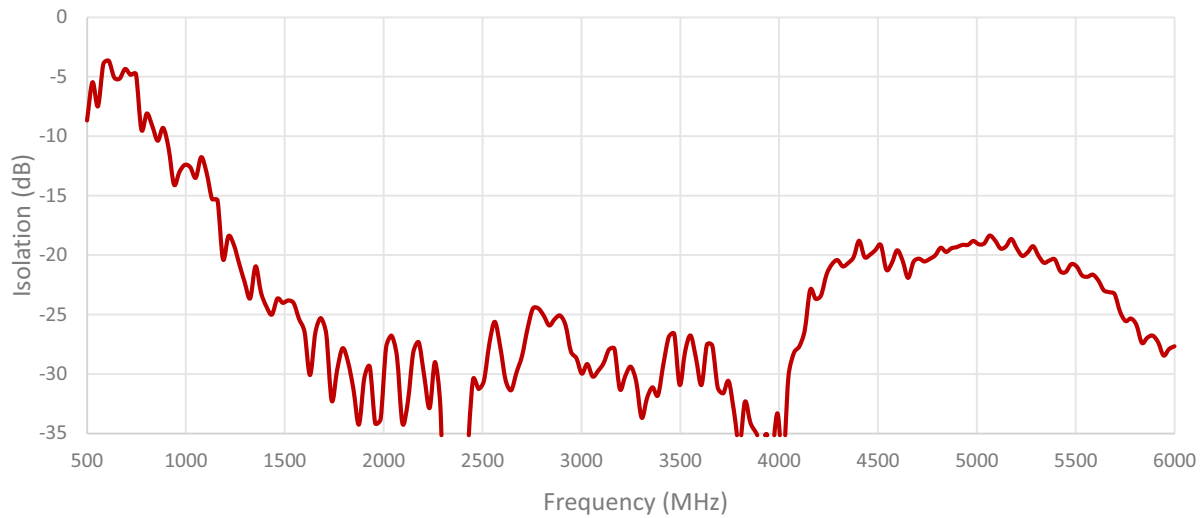


Cable 4: 5GNR

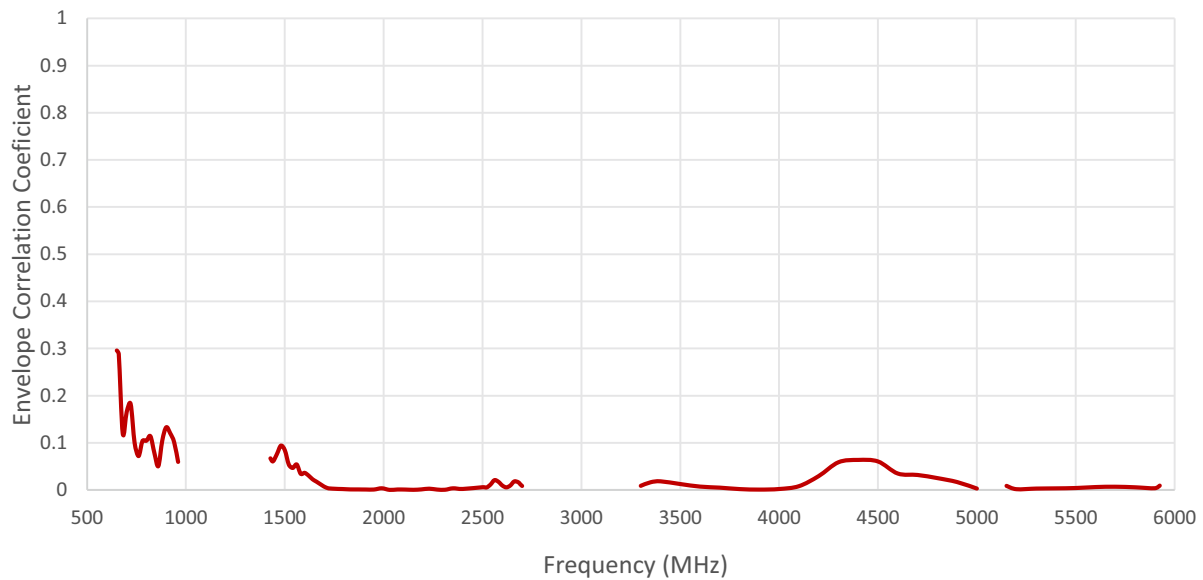




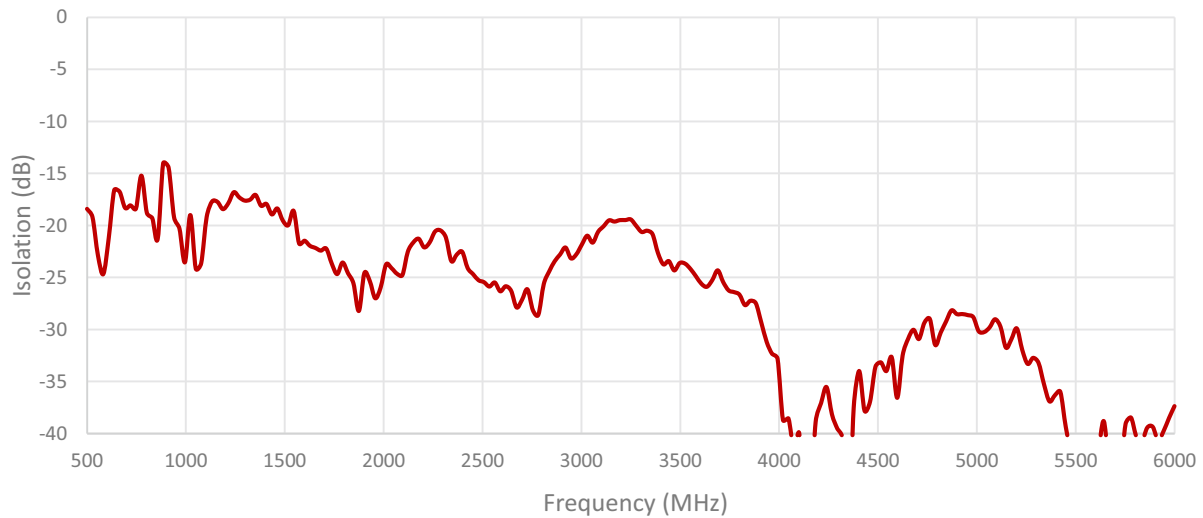
## ISOLATION FOR CABLES 1 AND 2



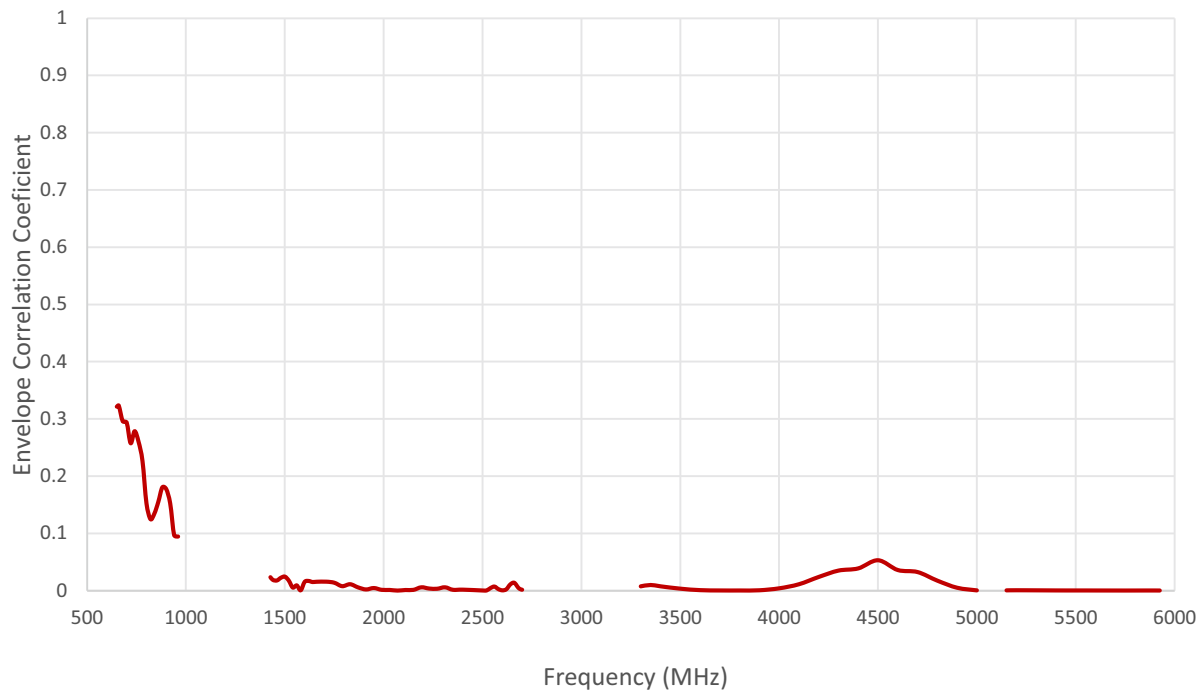
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2



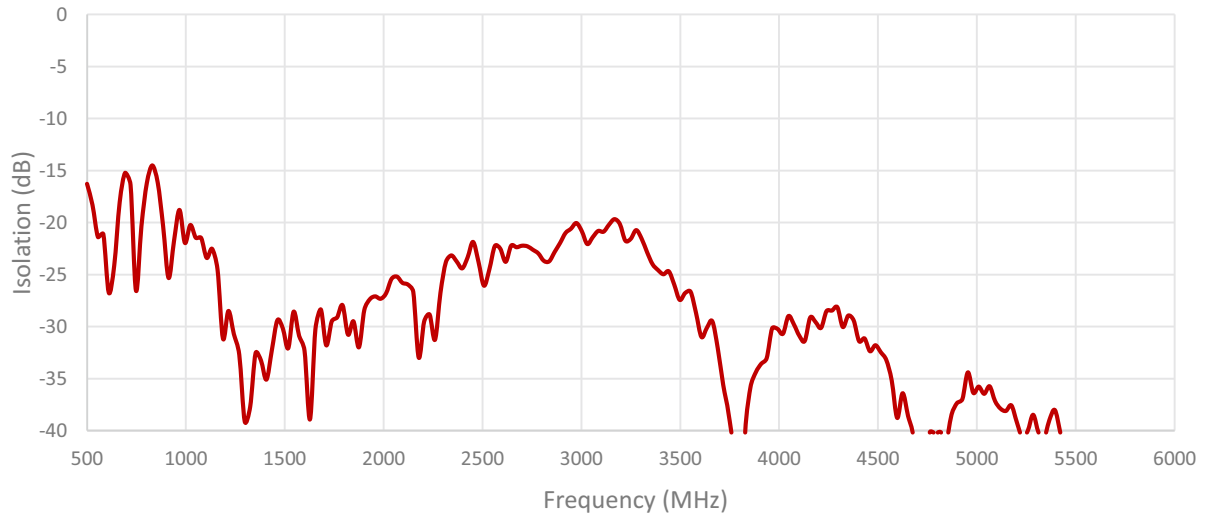
## ISOLATION FOR CABLES 1 AND 3



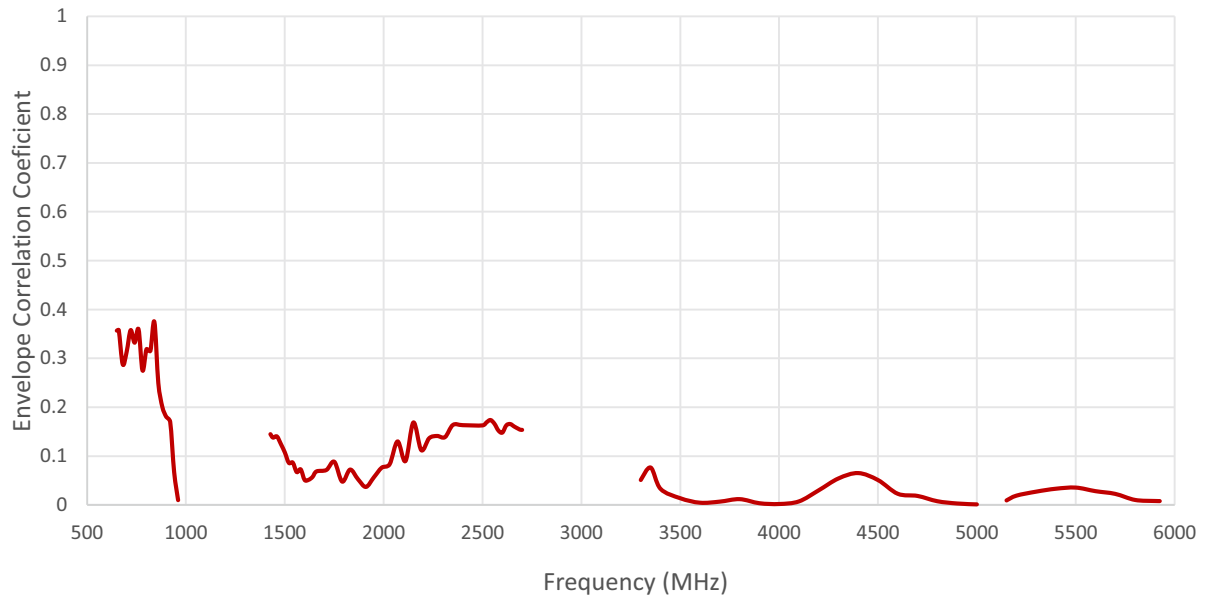
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 3



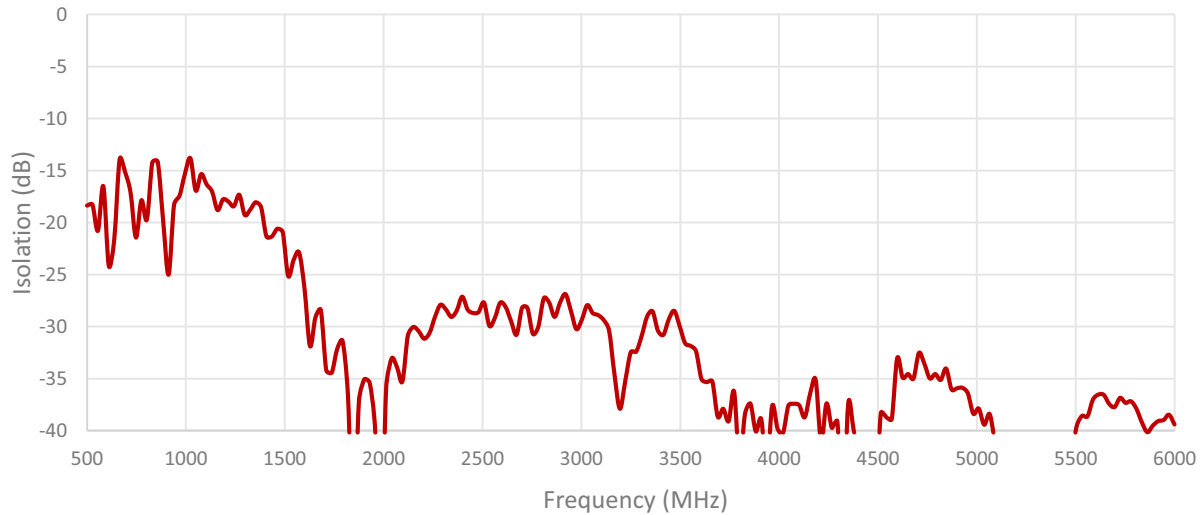
## ISOLATION FOR CABLES 1 AND 4



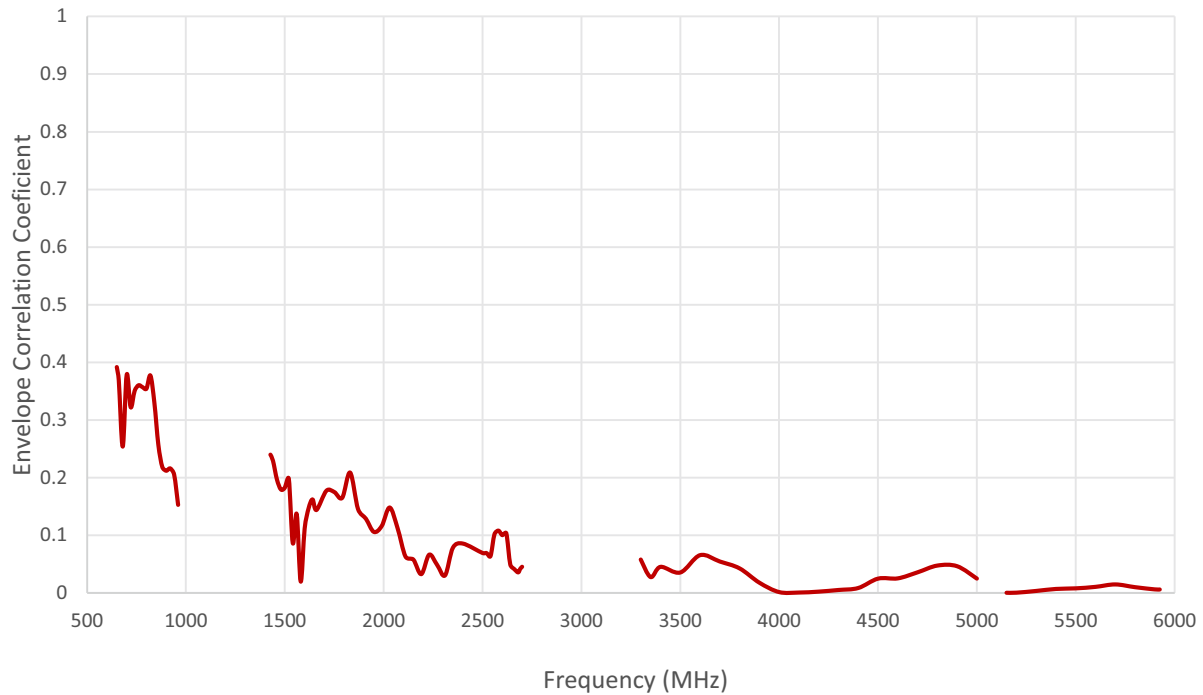
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 4



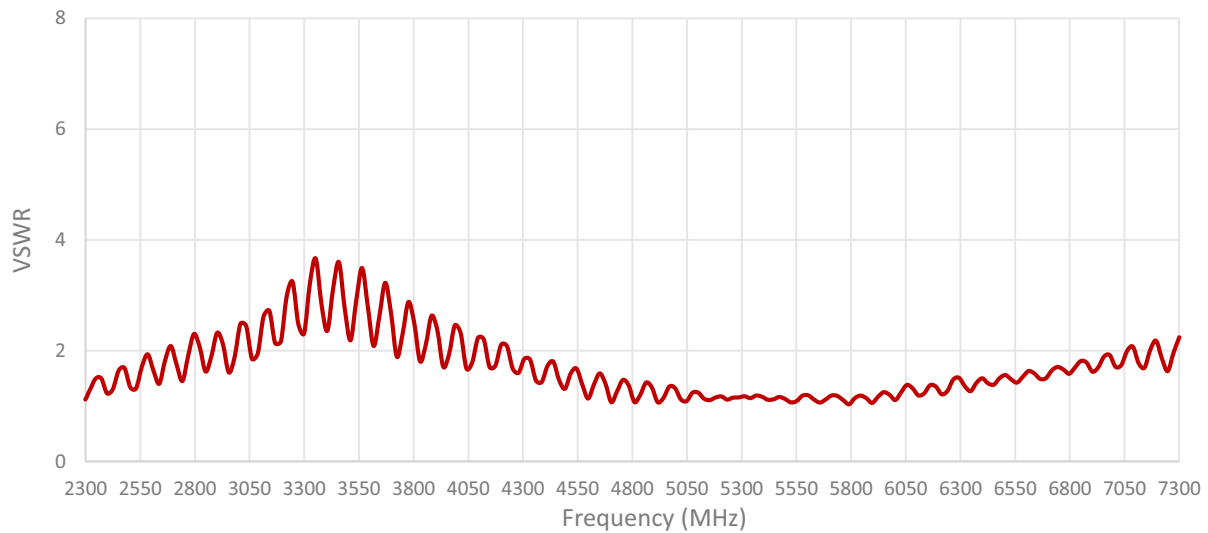
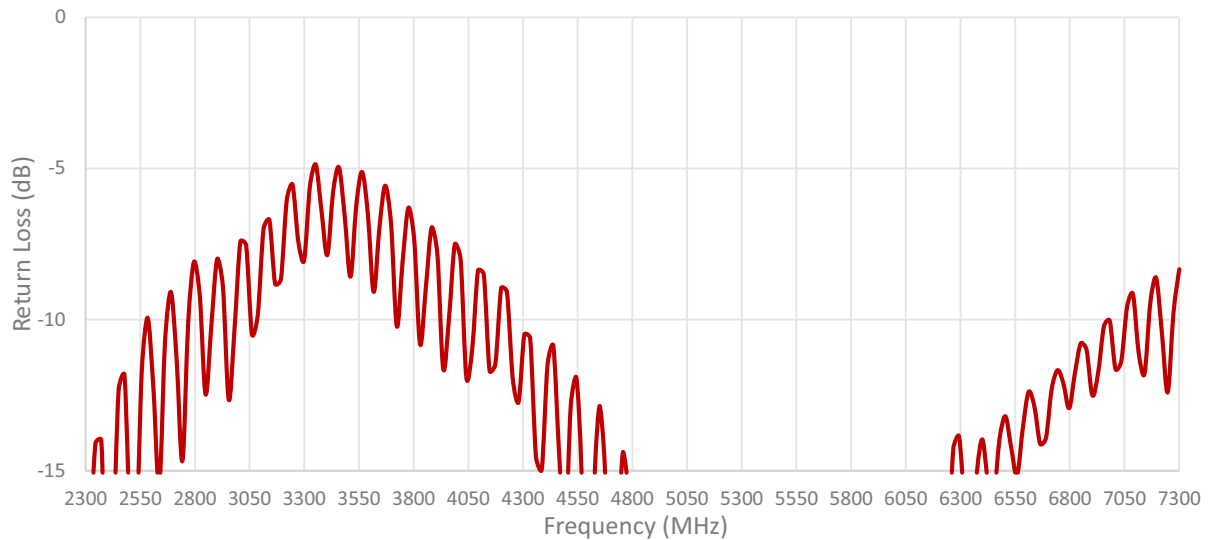
## ISOLATION FOR CABLES 2 AND 3

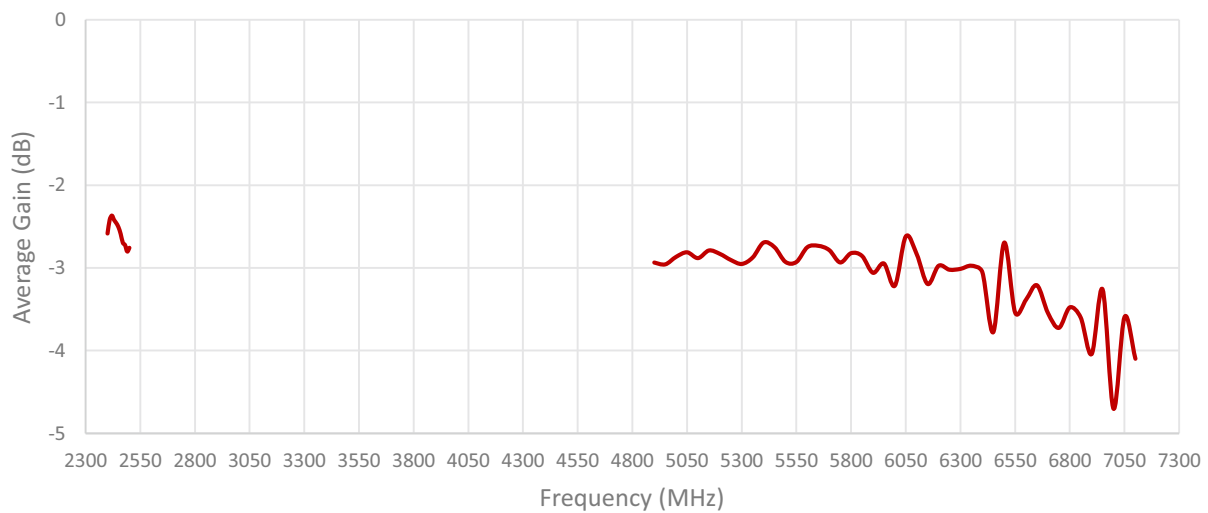
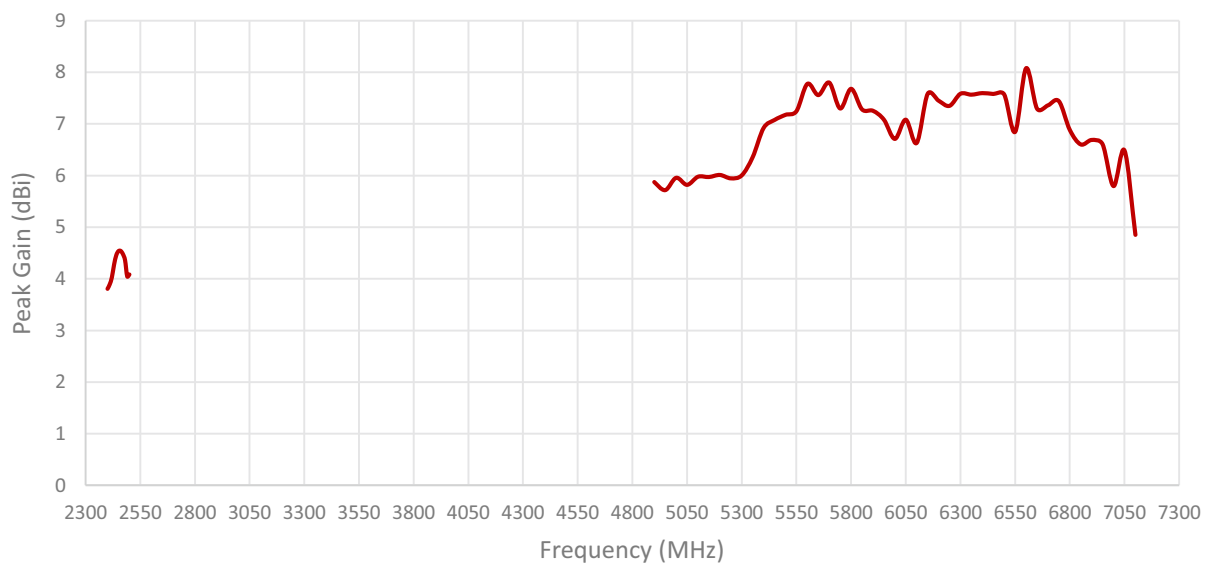
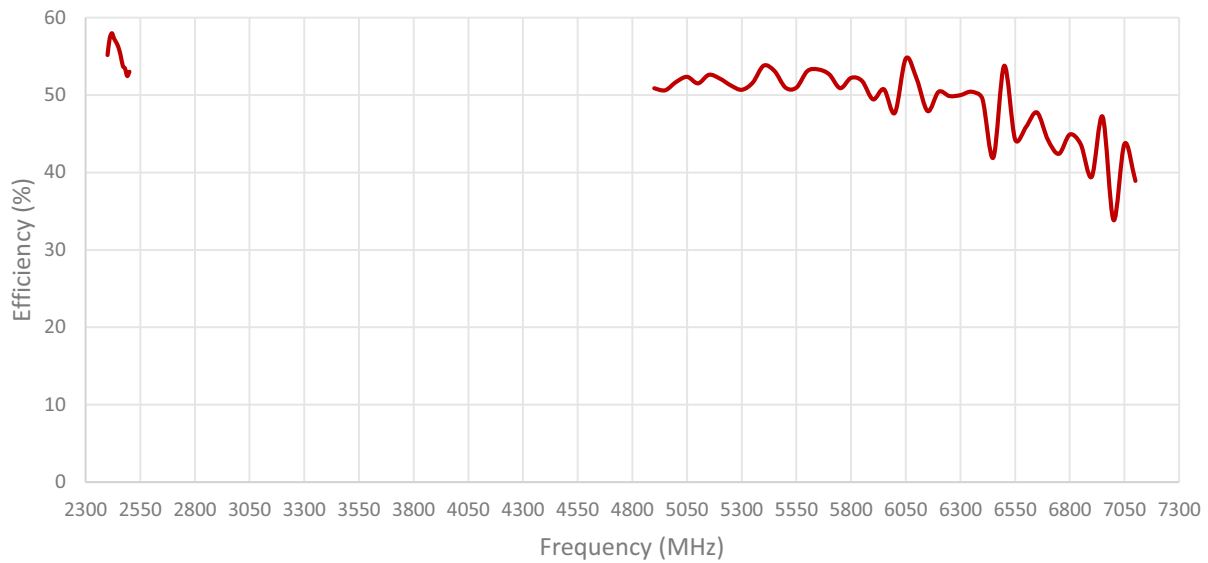


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 2 AND 3

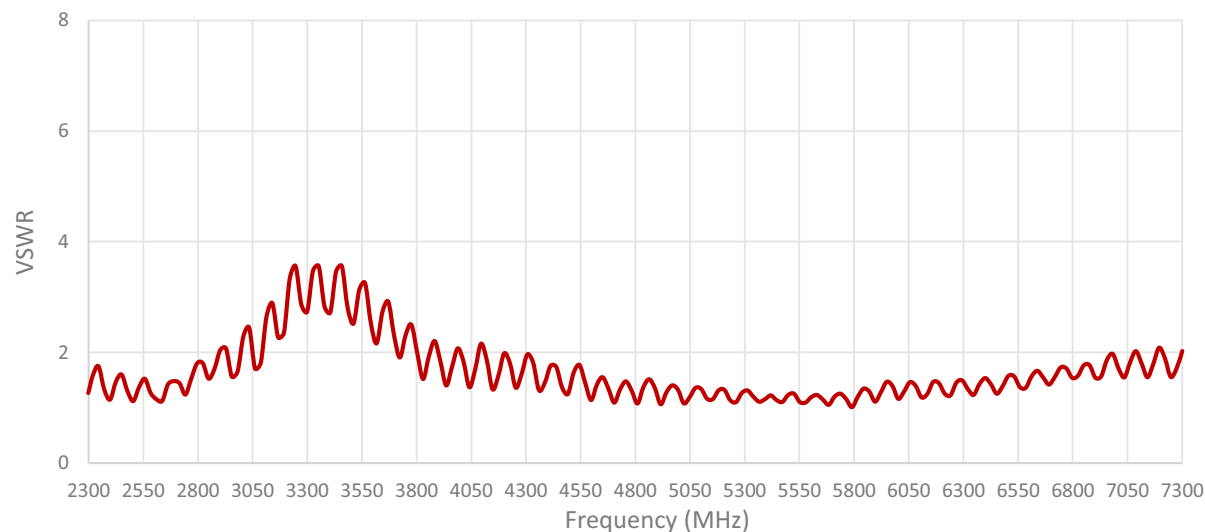
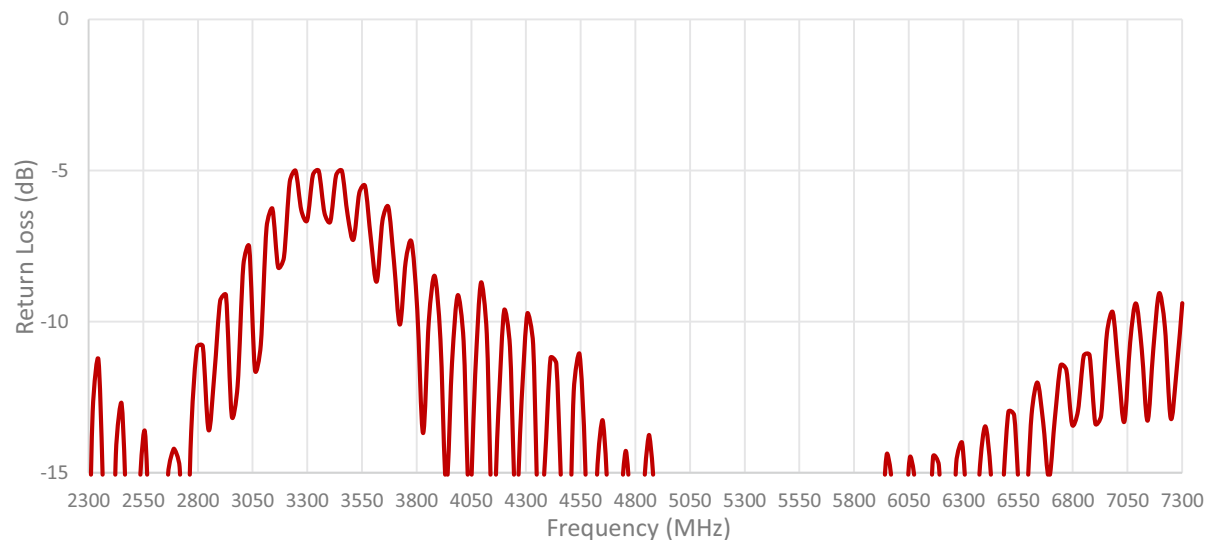


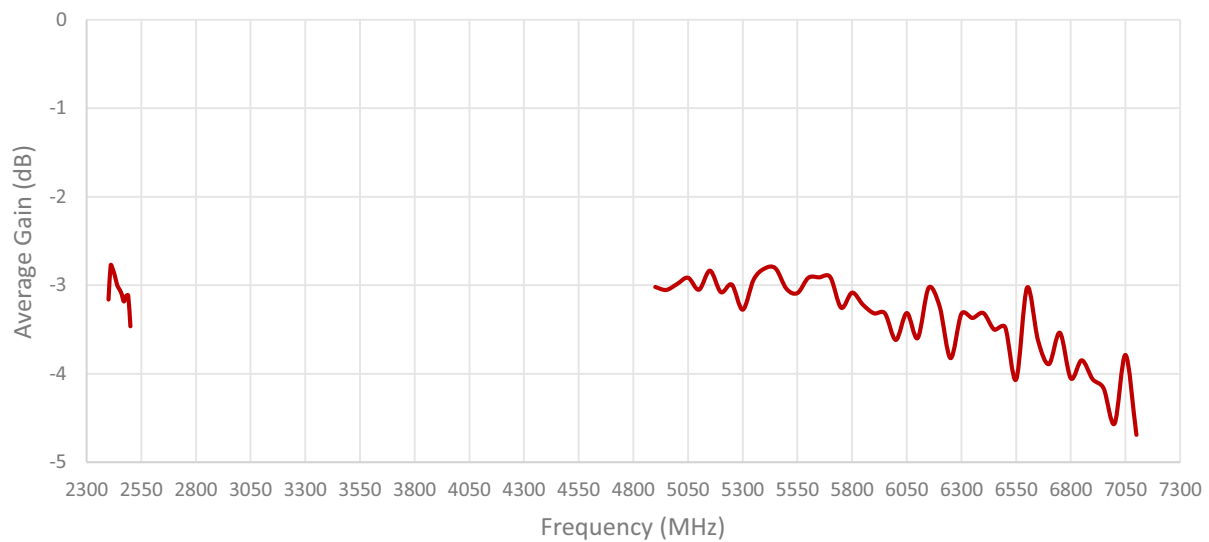
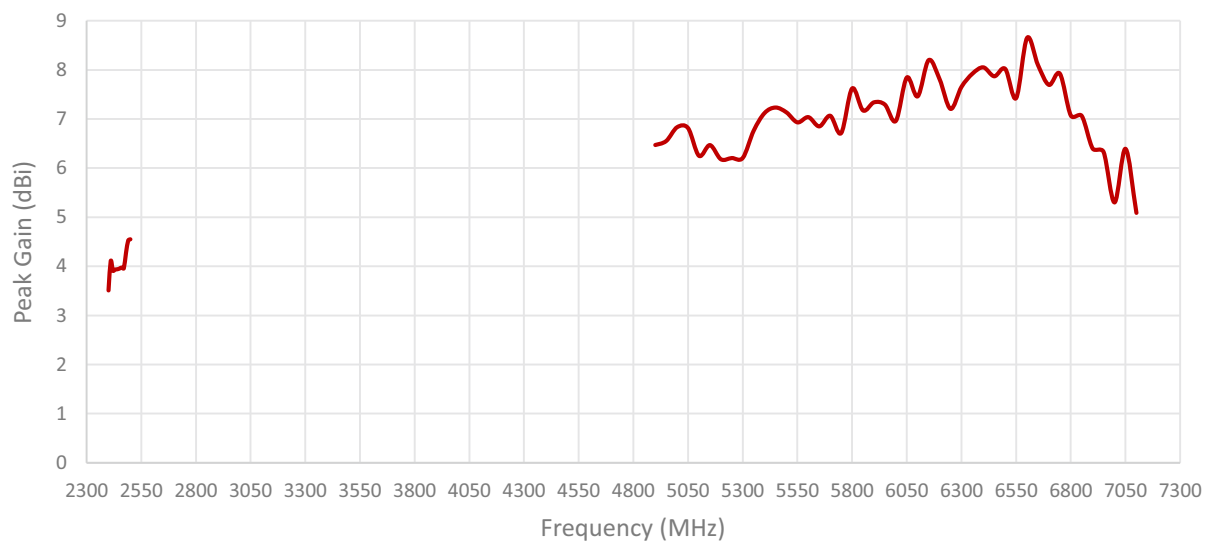
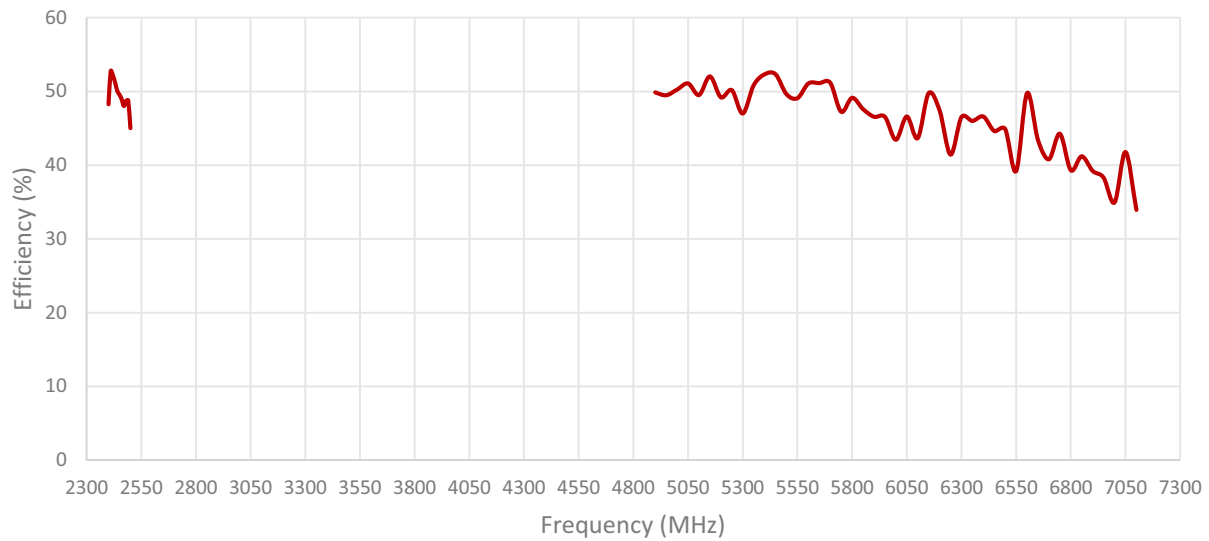
Cable 5: 2.4/5.0/6.0 GHz ISM



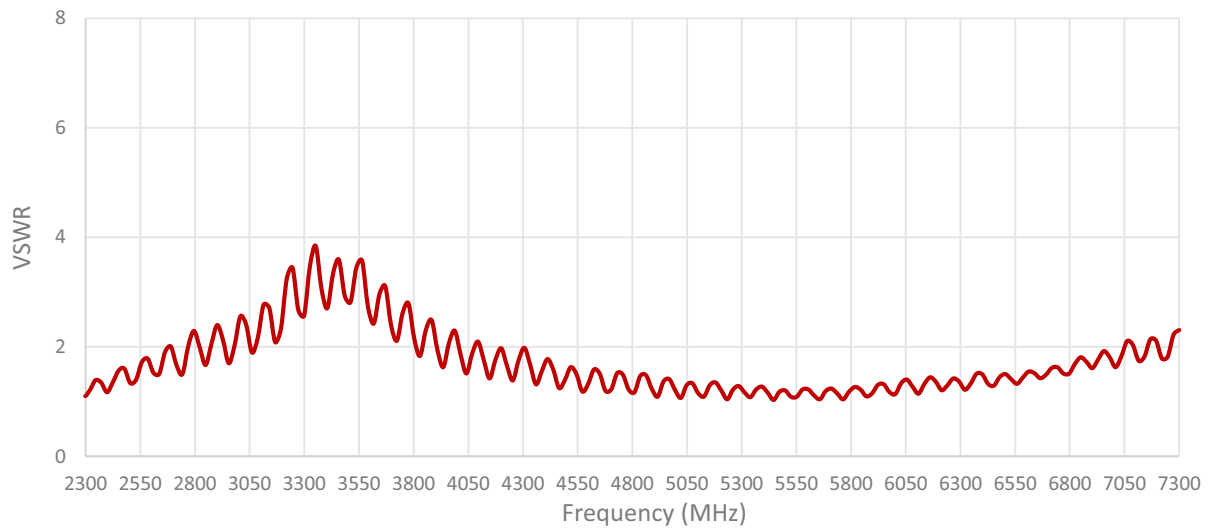
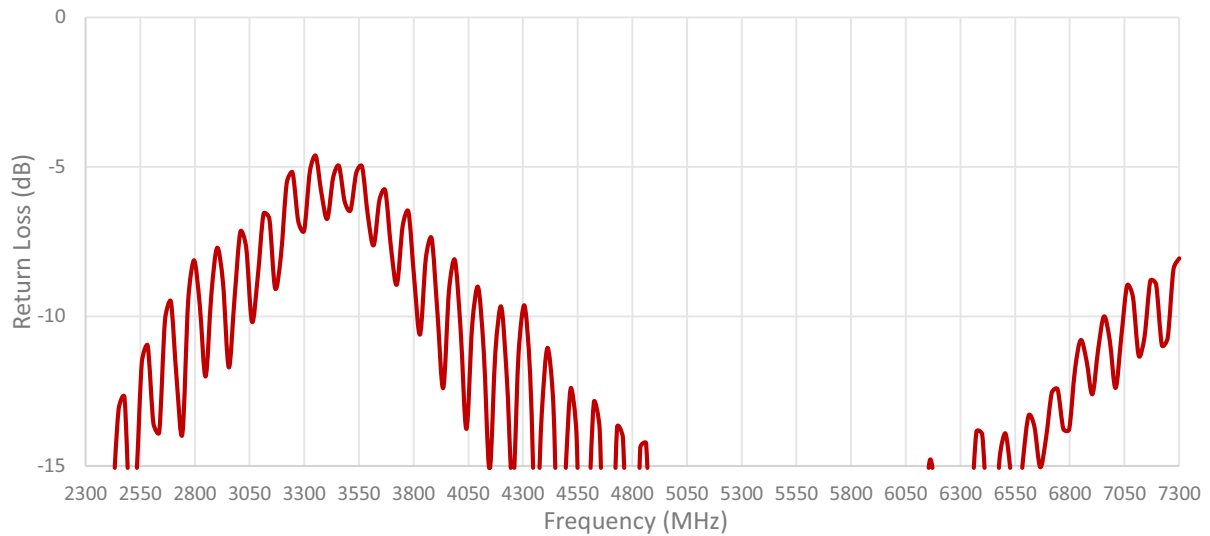


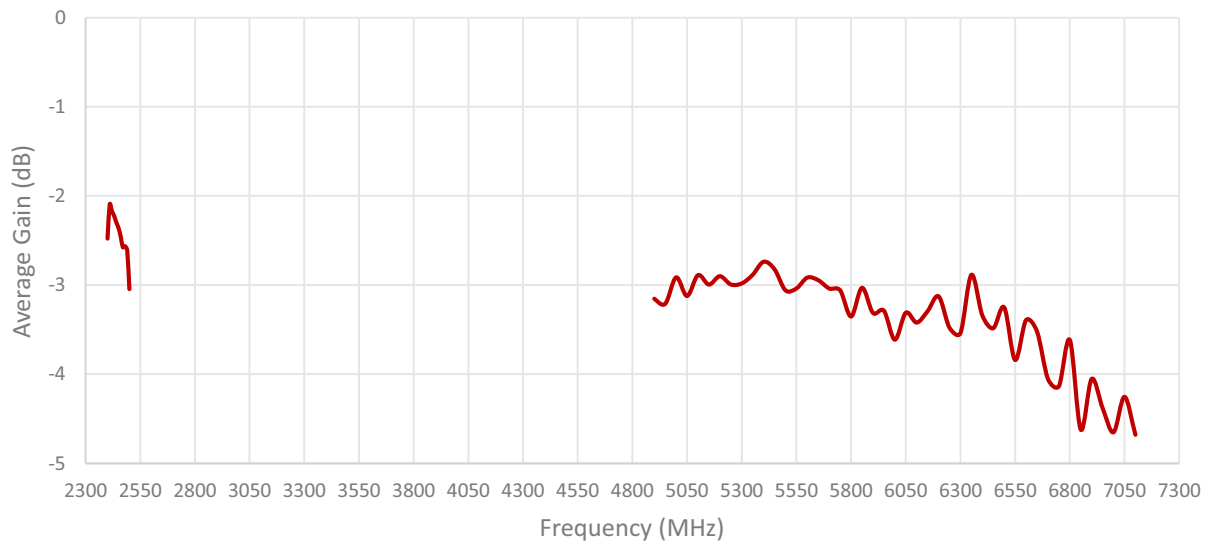
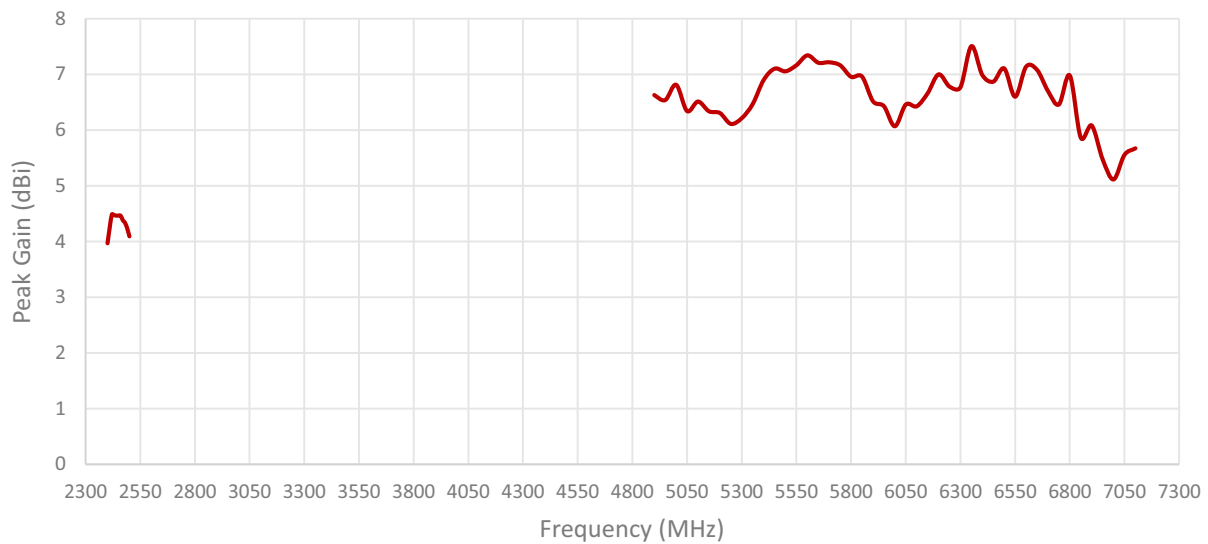
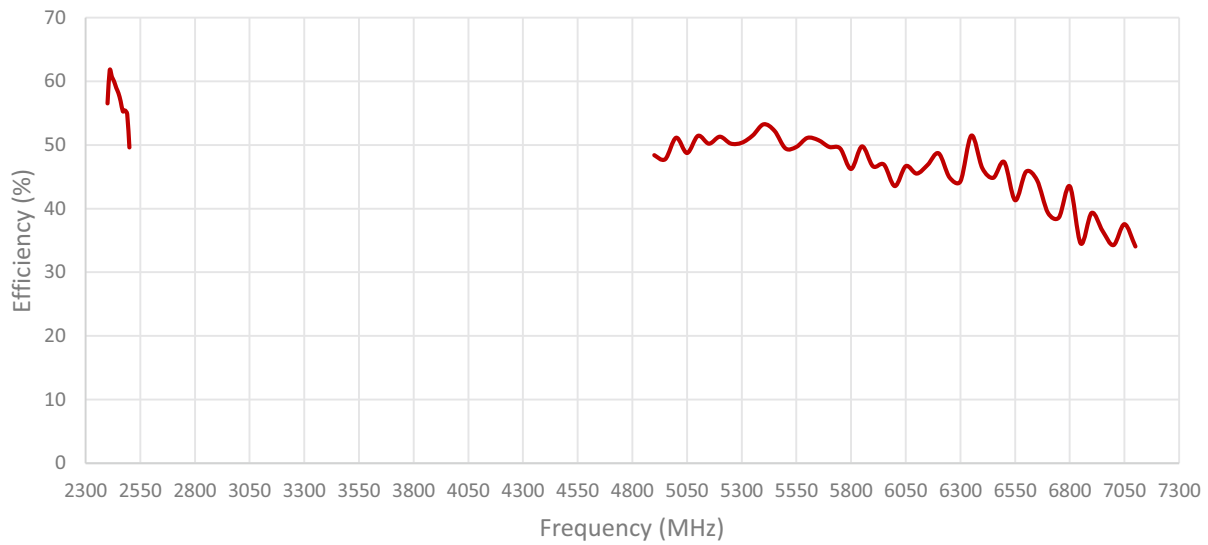
**Cable 6: 2.4/5.0/6.0 GHz ISM**



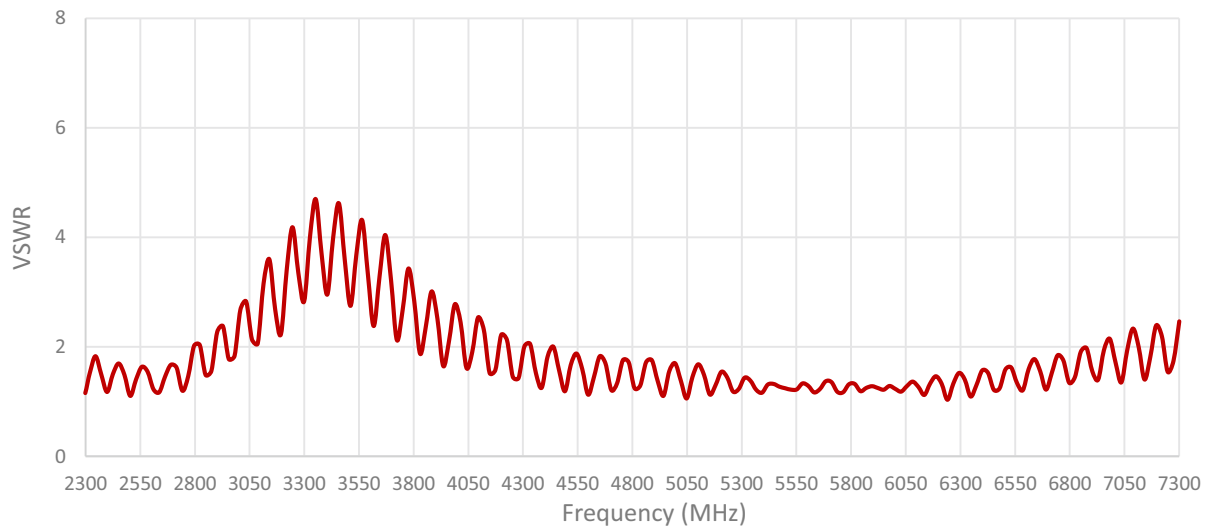
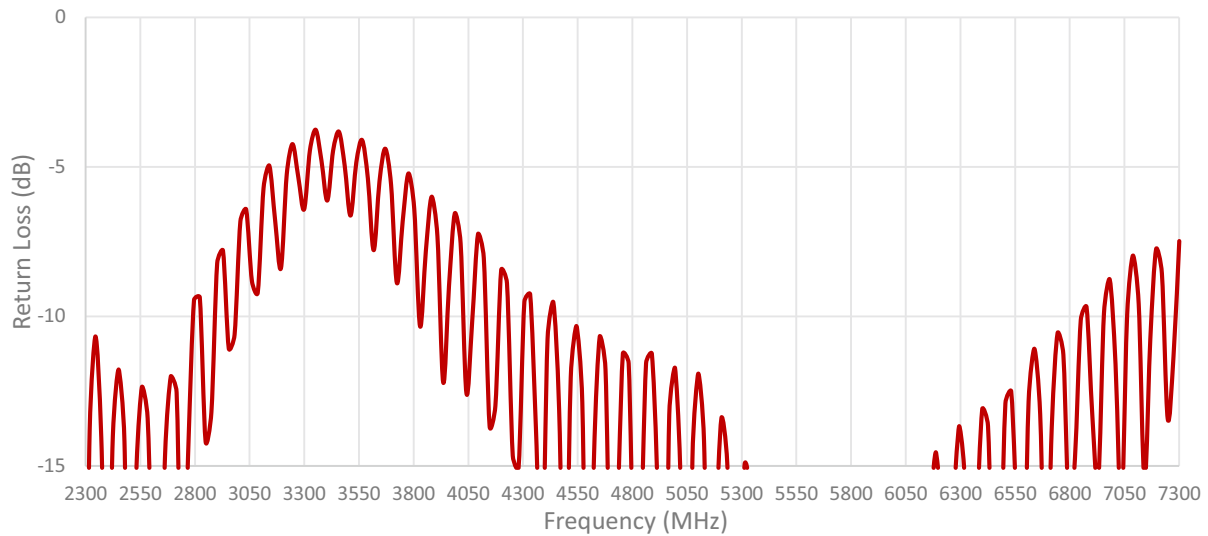


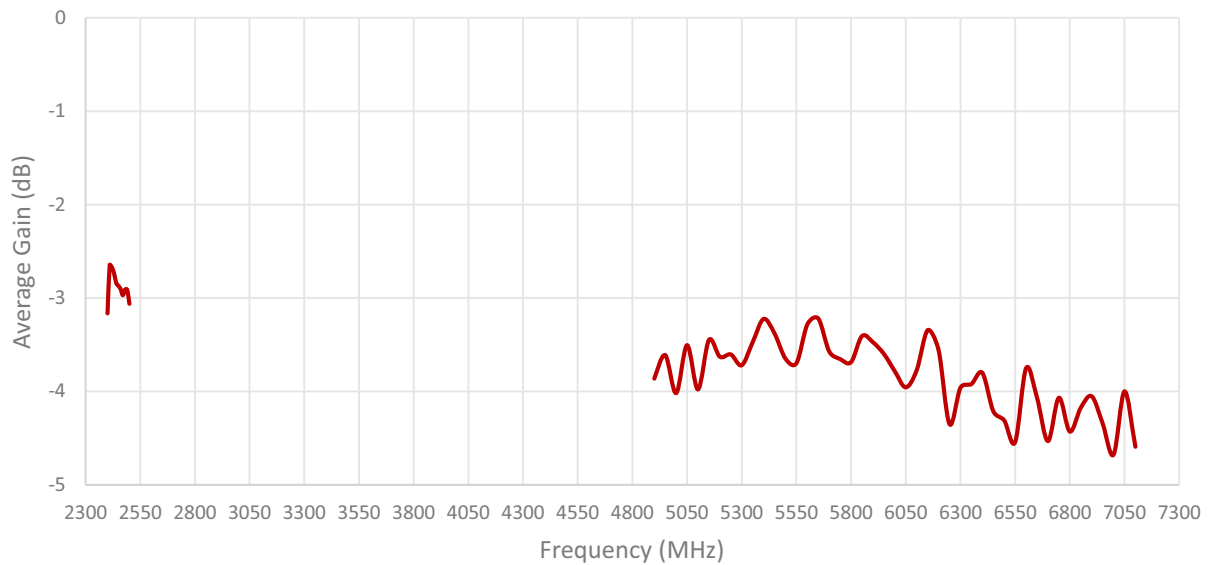
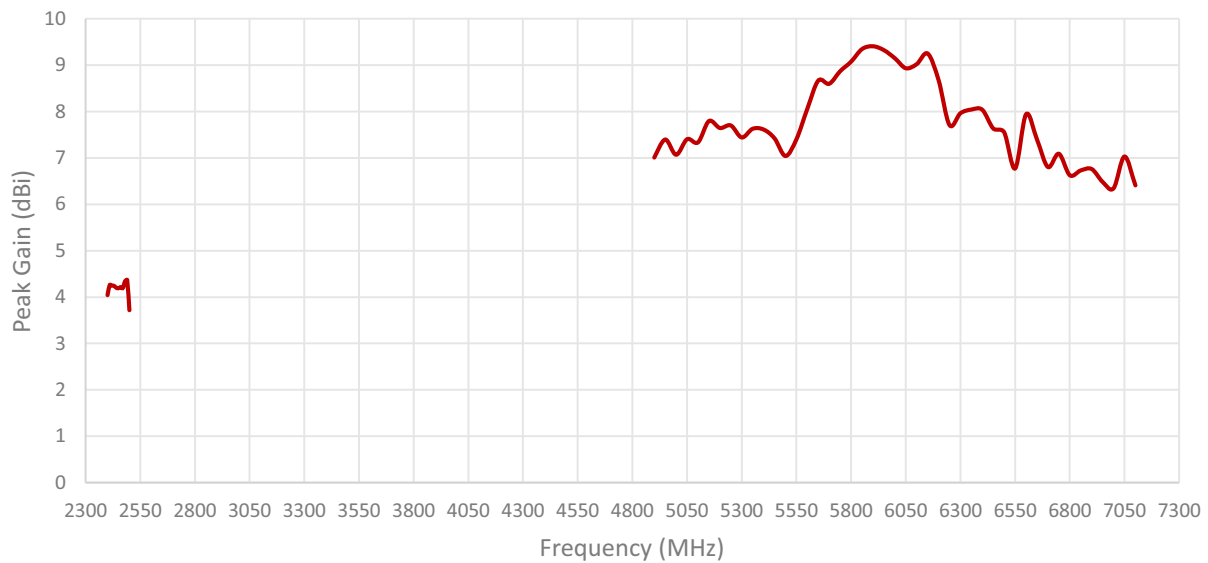
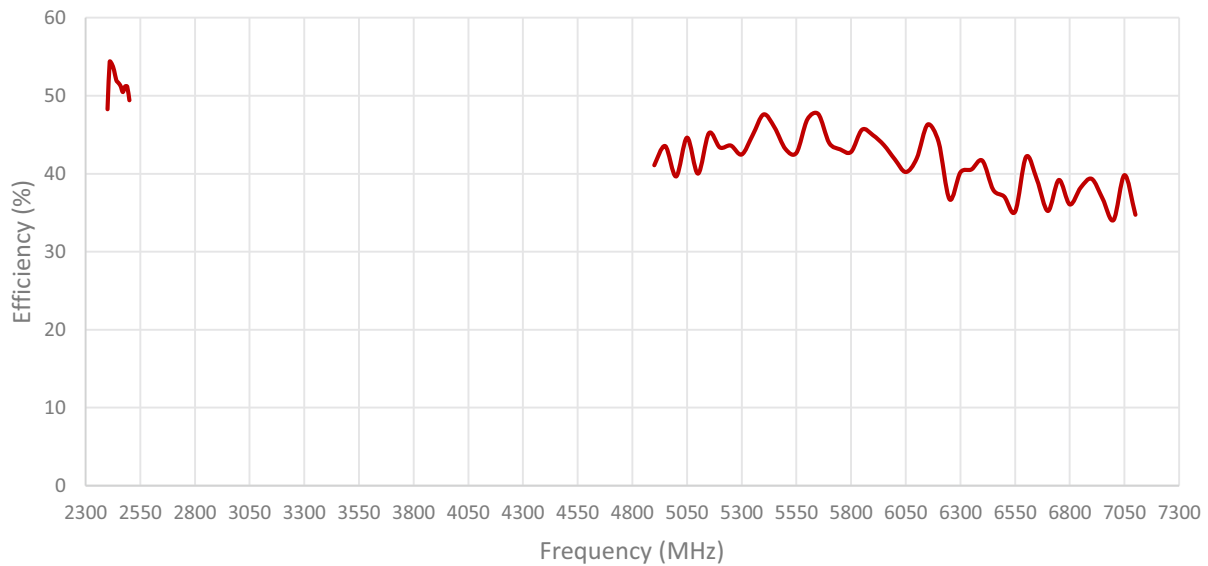
Cable 7: 2.4/5.0/6.0 GHz ISM



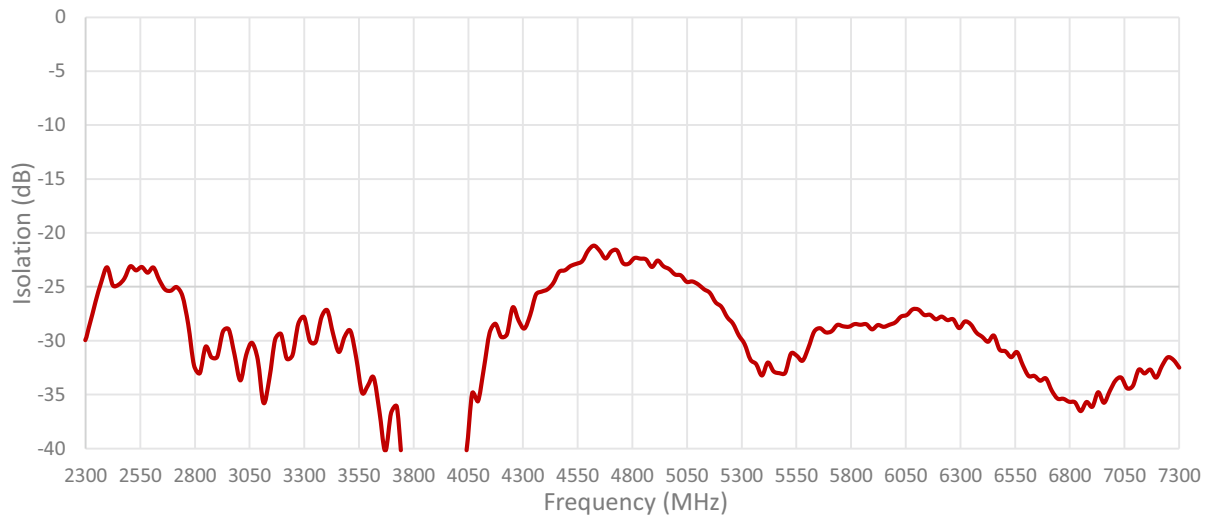


Cable 8: 2.4/5.0/6.0 GHz ISM

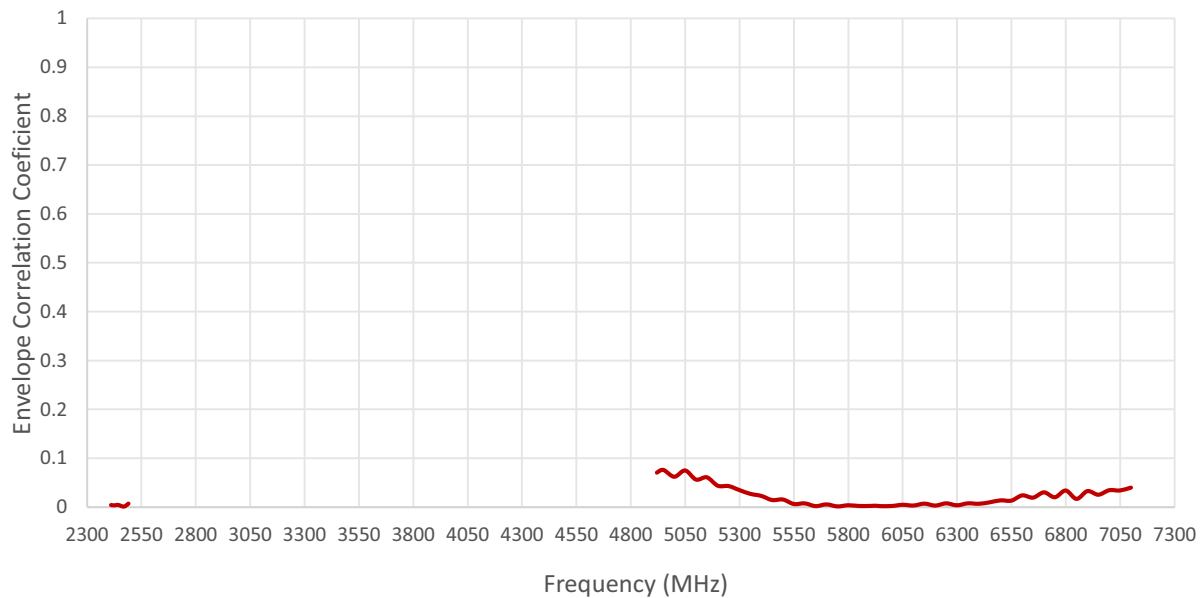




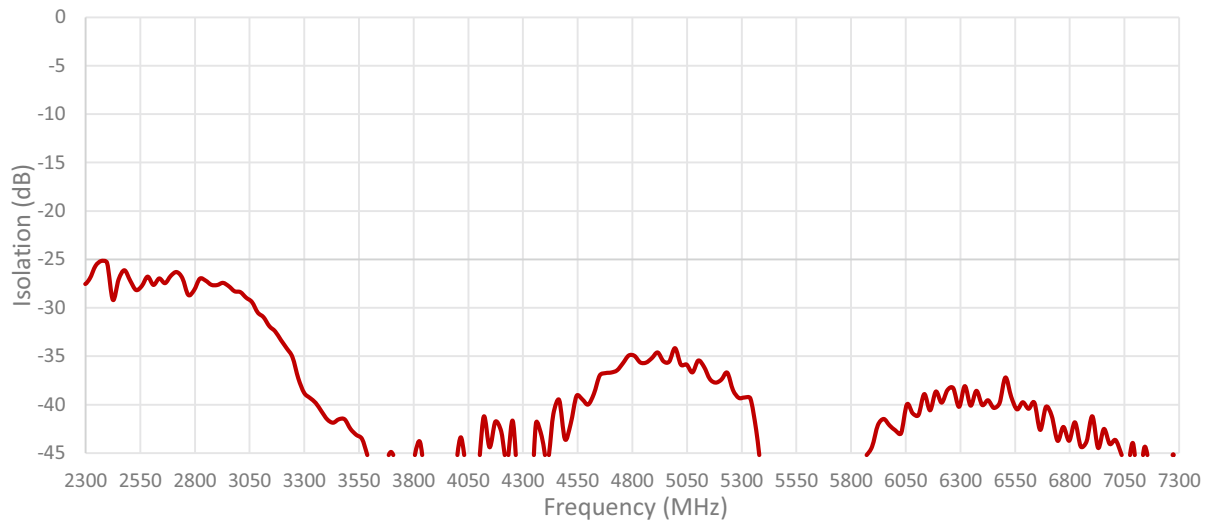
## ISOLATION FOR CABLES 5 AND 6



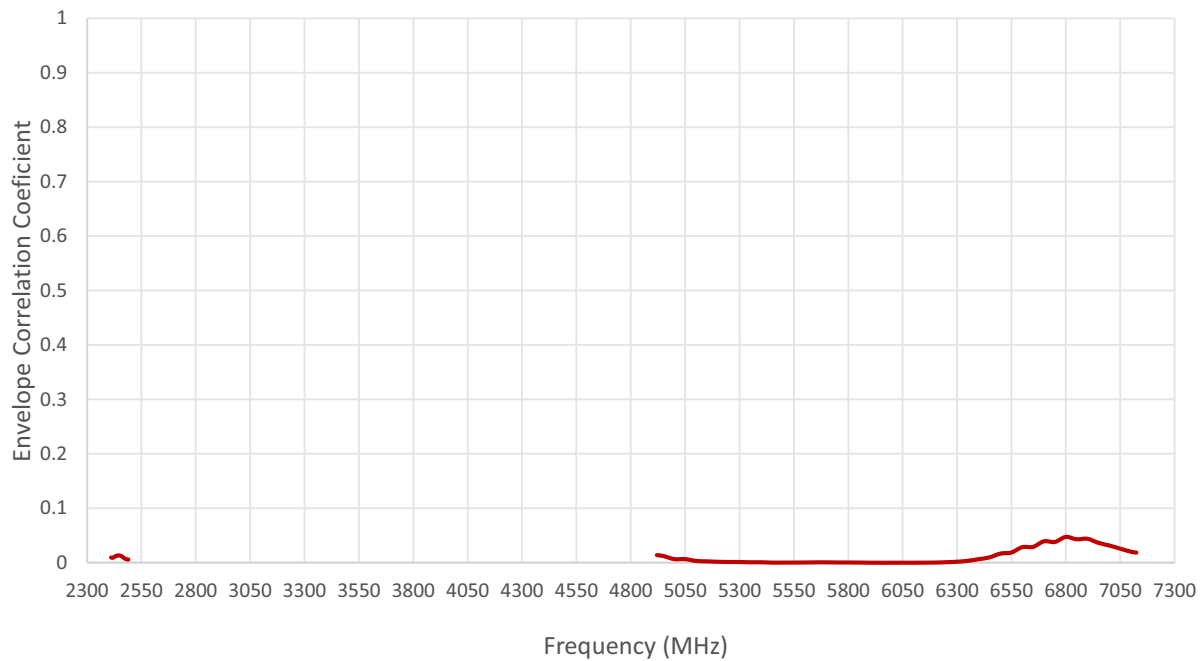
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 5 AND 6



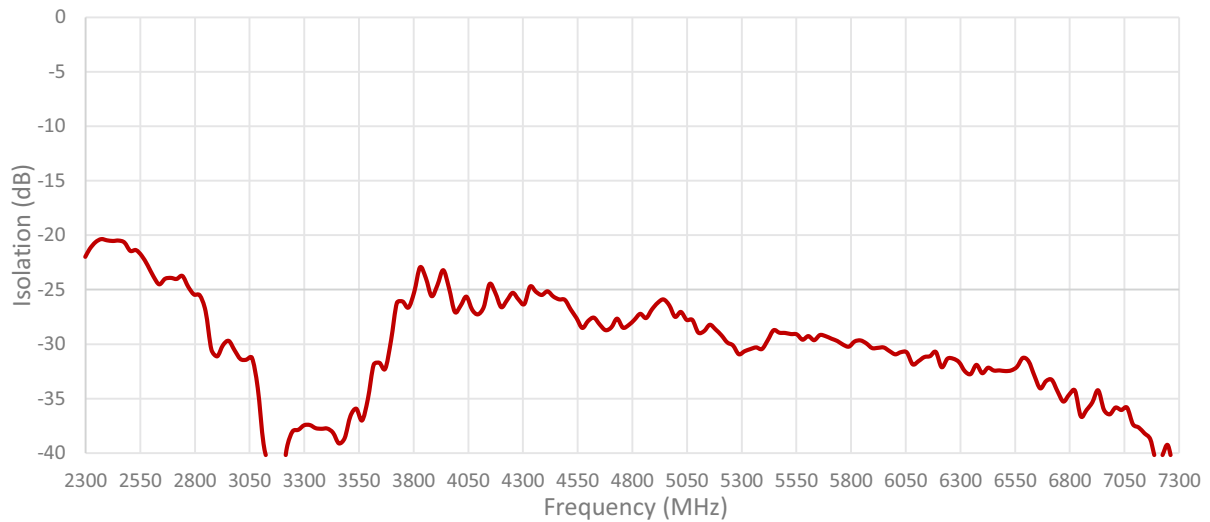
## ISOLATION FOR CABLES 5 AND 7



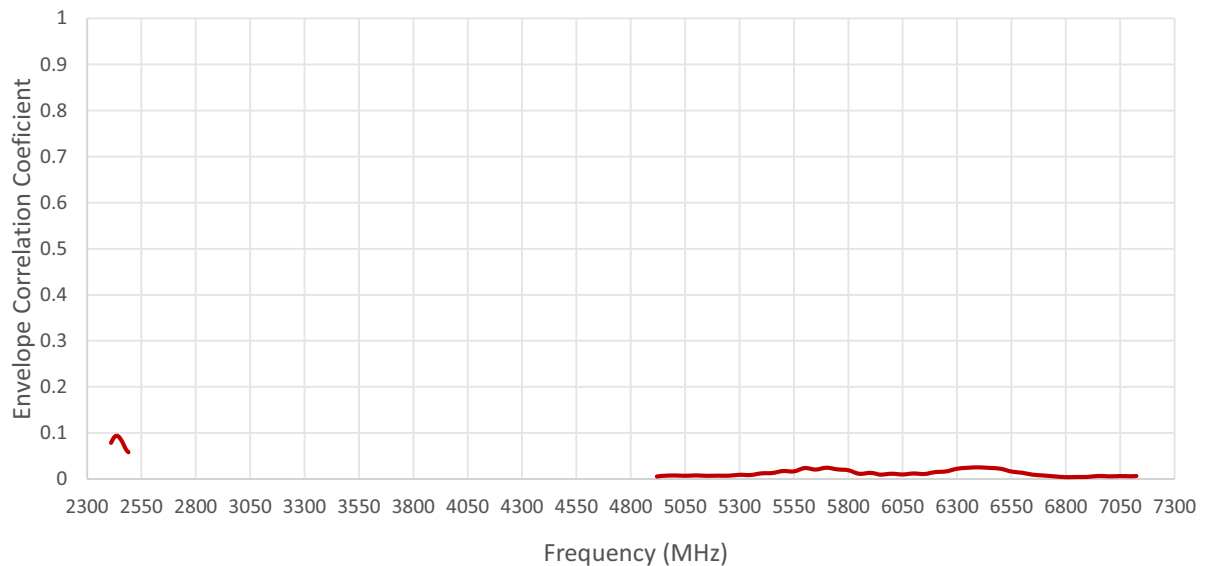
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 5 AND 7



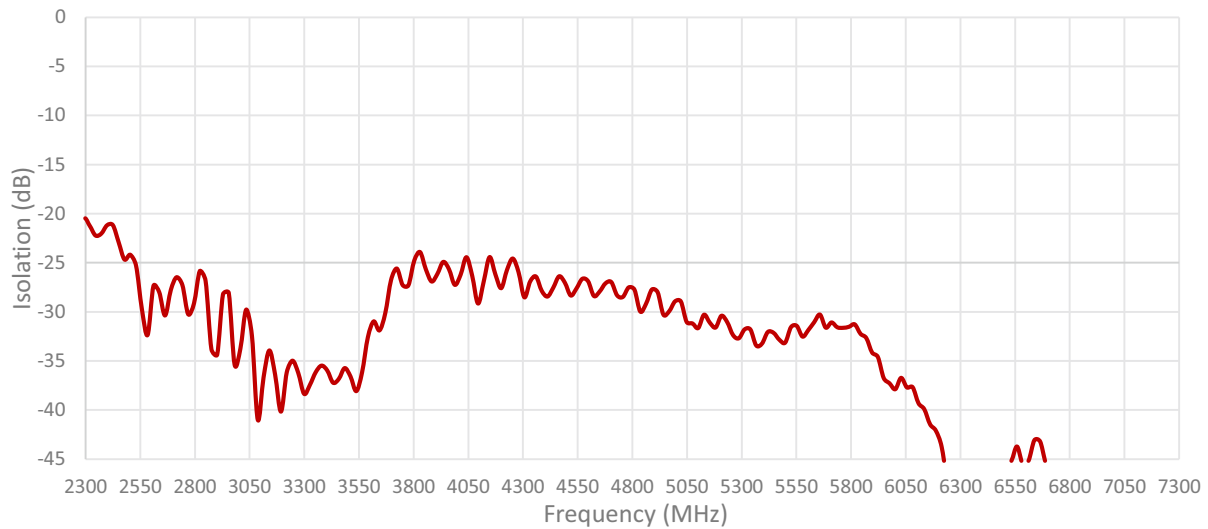
## ISOLATION FOR CABLES 5 AND 8



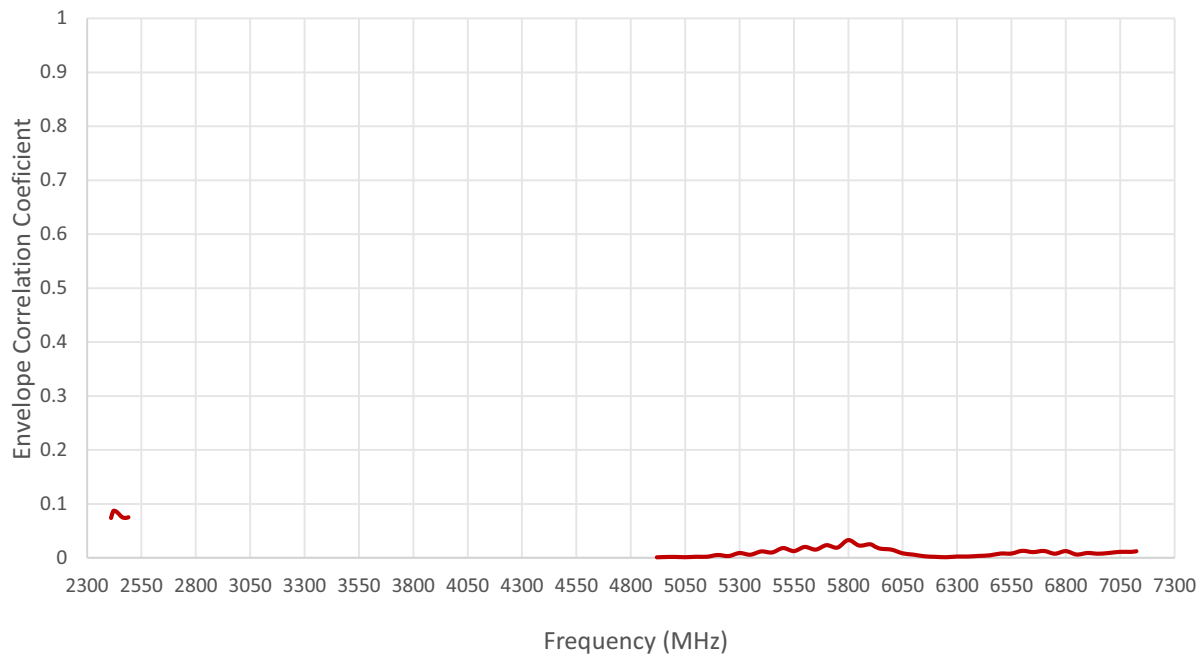
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 5 AND 8

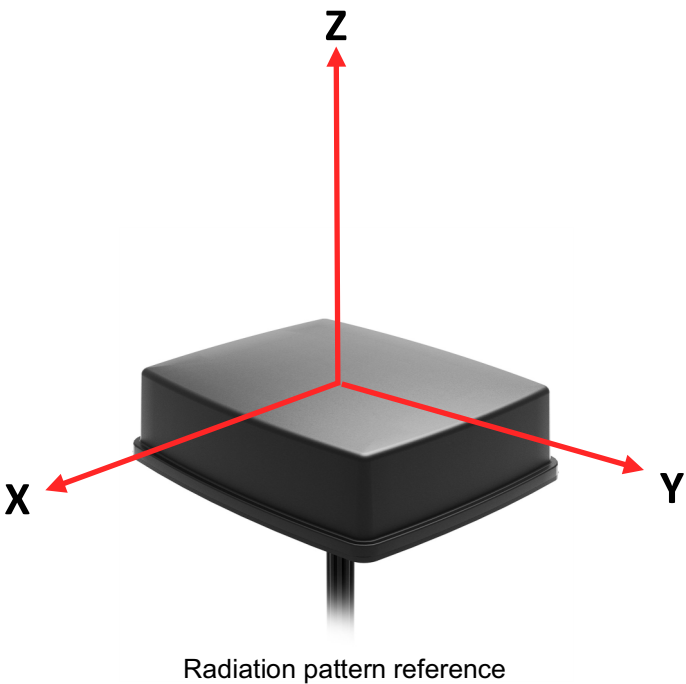


## ISOLATION FOR CABLES 6 AND 7

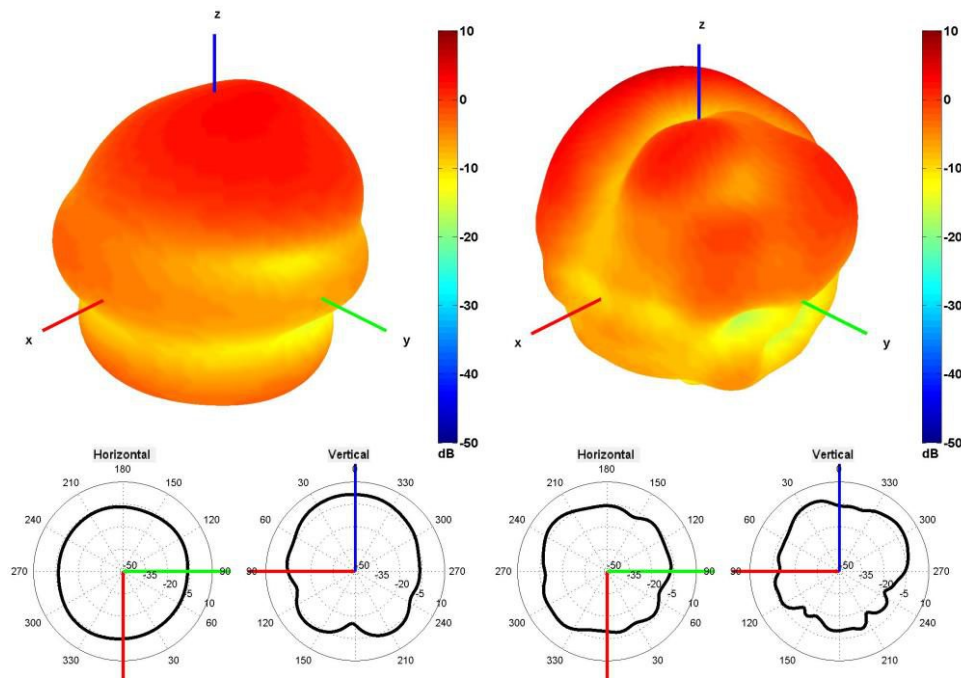


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 6 AND 7

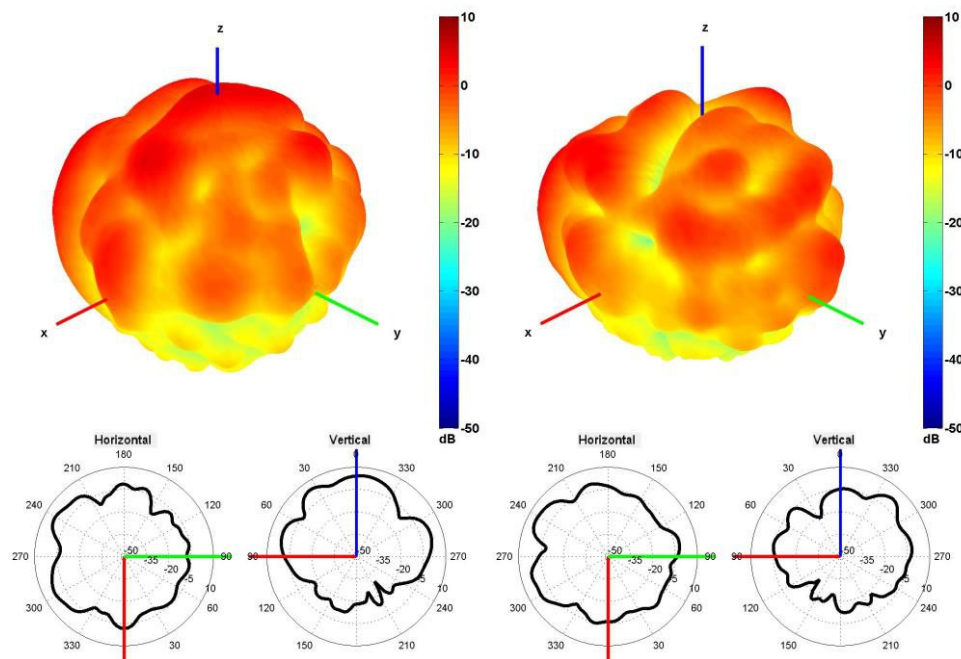




Cable 1: 5GNR

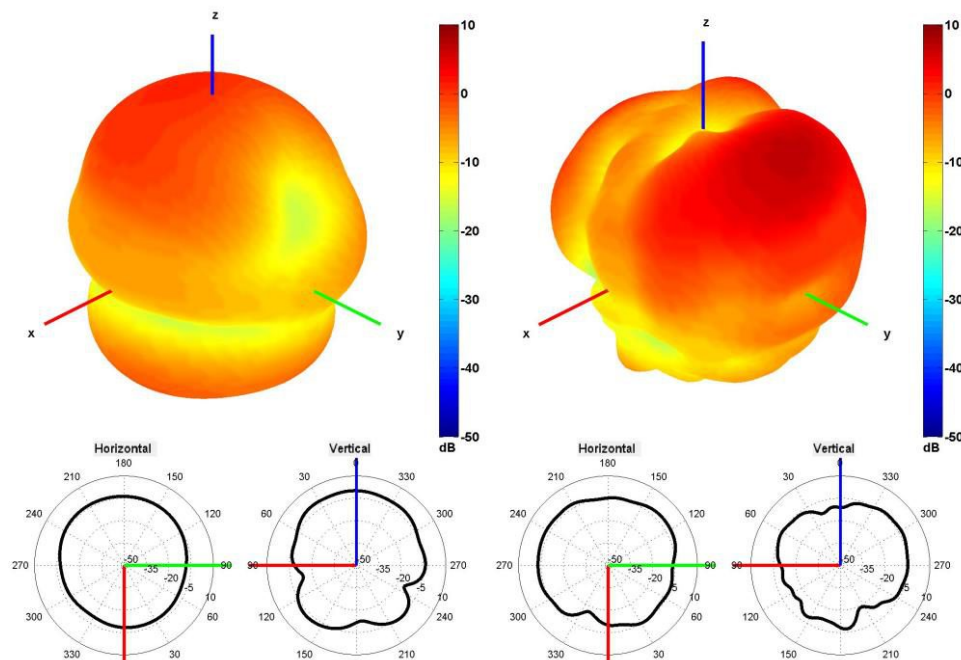


750 and 2500 MHz Radiation pattern

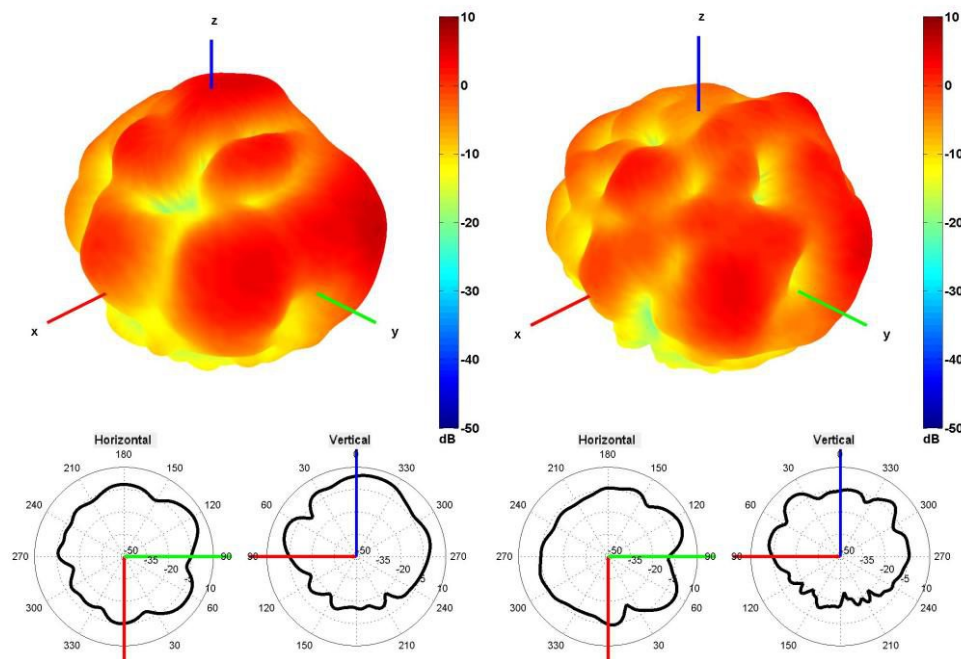


4500 and 5500 MHz Radiation pattern

Cable 2: 5GNR

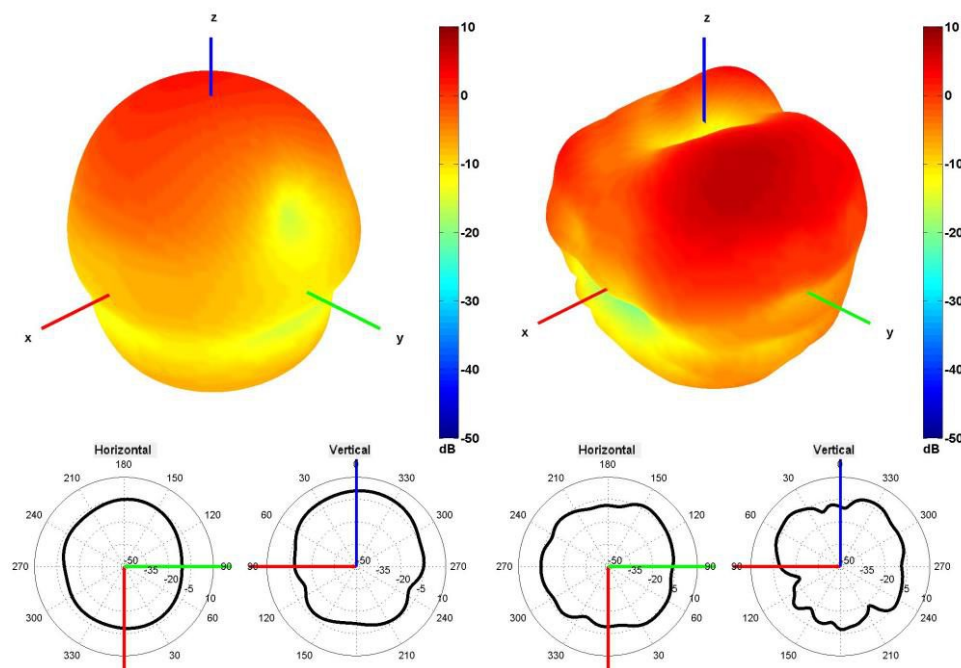


750 and 2500 MHz Radiation pattern

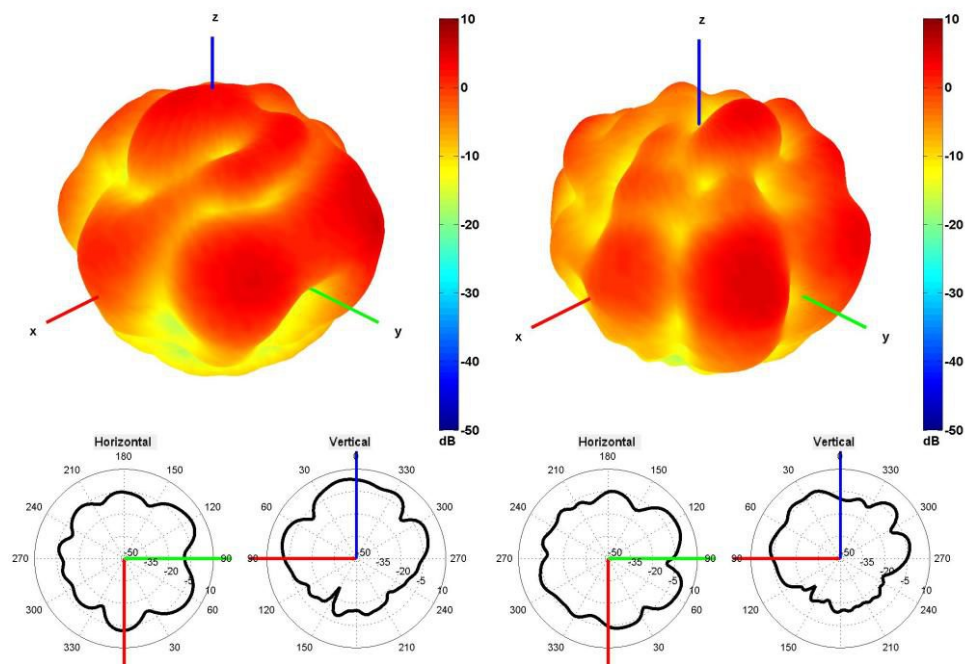


4500 and 5500 MHz Radiation pattern

Cable 3: 5GNR

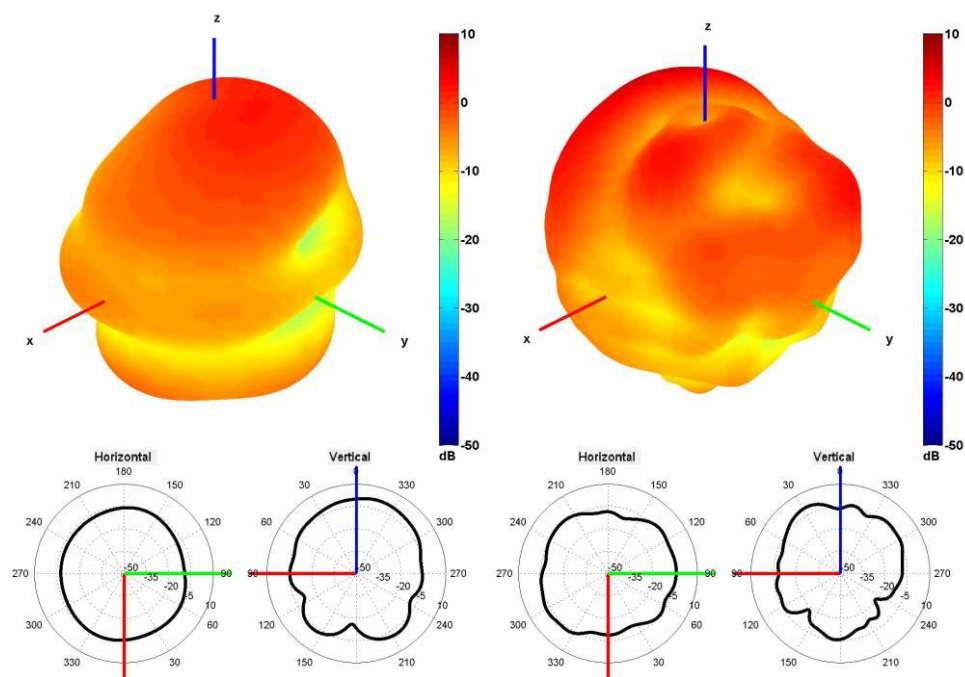


750 and 2500 MHz Radiation pattern

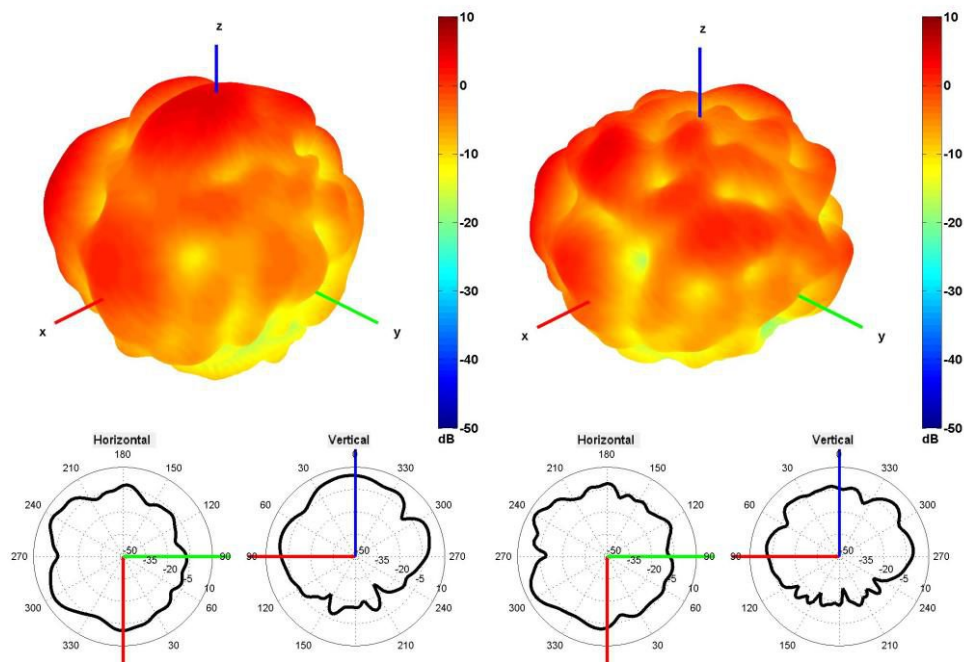


4500 and 5500 MHz Radiation pattern

Cable 4: 5GNR

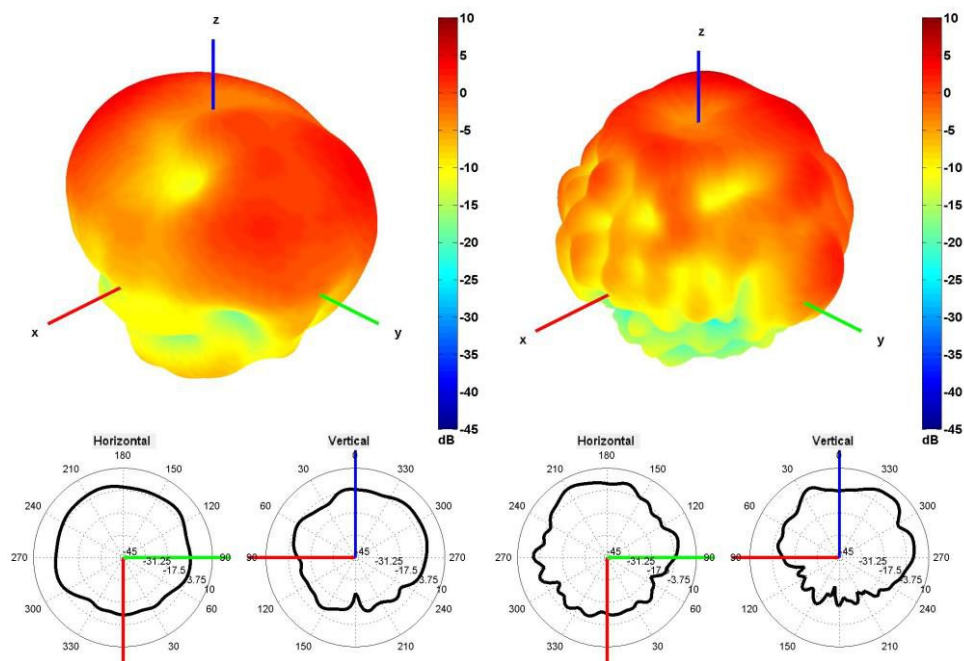


750 and 2500 MHz Radiation pattern

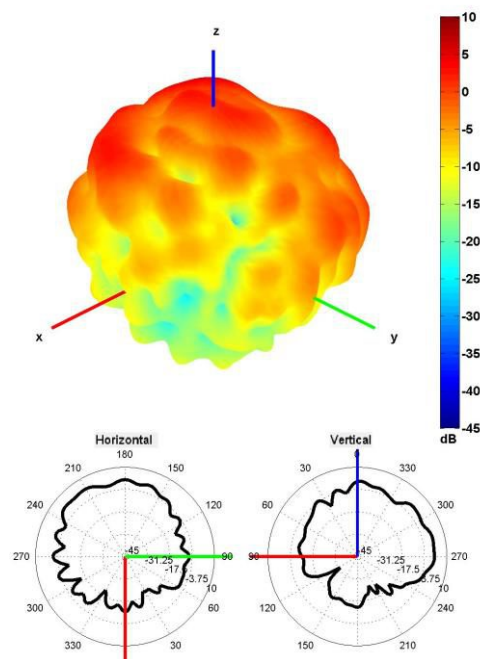


4500 and 5500 MHz Radiation pattern

Cable 5: 2.4/5.0/6.0 GHz ISM

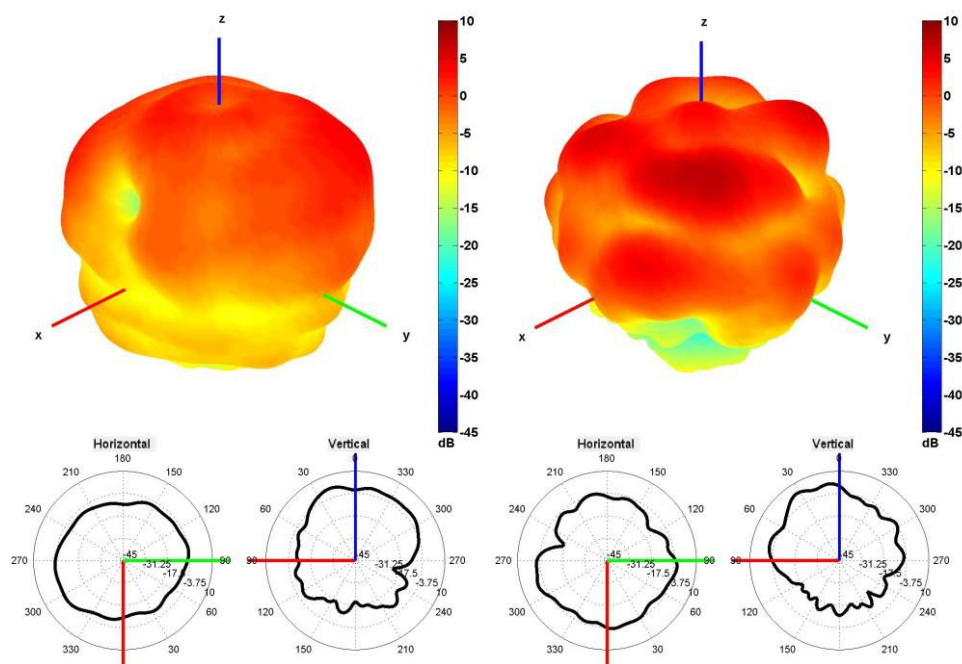


2450 and 5500 MHz Radiation pattern

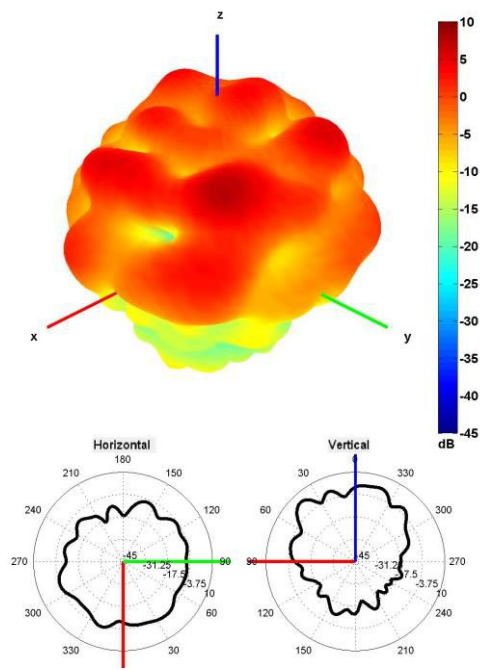


6500 MHz Radiation pattern

Cable 6: 2.4/5.0/6.0 GHz ISM

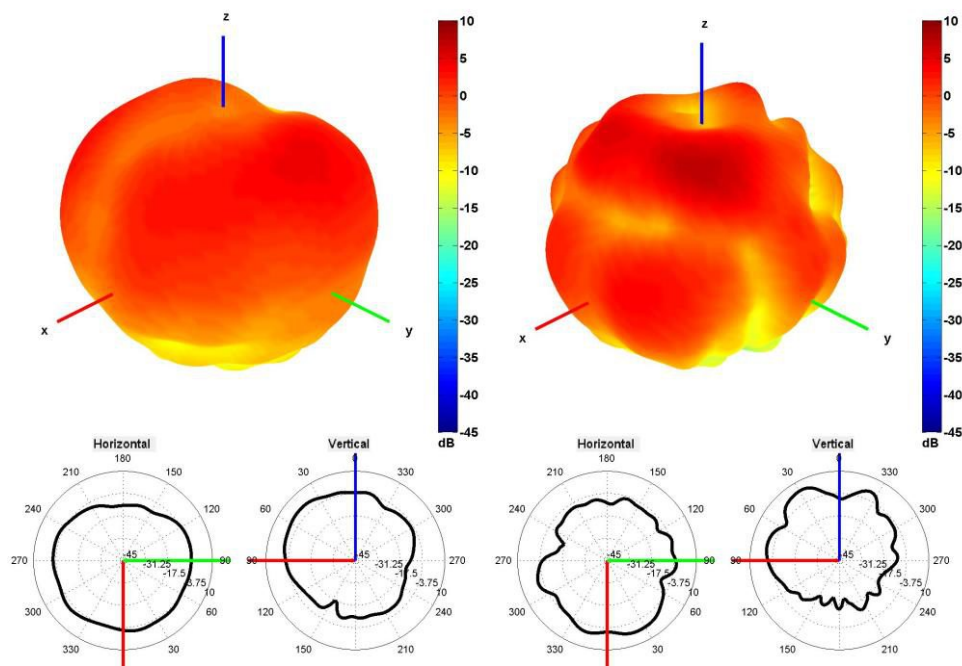


2450 and 5500 MHz Radiation pattern

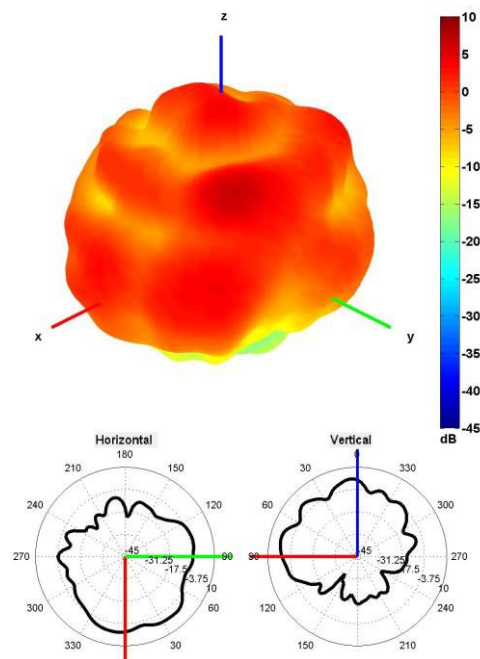


6500 MHz Radiation pattern

Cable 7: 2.4/5.0/6.0 GHz ISM

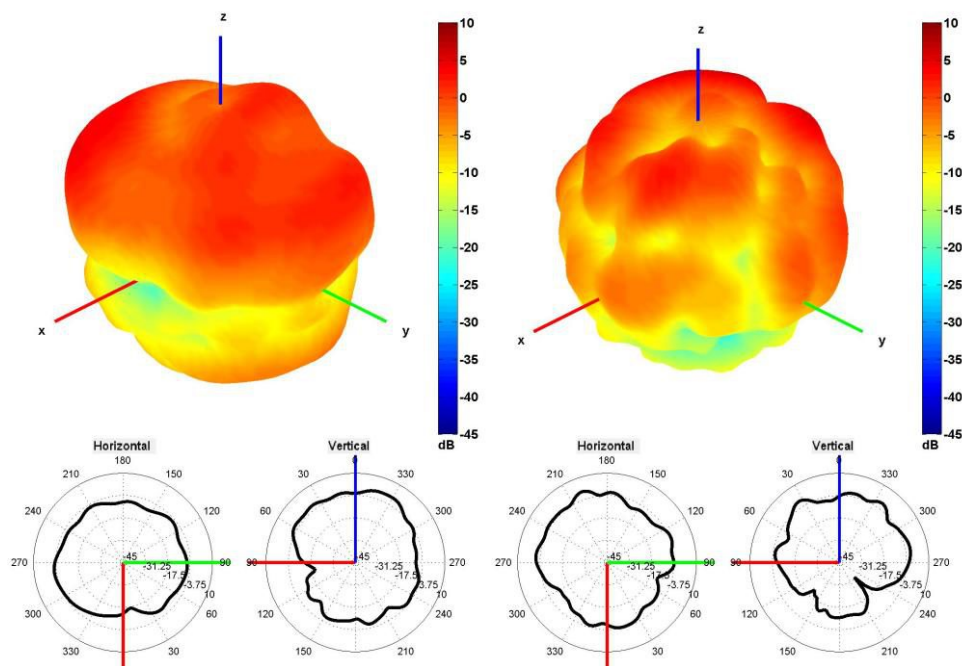


2450 and 5500 MHz Radiation pattern

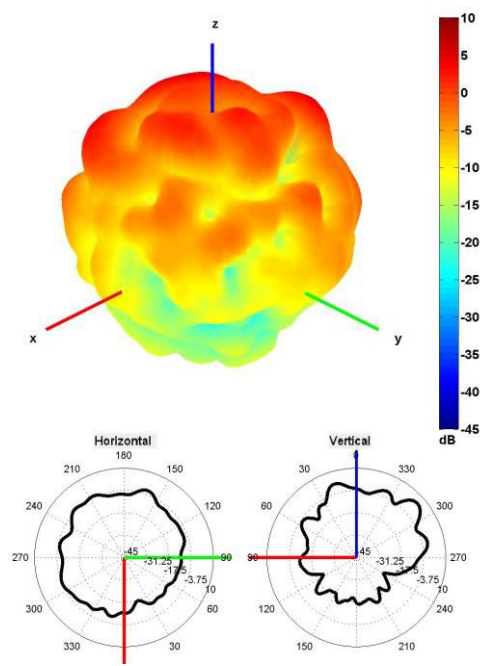


6500 MHz Radiation pattern

Cable 8: 2.4/5.0/6.0 GHz ISM

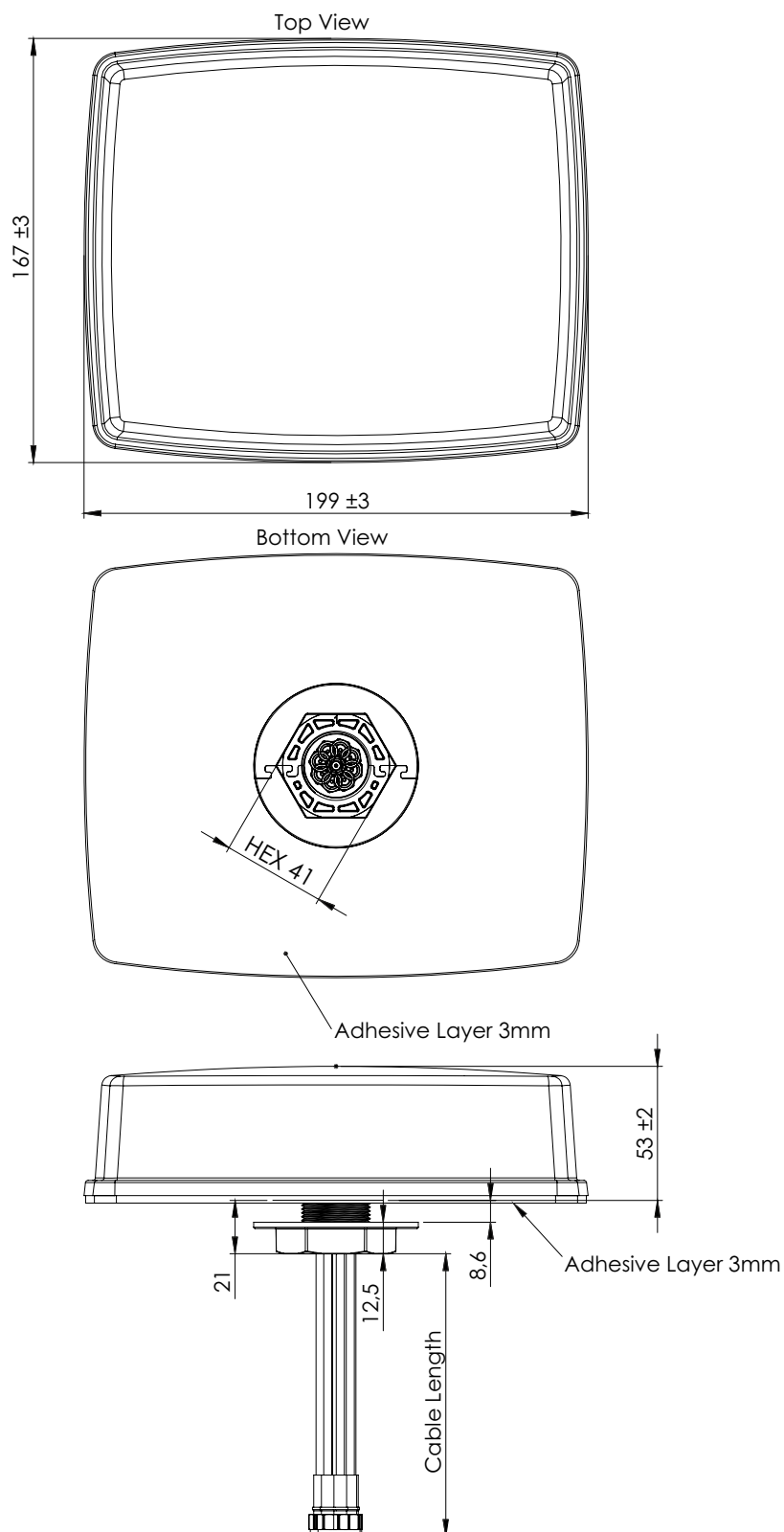


2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern

## 4. Antenna drawings



Screw Mount specs:  
**Mounting hole: Ø27.5mm**  
**Mounting torque: 6 Nm**  
**Surface thickness: max 8.6mm**  
**Wrench size: hex. 41mm**  
 Note: Dimensions are in millimeters  
 \*Dimensions are after mounting

## 5. Antenna Images

