

**FEATURES**

- Up to 90° flexibility
- Dual band Frequency
- RoHS Compliant

**APPLICATIONS**

- Meters
- Routers
- Gateways



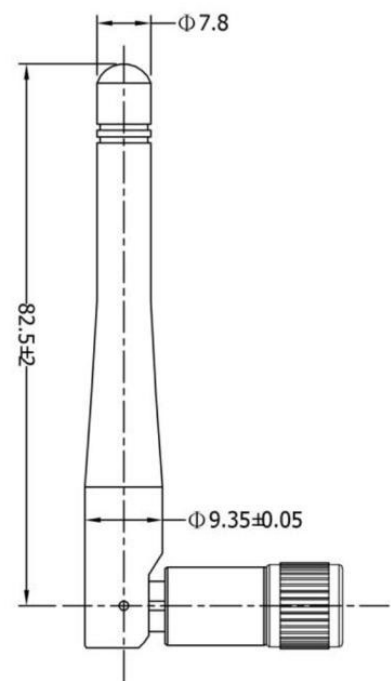
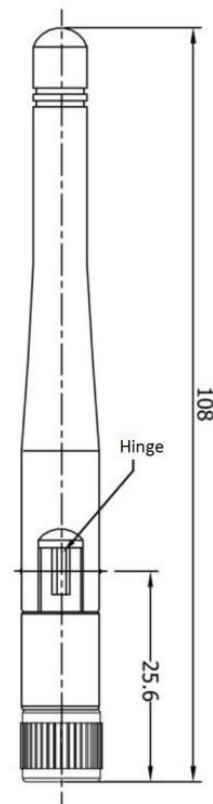
RoHS Compliant

includes all homogeneous materials  
(see part numbering system for details)

**SPECIFICATIONS**

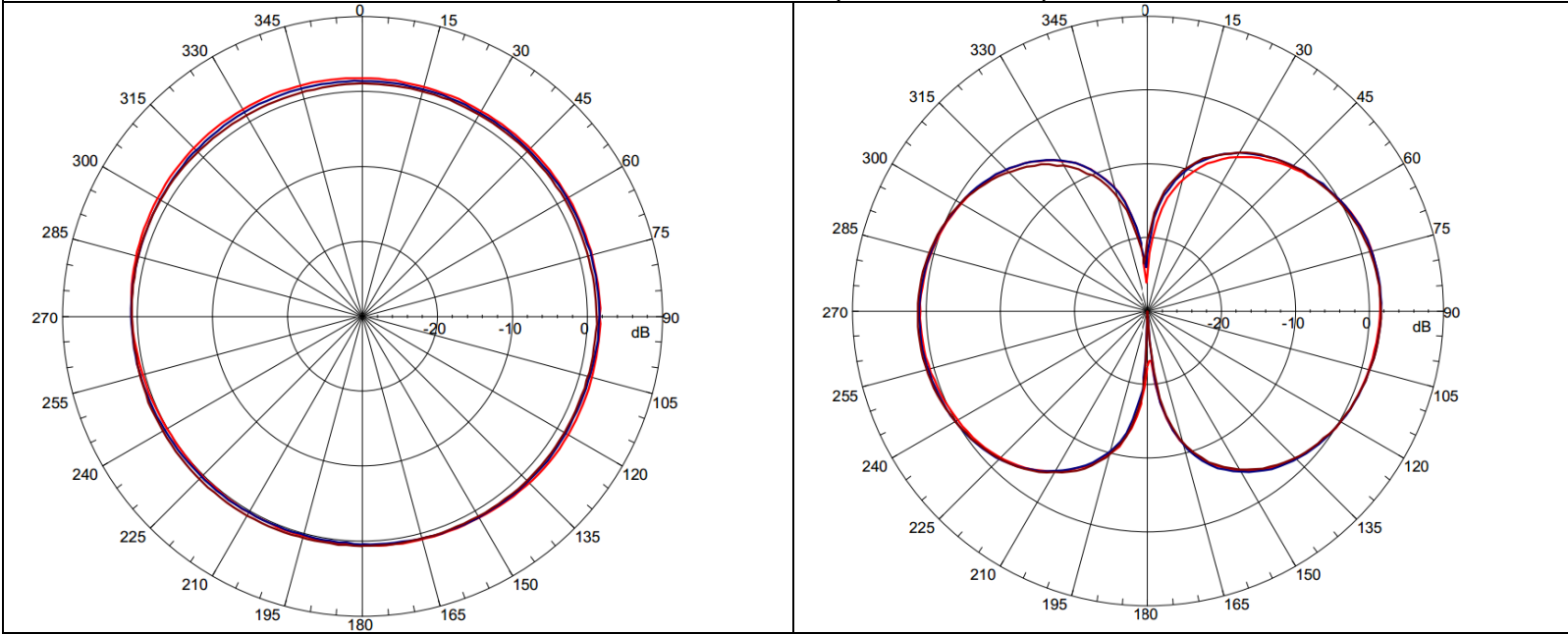
| Electrical       |                                                        |
|------------------|--------------------------------------------------------|
| Frequency Range  | 2.4~2.5 GHz<br>4.9~5.82 GHz                            |
| Polarization     | Linear                                                 |
| Gain             | Max 2.7dBi @ 2.4~2.5 GHz<br>Max 4.0dBi @ 4.9~5.825 GHz |
| V.S.W.R          | <2.0                                                   |
| Impedance        | 50Ω                                                    |
| Dimensions (mm): |                                                        |
| Body Length      | 108.0                                                  |
| Diameter         | 9.35 ± 0.05                                            |
| Connection Type  | RP-SMA Male                                            |

NAN-E 108x9 B2 A R F  
 F = RoHS compliant  
 R = RP-SMA Connector  
 A = Revision Code (See Page 5)  
 B2 = 2 Band Frequencies  
 108x9 = Size (108 mm x 9.35mm)  
 NAN-E = Series

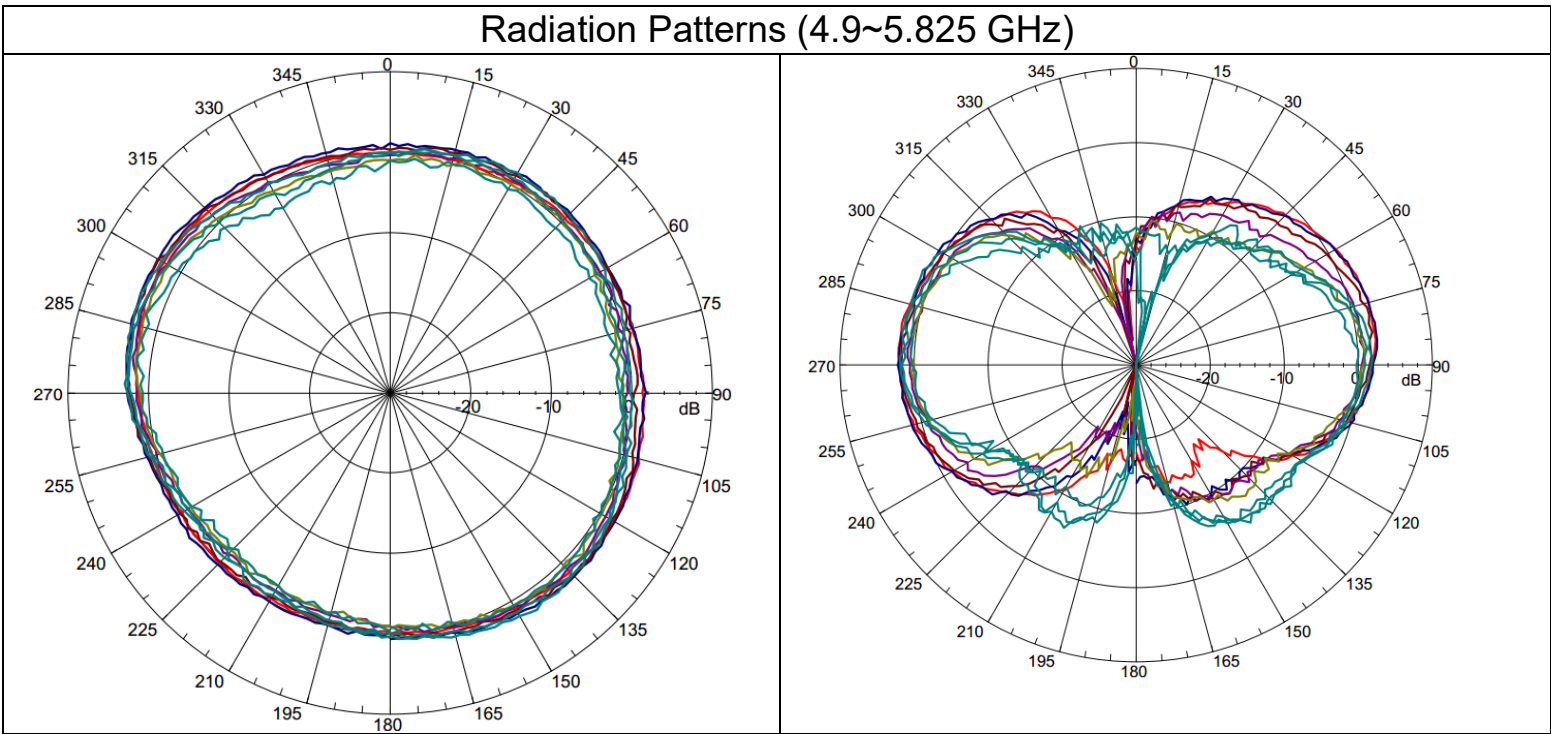


|                       |                                        |
|-----------------------|----------------------------------------|
| <b>Environmental</b>  |                                        |
| Operating Temperature | -40°C~+85°C                            |
| Vibration             | 10 ~ 55Hz with 1.5mm Amplitude 2 Hours |
| RoHS Compliant        | Yes                                    |

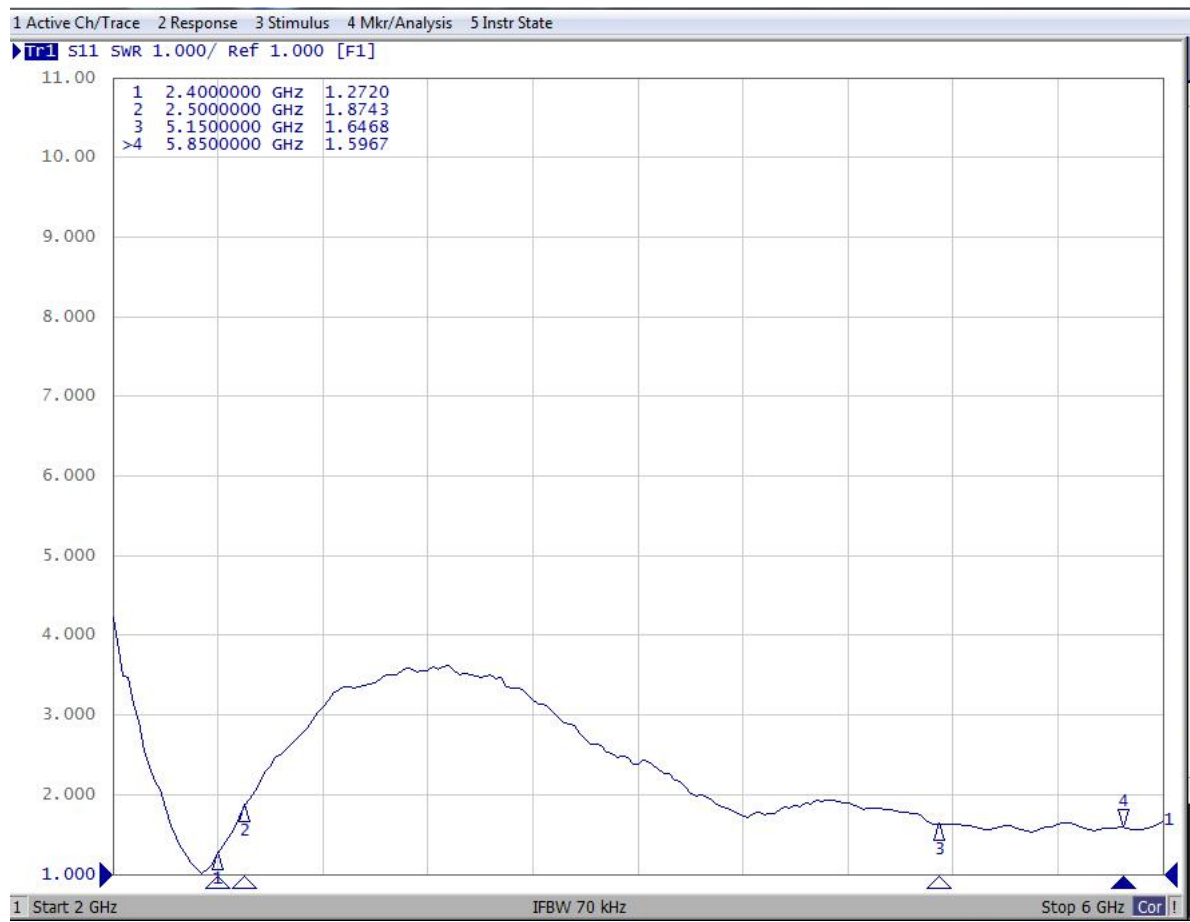
Radiation Patterns (2.4~2.5GHz)



Radiation Patterns (4.9~5.825 GHz)

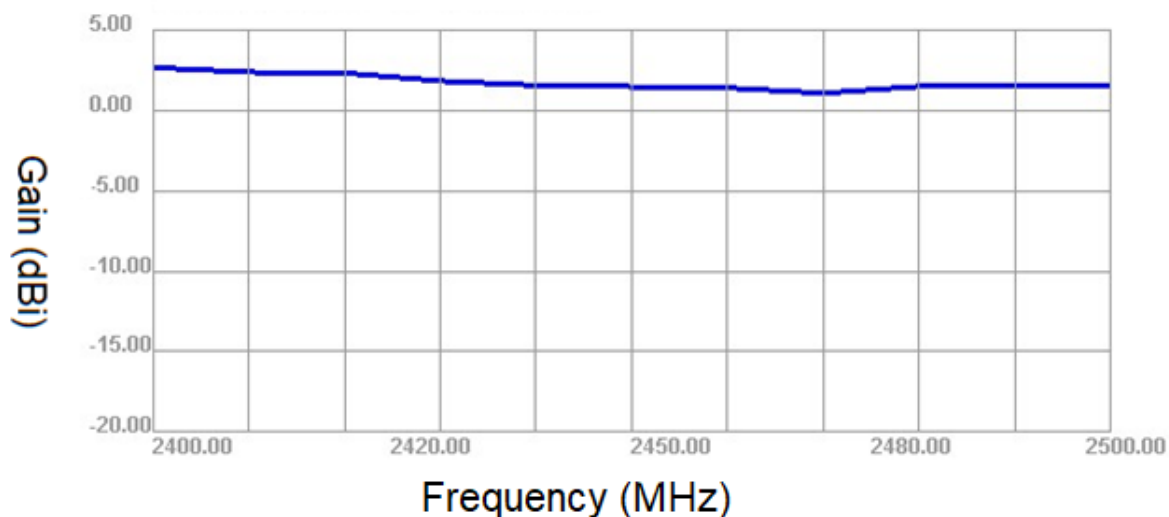


VSWR

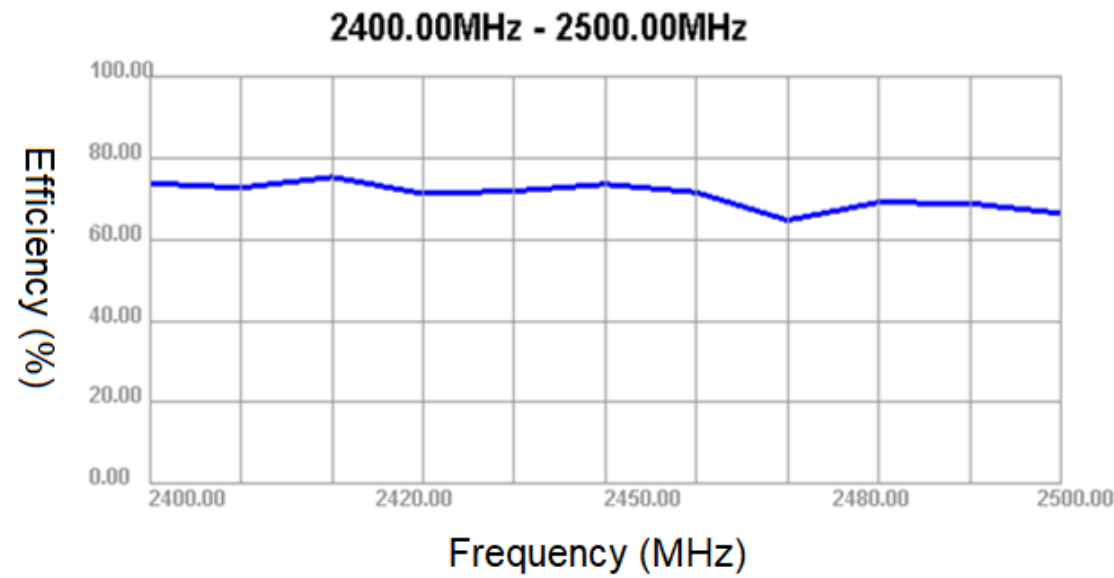


**2400 - 2500 MHz****Passive Data**

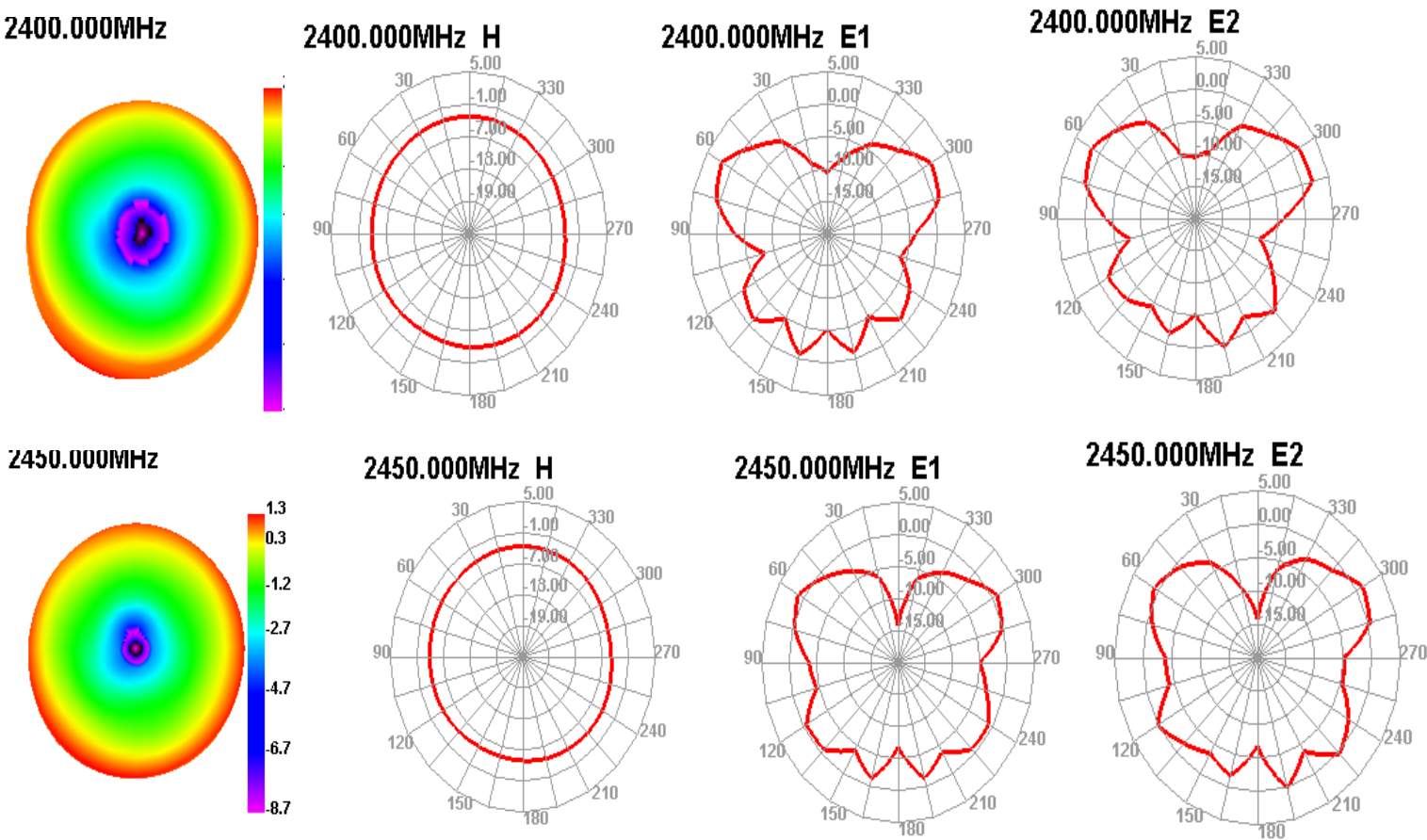
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHS (%) | Max (dB) | Min (dB) | Directivity (dBi) | Beamwidth (3dB) | AttH (dB) | AttV (dB) |
|------------|----------|-----------|------------|------------|---------|---------|----------|----------|-------------------|-----------------|-----------|-----------|
| 2400       | 73.8     | -1.32     | 2.66       | 0.51       | 49.427  | 24.372  | 2.66     | -11.31   | 3.98              | 15              | 46.78     | 46.66     |
| 2410       | 72.65    | -1.39     | 2.37       | 0.22       | 47.702  | 24.948  | 2.37     | -12.01   | 3.75              | 15              | 46.54     | 46.47     |
| 2420       | 75.27    | -1.23     | 2.31       | 0.16       | 48.057  | 27.212  | 2.31     | -12.44   | 3.55              | 15              | 46.78     | 46.77     |
| 2430       | 71.25    | -1.47     | 1.82       | -0.33      | 43.914  | 27.337  | 1.82     | -13.39   | 3.29              | 15              | 46.65     | 46.52     |
| 2440       | 71.85    | -1.44     | 1.55       | -0.6       | 42.656  | 29.197  | 1.55     | -14.18   | 2.99              | 30              | 46.79     | 46.73     |
| 2450       | 73.54    | -1.33     | 1.47       | -0.68      | 42.424  | 31.114  | 1.47     | -15.24   | 2.81              | 15              | 46.92     | 46.83     |
| 2460       | 71.53    | -1.45     | 1.39       | -0.76      | 40.773  | 30.762  | 1.39     | -16.62   | 2.85              | 30              | 47.02     | 46.93     |
| 2470       | 64.72    | -1.89     | 1.06       | -1.09      | 36.996  | 27.723  | 1.06     | -18.31   | 2.95              | 30              | 46.82     | 46.7      |
| 2480       | 69.08    | -1.61     | 1.49       | -0.66      | 39.986  | 29.098  | 1.49     | -19.4    | 3.1               | 30              | 47.15     | 47.03     |
| 2490       | 68.82    | -1.62     | 1.58       | -0.57      | 40.306  | 28.515  | 1.58     | -20.08   | 3.21              | 30              | 47.25     | 47.04     |
| 2500       | 66.39    | -1.78     | 1.48       | -0.67      | 39.248  | 27.138  | 1.48     | -20.46   | 3.26              | 30              | 47.08     | 46.9      |

**Gain vs. Frequency****2400.00MHz - 2500.00MHz**

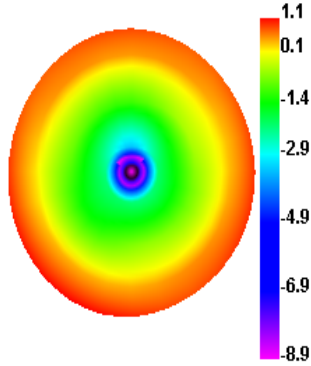
Efficiency vs Frequency



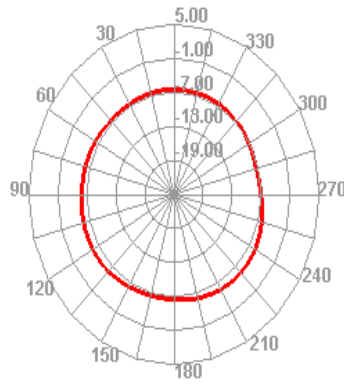
Radiation Patterns



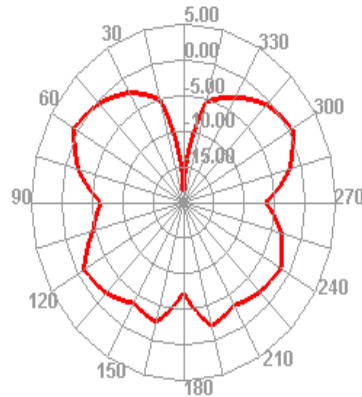
2500.000MHz



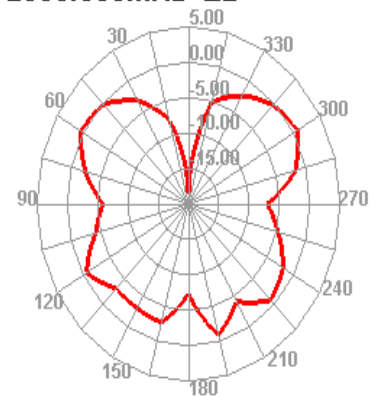
2500.000MHz H



2500.000MHz E1



2500.000MHz E2

**4900 – 5825 MHz****Passive Data**

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHIS (%) | Max (dB) | Min (dB) | Directivity (dBi) | Beamwidth (3dB) | AttH (dB) | AttV (dB) |
|------------|----------|-----------|------------|------------|---------|----------|----------|----------|-------------------|-----------------|-----------|-----------|
| 4900       | 68.31    | -1.66     | 2.41       | 0.26       | 44.855  | 23.453   | 2.41     | -23.27   | 4.06              | 30              | 51.87     | 51.94     |
| 4905       | 67.54    | -1.7      | 2.36       | 0.21       | 43.938  | 23.602   | 2.36     | -24.06   | 4.07              | 30              | 51.8      | 51.91     |
| 4910       | 61.43    | -2.12     | 1.97       | -0.18      | 39.578  | 21.853   | 1.97     | -25.2    | 4.09              | 30              | 51.57     | 51.69     |
| 4915       | 63.2     | -1.99     | 2.1        | -0.05      | 40.342  | 22.853   | 2.1      | -25.65   | 4.09              | 30              | 51.72     | 51.76     |
| 4920       | 59.68    | -2.24     | 1.85       | -0.3       | 37.762  | 21.914   | 1.85     | -26.96   | 4.09              | 30              | 51.64     | 51.72     |
| 4925       | 57.88    | -2.37     | 1.75       | -0.4       | 36.316  | 21.567   | 1.75     | -27.07   | 4.13              | 30              | 51.58     | 51.76     |
| 4930       | 65.98    | -1.81     | 2.33       | 0.18       | 41.074  | 24.902   | 2.33     | -27.26   | 4.14              | 30              | 51.9      | 52.03     |
| 4935       | 65.16    | -1.86     | 2.35       | 0.2        | 40.272  | 24.887   | 2.35     | -27.12   | 4.21              | 30              | 51.82     | 51.93     |
| 4940       | 57.7     | -2.39     | 1.88       | -0.27      | 35.419  | 22.285   | 1.88     | -26.8    | 4.27              | 30              | 51.49     | 51.67     |
| 4945       | 60.4     | -2.19     | 2.15       | 0          | 36.835  | 23.565   | 2.15     | -26.13   | 4.34              | 30              | 51.71     | 51.85     |
| 4950       | 64.97    | -1.87     | 2.56       | 0.41       | 39.397  | 25.568   | 2.56     | -25.48   | 4.43              | 30              | 51.87     | 52.01     |
| 4955       | 65.39    | -1.84     | 2.64       | 0.49       | 39.443  | 25.945   | 2.64     | -24.75   | 4.48              | 30              | 51.73     | 51.98     |
| 4960       | 64.03    | -1.94     | 2.6        | 0.45       | 38.427  | 25.601   | 2.6      | -24.42   | 4.54              | 30              | 51.76     | 51.93     |
| 4965       | 62.1     | -2.07     | 2.54       | 0.39       | 37.12   | 24.983   | 2.54     | -23.77   | 4.6               | 30              | 51.89     | 52.01     |
| 4970       | 64.94    | -1.88     | 2.79       | 0.64       | 38.673  | 26.263   | 2.79     | -23.48   | 4.66              | 30              | 51.93     | 52.18     |
| 4975       | 63.2     | -1.99     | 2.68       | 0.53       | 37.525  | 25.675   | 2.68     | -23.05   | 4.67              | 30              | 51.72     | 52.03     |
| 4980       | 57.64    | -2.39     | 2.3        | 0.15       | 34.132  | 23.508   | 2.3      | -23.09   | 4.7               | 30              | 51.64     | 51.87     |
| 4985       | 64.43    | -1.91     | 2.8        | 0.65       | 38.093  | 26.337   | 2.8      | -22.56   | 4.71              | 30              | 52.07     | 52.25     |
| 4990       | 69.38    | -1.59     | 3.11       | 0.96       | 40.959  | 28.42    | 3.11     | -21.89   | 4.69              | 30              | 52.18     | 52.41     |
| 4995       | 62.68    | -2.03     | 2.66       | 0.51       | 36.979  | 25.703   | 2.66     | -21.74   | 4.69              | 30              | 51.87     | 52.18     |
| 5000       | 67.6     | -1.7      | 2.95       | 0.8        | 39.858  | 27.742   | 2.95     | -21.11   | 4.66              | 30              | 52.14     | 52.37     |
| 5005       | 71.9     | -1.43     | 3.21       | 1.06       | 42.407  | 29.488   | 3.21     | -20.3    | 4.64              | 30              | 52.38     | 52.54     |

|      |       |       |      |       |        |        |      |        |      |    |       |       |
|------|-------|-------|------|-------|--------|--------|------|--------|------|----|-------|-------|
| 5010 | 62.92 | -2.01 | 2.64 | 0.49  | 37.142 | 25.779 | 2.64 | -20.11 | 4.65 | 30 | 52.06 | 52.32 |
| 5015 | 69.12 | -1.6  | 3.06 | 0.91  | 40.869 | 28.255 | 3.06 | -19.62 | 4.66 | 30 | 52.4  | 52.65 |
| 5020 | 75.97 | -1.19 | 3.46 | 1.31  | 45.04  | 30.935 | 3.46 | -18.81 | 4.65 | 30 | 52.85 | 52.98 |
| 5025 | 60.47 | -2.18 | 2.49 | 0.34  | 35.963 | 24.512 | 2.49 | -19.31 | 4.67 | 30 | 52.3  | 52.56 |
| 5030 | 59.43 | -2.26 | 2.43 | 0.28  | 35.454 | 23.972 | 2.43 | -18.58 | 4.69 | 30 | 52.22 | 52.5  |
| 5035 | 71.52 | -1.46 | 3.23 | 1.08  | 42.837 | 28.68  | 3.23 | -17.37 | 4.68 | 30 | 52.77 | 52.85 |
| 5040 | 64.96 | -1.87 | 2.82 | 0.67  | 39.056 | 25.901 | 2.82 | -17.15 | 4.69 | 30 | 52.42 | 52.6  |
| 5045 | 59.67 | -2.24 | 2.46 | 0.31  | 35.974 | 23.691 | 2.46 | -17.01 | 4.71 | 30 | 52.05 | 52.38 |
| 5050 | 68.05 | -1.67 | 3.03 | 0.88  | 41.152 | 26.901 | 3.03 | -16.13 | 4.7  | 30 | 52.5  | 52.61 |
| 5055 | 66.78 | -1.75 | 2.92 | 0.77  | 40.531 | 26.248 | 2.92 | -15.7  | 4.67 | 30 | 52.42 | 52.48 |
| 5060 | 61.99 | -2.08 | 2.59 | 0.44  | 37.728 | 24.265 | 2.59 | -16.99 | 4.66 | 30 | 51.96 | 52.17 |
| 5065 | 65.65 | -1.83 | 2.78 | 0.63  | 40.079 | 25.569 | 2.78 | -18.31 | 4.61 | 30 | 52.09 | 52.29 |
| 5070 | 65.18 | -1.86 | 2.66 | 0.51  | 39.939 | 25.238 | 2.66 | -20.03 | 4.52 | 30 | 52.12 | 52.27 |
| 5075 | 61.37 | -2.12 | 2.32 | 0.17  | 37.727 | 23.643 | 2.32 | -22.63 | 4.44 | 30 | 51.91 | 52.1  |
| 5080 | 61.49 | -2.11 | 2.22 | 0.07  | 37.904 | 23.589 | 2.22 | -24.74 | 4.34 | 30 | 51.93 | 52.07 |
| 5085 | 63.11 | -2    | 2.24 | 0.09  | 39.014 | 24.099 | 2.24 | -26.49 | 4.23 | 30 | 52    | 52.14 |
| 5090 | 62.82 | -2.02 | 2.12 | -0.03 | 38.898 | 23.92  | 2.12 | -25.89 | 4.14 | 30 | 51.98 | 52.15 |
| 5095 | 61.15 | -2.14 | 1.9  | -0.25 | 37.895 | 23.259 | 1.9  | -24.83 | 4.04 | 30 | 51.99 | 52.07 |
| 5100 | 65.8  | -1.82 | 2.16 | 0.01  | 40.782 | 25.019 | 2.16 | -23.33 | 3.98 | 30 | 52.23 | 52.3  |
| 5105 | 70.9  | -1.49 | 2.51 | 0.36  | 43.87  | 27.025 | 2.51 | -21.84 | 4.01 | 30 | 52.53 | 52.57 |
| 5110 | 64.45 | -1.91 | 2.11 | -0.04 | 39.754 | 24.692 | 2.11 | -21.47 | 4.01 | 30 | 52.39 | 52.37 |
| 5115 | 60.05 | -2.21 | 1.78 | -0.37 | 36.884 | 23.165 | 1.78 | -21.18 | 3.99 | 30 | 52.04 | 52.12 |
| 5120 | 67.47 | -1.71 | 2.28 | 0.13  | 41.171 | 26.295 | 2.28 | -19.61 | 3.99 | 45 | 52.33 | 52.44 |
| 5125 | 67.21 | -1.73 | 2.23 | 0.08  | 40.745 | 26.469 | 2.23 | -19.71 | 3.96 | 45 | 52.62 | 52.57 |
| 5130 | 61.01 | -2.15 | 1.77 | -0.38 | 36.737 | 24.27  | 1.77 | -20.43 | 3.91 | 45 | 52.29 | 52.29 |
| 5135 | 66.05 | -1.8  | 2.06 | -0.09 | 39.466 | 26.58  | 2.06 | -20.17 | 3.86 | 45 | 52.23 | 52.28 |
| 5140 | 66.22 | -1.79 | 2    | -0.15 | 39.267 | 26.957 | 2    | -20    | 3.79 | 30 | 52.33 | 52.33 |
| 5145 | 58.35 | -2.34 | 1.4  | -0.75 | 34.352 | 23.994 | 1.4  | -20.57 | 3.74 | 30 | 52.13 | 52.12 |
| 5150 | 64.69 | -1.89 | 1.86 | -0.29 | 37.825 | 26.863 | 1.86 | -19.45 | 3.75 | 30 | 52.43 | 52.34 |
| 5155 | 69.25 | -1.6  | 2.16 | 0.01  | 40.245 | 29.006 | 2.16 | -18.5  | 3.76 | 30 | 52.61 | 52.51 |
| 5160 | 59.82 | -2.23 | 1.56 | -0.59 | 34.533 | 25.283 | 1.56 | -18.38 | 3.79 | 30 | 52.12 | 52.18 |
| 5165 | 62.64 | -2.03 | 1.82 | -0.33 | 35.944 | 26.698 | 1.82 | -17.66 | 3.85 | 30 | 52.23 | 52.25 |
| 5170 | 69.78 | -1.56 | 2.3  | 0.15  | 39.861 | 29.919 | 2.3  | -17.32 | 3.86 | 30 | 52.6  | 52.46 |
| 5175 | 62.55 | -2.04 | 1.9  | -0.25 | 35.596 | 26.955 | 1.9  | -18.76 | 3.94 | 30 | 52.18 | 52.19 |
| 5180 | 60.97 | -2.15 | 1.82 | -0.33 | 34.572 | 26.394 | 1.82 | -19.08 | 3.97 | 30 | 52.05 | 52.05 |
| 5185 | 67.07 | -1.73 | 2.27 | 0.12  | 37.965 | 29.106 | 2.27 | -19.01 | 4.01 | 30 | 52.45 | 52.28 |
| 5190 | 64.17 | -1.93 | 2.14 | -0.01 | 36.262 | 27.907 | 2.14 | -19.33 | 4.06 | 30 | 52.18 | 52.17 |
| 5195 | 60.82 | -2.16 | 1.92 | -0.23 | 34.287 | 26.53  | 1.92 | -19.27 | 4.08 | 30 | 52.04 | 52.03 |
| 5200 | 62.44 | -2.05 | 2.06 | -0.09 | 35.135 | 27.309 | 2.06 | -18.5  | 4.11 | 30 | 52.5  | 52.27 |
| 5205 | 66.36 | -1.78 | 2.31 | 0.16  | 37.248 | 29.117 | 2.31 | -18.11 | 4.09 | 30 | 52.56 | 52.49 |

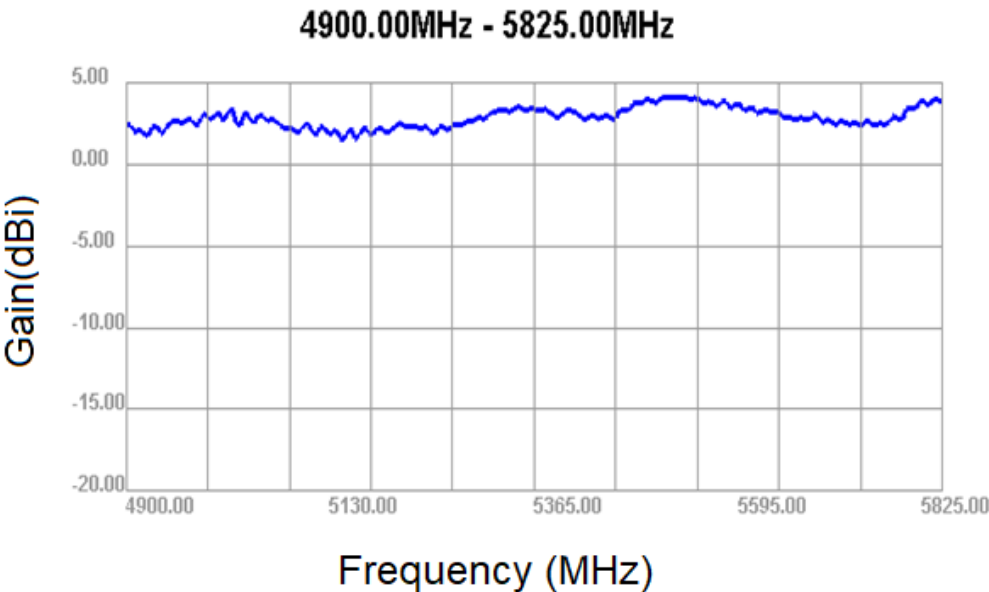
|      |       |       |      |       |        |        |      |        |      |    |       |       |
|------|-------|-------|------|-------|--------|--------|------|--------|------|----|-------|-------|
| 5210 | 70.2  | -1.54 | 2.53 | 0.38  | 39.262 | 30.934 | 2.53 | -17.1  | 4.06 | 30 | 52.27 | 52.38 |
| 5215 | 68.35 | -1.65 | 2.38 | 0.23  | 38.089 | 30.262 | 2.38 | -16.59 | 4.03 | 30 | 52.34 | 52.24 |
| 5220 | 66.94 | -1.74 | 2.24 | 0.09  | 37.19  | 29.75  | 2.24 | -16.2  | 3.98 | 30 | 52.4  | 52.27 |
| 5225 | 69.83 | -1.56 | 2.37 | 0.22  | 38.672 | 31.153 | 2.37 | -16.45 | 3.93 | 30 | 52.28 | 52.3  |
| 5230 | 69.08 | -1.61 | 2.26 | 0.11  | 38.167 | 30.912 | 2.26 | -16.94 | 3.87 | 30 | 52.24 | 52.27 |
| 5235 | 68.86 | -1.62 | 2.2  | 0.05  | 37.993 | 30.866 | 2.2  | -17.23 | 3.82 | 30 | 52.27 | 52.26 |
| 5240 | 72.22 | -1.41 | 2.36 | 0.21  | 39.833 | 32.39  | 2.36 | -17.32 | 3.77 | 30 | 52.38 | 52.3  |
| 5245 | 67.35 | -1.72 | 1.99 | -0.16 | 37.169 | 30.184 | 1.99 | -17.69 | 3.71 | 30 | 52.33 | 52.26 |
| 5250 | 66.26 | -1.79 | 1.87 | -0.28 | 36.621 | 29.638 | 1.87 | -17.95 | 3.65 | 30 | 52.27 | 52.3  |
| 5255 | 73.94 | -1.31 | 2.31 | 0.16  | 40.935 | 33.004 | 2.31 | -17.51 | 3.62 | 30 | 52.5  | 52.48 |
| 5260 | 73.29 | -1.35 | 2.24 | 0.09  | 40.666 | 32.628 | 2.24 | -17.44 | 3.59 | 30 | 52.58 | 52.56 |
| 5265 | 71.58 | -1.45 | 2.08 | -0.07 | 39.812 | 31.769 | 2.08 | -17.2  | 3.53 | 30 | 52.47 | 52.59 |
| 5270 | 77.83 | -1.09 | 2.42 | 0.27  | 43.423 | 34.409 | 2.42 | -16.51 | 3.51 | 30 | 52.68 | 52.73 |
| 5275 | 79.06 | -1.02 | 2.48 | 0.33  | 44.263 | 34.793 | 2.48 | -16.49 | 3.5  | 30 | 52.86 | 52.86 |
| 5280 | 75.87 | -1.2  | 2.4  | 0.25  | 42.641 | 33.23  | 2.4  | -16.47 | 3.59 | 30 | 52.54 | 52.75 |
| 5285 | 77.91 | -1.08 | 2.59 | 0.44  | 43.942 | 33.965 | 2.59 | -16.22 | 3.67 | 30 | 52.55 | 52.67 |
| 5290 | 76.87 | -1.14 | 2.61 | 0.46  | 43.532 | 33.336 | 2.61 | -16.06 | 3.75 | 30 | 52.86 | 52.77 |
| 5295 | 77.61 | -1.1  | 2.73 | 0.58  | 44.101 | 33.511 | 2.73 | -15.86 | 3.83 | 30 | 52.79 | 52.9  |
| 5300 | 79.61 | -0.99 | 2.9  | 0.75  | 45.316 | 34.289 | 2.9  | -15.75 | 3.89 | 30 | 52.57 | 52.74 |
| 5305 | 76.02 | -1.19 | 2.76 | 0.61  | 43.363 | 32.653 | 2.76 | -15.74 | 3.95 | 30 | 52.57 | 52.61 |
| 5310 | 77.18 | -1.13 | 2.88 | 0.73  | 44.072 | 33.105 | 2.88 | -15.59 | 4    | 30 | 52.64 | 52.76 |
| 5315 | 83.38 | -0.79 | 3.24 | 1.09  | 47.645 | 35.732 | 3.24 | -15.12 | 4.03 | 30 | 52.86 | 53    |
| 5320 | 82.61 | -0.83 | 3.24 | 1.09  | 47.264 | 35.347 | 3.24 | -15.26 | 4.07 | 30 | 53.01 | 53.1  |
| 5325 | 82.75 | -0.82 | 3.29 | 1.14  | 47.397 | 35.351 | 3.29 | -15.24 | 4.11 | 30 | 52.89 | 53.15 |
| 5330 | 83.19 | -0.8  | 3.36 | 1.21  | 47.702 | 35.49  | 3.36 | -15.27 | 4.16 | 30 | 52.84 | 53.07 |
| 5335 | 79.51 | -1    | 3.2  | 1.05  | 45.678 | 33.832 | 3.2  | -15.45 | 4.19 | 30 | 52.92 | 52.98 |
| 5340 | 82.55 | -0.83 | 3.39 | 1.24  | 47.511 | 35.038 | 3.39 | -15.36 | 4.23 | 30 | 52.93 | 53.13 |
| 5345 | 85.79 | -0.67 | 3.57 | 1.42  | 49.448 | 36.343 | 3.57 | -15.84 | 4.24 | 30 | 53.03 | 53.24 |
| 5350 | 80.71 | -0.93 | 3.32 | 1.17  | 46.621 | 34.085 | 3.32 | -16.89 | 4.25 | 30 | 53.1  | 53.18 |
| 5355 | 80.49 | -0.94 | 3.31 | 1.16  | 46.637 | 33.857 | 3.31 | -17.55 | 4.25 | 30 | 52.95 | 53.18 |
| 5360 | 84.28 | -0.74 | 3.5  | 1.35  | 48.935 | 35.343 | 3.5  | -17.79 | 4.24 | 30 | 53.07 | 53.26 |
| 5365 | 80.5  | -0.94 | 3.26 | 1.11  | 46.892 | 33.606 | 3.26 | -18.32 | 4.2  | 30 | 53.2  | 53.23 |
| 5370 | 80.64 | -0.93 | 3.25 | 1.1   | 47.162 | 33.476 | 3.25 | -18.09 | 4.19 | 30 | 53.05 | 53.27 |
| 5375 | 84    | -0.76 | 3.37 | 1.22  | 49.285 | 34.712 | 3.37 | -17.38 | 4.13 | 30 | 53.05 | 53.32 |
| 5380 | 80.93 | -0.92 | 3.19 | 1.04  | 47.683 | 33.245 | 3.19 | -16.91 | 4.11 | 30 | 53.13 | 53.16 |
| 5385 | 77.58 | -1.1  | 2.96 | 0.81  | 45.87  | 31.707 | 2.96 | -16.5  | 4.07 | 30 | 52.89 | 52.95 |
| 5390 | 75.88 | -1.2  | 2.81 | 0.66  | 44.977 | 30.902 | 2.81 | -16.58 | 4.01 | 30 | 52.63 | 52.77 |
| 5395 | 82.63 | -0.83 | 3.11 | 0.96  | 49.052 | 33.577 | 3.11 | -15.85 | 3.94 | 30 | 53.08 | 53.22 |
| 5400 | 89.79 | -0.47 | 3.37 | 1.22  | 53.348 | 36.443 | 3.37 | -15.22 | 3.84 | 30 | 53.43 | 53.58 |
| 5405 | 88.9  | -0.51 | 3.24 | 1.09  | 52.826 | 36.074 | 3.24 | -14.75 | 3.75 | 30 | 53.47 | 53.53 |

|      |       |       |      |      |        |        |      |        |      |    |       |       |
|------|-------|-------|------|------|--------|--------|------|--------|------|----|-------|-------|
| 5410 | 88.48 | -0.53 | 3.14 | 0.99 | 52.555 | 35.927 | 3.14 | -14.2  | 3.67 | 30 | 53.54 | 53.62 |
| 5415 | 86.75 | -0.62 | 2.93 | 0.78 | 51.469 | 35.283 | 2.93 | -13.75 | 3.55 | 30 | 53.41 | 53.61 |
| 5420 | 83.8  | -0.77 | 2.71 | 0.56 | 49.638 | 34.167 | 2.71 | -13.78 | 3.48 | 30 | 53.45 | 53.52 |
| 5425 | 85.14 | -0.7  | 2.89 | 0.74 | 50.441 | 34.704 | 2.89 | -14.16 | 3.59 | 30 | 53.59 | 53.63 |
| 5430 | 85.28 | -0.69 | 3    | 0.85 | 50.524 | 34.76  | 3    | -14.3  | 3.69 | 30 | 53.6  | 53.75 |
| 5435 | 80.04 | -0.97 | 2.8  | 0.65 | 47.499 | 32.543 | 2.8  | -14.76 | 3.77 | 30 | 53.77 | 53.72 |
| 5440 | 80.38 | -0.95 | 2.88 | 0.73 | 47.845 | 32.532 | 2.88 | -14.97 | 3.83 | 30 | 53.9  | 53.8  |
| 5445 | 83.18 | -0.8  | 3.05 | 0.9  | 49.689 | 33.488 | 3.05 | -14.84 | 3.85 | 30 | 53.81 | 53.98 |
| 5450 | 77.67 | -1.1  | 2.77 | 0.62 | 46.585 | 31.082 | 2.77 | -14.8  | 3.87 | 30 | 53.96 | 53.96 |
| 5455 | 78.59 | -1.05 | 2.81 | 0.66 | 47.43  | 31.165 | 2.81 | -14.73 | 3.85 | 30 | 54.29 | 54.11 |
| 5460 | 85.87 | -0.66 | 3.34 | 1.19 | 52.11  | 33.764 | 3.34 | -14.39 | 4.01 | 30 | 54.16 | 54.21 |
| 5465 | 82.13 | -0.86 | 3.3  | 1.15 | 50.089 | 32.036 | 3.3  | -15.1  | 4.16 | 30 | 53.88 | 53.95 |
| 5470 | 79.01 | -1.02 | 3.28 | 1.13 | 48.48  | 30.534 | 3.28 | -15.49 | 4.31 | 30 | 53.92 | 53.79 |
| 5475 | 84    | -0.76 | 3.7  | 1.55 | 51.836 | 32.165 | 3.7  | -15.29 | 4.46 | 30 | 53.94 | 53.91 |
| 5480 | 81.68 | -0.88 | 3.73 | 1.58 | 50.673 | 31.005 | 3.73 | -15.17 | 4.61 | 30 | 53.84 | 53.78 |
| 5485 | 79.17 | -1.01 | 3.7  | 1.55 | 49.407 | 29.759 | 3.7  | -15.95 | 4.72 | 30 | 53.87 | 53.75 |
| 5490 | 82.12 | -0.86 | 3.98 | 1.83 | 51.527 | 30.595 | 3.98 | -16.53 | 4.84 | 30 | 53.87 | 53.89 |
| 5495 | 79.37 | -1    | 3.91 | 1.76 | 50.074 | 29.294 | 3.91 | -17.26 | 4.91 | 30 | 53.89 | 53.86 |
| 5500 | 75.28 | -1.23 | 3.75 | 1.6  | 47.787 | 27.491 | 3.75 | -18.4  | 4.98 | 30 | 53.87 | 53.76 |
| 5505 | 78.49 | -1.05 | 3.96 | 1.81 | 50.099 | 28.393 | 3.96 | -19.26 | 5.01 | 30 | 53.74 | 53.76 |
| 5510 | 80.24 | -0.96 | 4.09 | 1.94 | 51.46  | 28.778 | 4.09 | -19.78 | 5.04 | 30 | 53.73 | 53.72 |
| 5515 | 79.34 | -1    | 4.05 | 1.9  | 51.159 | 28.185 | 4.05 | -20.56 | 5.06 | 30 | 53.75 | 53.73 |
| 5520 | 80.18 | -0.96 | 4.1  | 1.95 | 51.955 | 28.227 | 4.1  | -20.65 | 5.06 | 30 | 53.63 | 53.68 |
| 5525 | 80.78 | -0.93 | 4.13 | 1.98 | 52.611 | 28.165 | 4.13 | -20.36 | 5.06 | 30 | 53.78 | 53.72 |
| 5530 | 81.41 | -0.89 | 4.14 | 1.99 | 53.364 | 28.045 | 4.14 | -19.92 | 5.03 | 30 | 53.99 | 53.91 |
| 5535 | 80.65 | -0.93 | 4.07 | 1.92 | 53.164 | 27.482 | 4.07 | -19.28 | 5    | 30 | 53.78 | 53.85 |
| 5540 | 79.6  | -0.99 | 3.99 | 1.84 | 52.828 | 26.777 | 3.99 | -18.78 | 4.98 | 30 | 53.7  | 53.69 |
| 5545 | 81.45 | -0.89 | 4.06 | 1.91 | 54.447 | 27.004 | 4.06 | -17.88 | 4.95 | 30 | 53.94 | 53.88 |
| 5550 | 80.15 | -0.96 | 3.92 | 1.77 | 53.962 | 26.193 | 3.92 | -17.12 | 4.88 | 30 | 53.94 | 53.98 |
| 5555 | 77.35 | -1.12 | 3.72 | 1.57 | 52.469 | 24.881 | 3.72 | -16.37 | 4.83 | 30 | 53.85 | 53.85 |
| 5560 | 80.9  | -0.92 | 3.85 | 1.7  | 55.288 | 25.613 | 3.85 | -16.29 | 4.77 | 30 | 53.96 | 54.02 |
| 5565 | 79.74 | -0.98 | 3.72 | 1.57 | 54.835 | 24.901 | 3.72 | -15.94 | 4.7  | 30 | 53.93 | 54.03 |
| 5570 | 76.93 | -1.14 | 3.49 | 1.34 | 53.238 | 23.693 | 3.49 | -15.73 | 4.63 | 30 | 54.05 | 53.98 |
| 5575 | 83.26 | -0.8  | 3.88 | 1.73 | 57.934 | 25.321 | 3.88 | -15.18 | 4.68 | 30 | 54.47 | 54.49 |
| 5580 | 80.82 | -0.93 | 3.8  | 1.65 | 56.447 | 24.368 | 3.8  | -15.35 | 4.72 | 30 | 54.53 | 54.71 |
| 5585 | 72.9  | -1.37 | 3.41 | 1.26 | 51.097 | 21.804 | 3.41 | -15.88 | 4.78 | 15 | 54.31 | 54.31 |
| 5590 | 76.47 | -1.16 | 3.64 | 1.49 | 53.83  | 22.645 | 3.64 | -15.46 | 4.81 | 15 | 54.27 | 54.3  |
| 5595 | 77.37 | -1.11 | 3.73 | 1.58 | 54.6   | 22.773 | 3.73 | -15.35 | 4.84 | 15 | 54.35 | 54.54 |
| 5600 | 69.3  | -1.59 | 3.25 | 1.1  | 49.057 | 20.238 | 3.25 | -16.14 | 4.84 | 15 | 54.33 | 54.33 |
| 5605 | 71.14 | -1.48 | 3.4  | 1.25 | 50.558 | 20.587 | 3.4  | -16.35 | 4.88 | 15 | 54.3  | 54.36 |

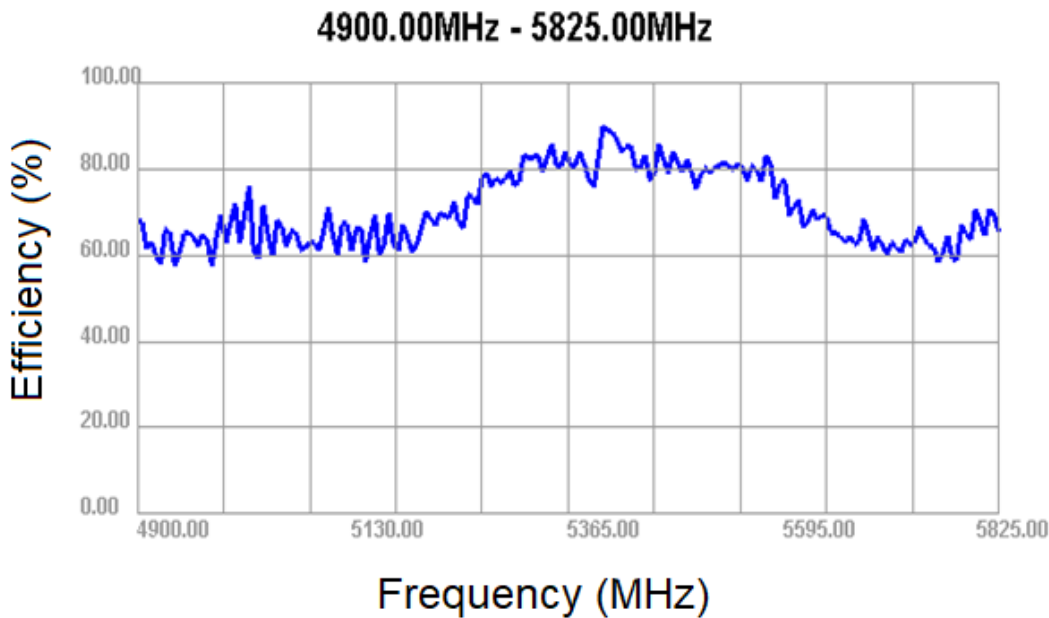
|      |       |       |      |      |        |        |      |        |      |    |       |       |
|------|-------|-------|------|------|--------|--------|------|--------|------|----|-------|-------|
| 5610 | 72.68 | -1.39 | 3.5  | 1.35 | 51.76  | 20.921 | 3.5  | -16.34 | 4.88 | 15 | 54.14 | 54.42 |
| 5615 | 66.49 | -1.77 | 3.11 | 0.96 | 47.453 | 19.035 | 3.11 | -16.69 | 4.89 | 15 | 54.03 | 54.09 |
| 5620 | 67.93 | -1.68 | 3.21 | 1.06 | 48.677 | 19.256 | 3.21 | -16.81 | 4.89 | 15 | 54.12 | 54.07 |
| 5625 | 70.55 | -1.51 | 3.35 | 1.2  | 50.638 | 19.913 | 3.35 | -17.08 | 4.87 | 15 | 54.01 | 54.2  |
| 5630 | 67.89 | -1.68 | 3.16 | 1.01 | 48.782 | 19.109 | 3.16 | -17.67 | 4.84 | 15 | 53.81 | 53.96 |
| 5635 | 69.33 | -1.59 | 3.23 | 1.08 | 49.94  | 19.386 | 3.23 | -18.3  | 4.82 | 15 | 53.89 | 53.89 |
| 5640 | 68.75 | -1.63 | 3.18 | 1.03 | 49.594 | 19.154 | 3.18 | -18.89 | 4.8  | 15 | 53.97 | 54.06 |
| 5645 | 65.09 | -1.86 | 2.89 | 0.74 | 46.963 | 18.127 | 2.89 | -19.45 | 4.76 | 15 | 53.95 | 54.03 |
| 5650 | 65.27 | -1.85 | 2.87 | 0.72 | 47.165 | 18.105 | 2.87 | -19.24 | 4.73 | 15 | 53.97 | 54.04 |
| 5655 | 64.25 | -1.92 | 2.8  | 0.65 | 46.441 | 17.81  | 2.8  | -19.1  | 4.72 | 15 | 53.96 | 54.12 |
| 5660 | 62.92 | -2.01 | 2.73 | 0.58 | 45.483 | 17.436 | 2.73 | -18.56 | 4.74 | 15 | 53.91 | 53.96 |
| 5665 | 64.43 | -1.91 | 2.84 | 0.69 | 46.607 | 17.818 | 2.84 | -17.89 | 4.75 | 15 | 53.93 | 53.97 |
| 5670 | 62.49 | -2.04 | 2.7  | 0.55 | 45.202 | 17.292 | 2.7  | -17.21 | 4.74 | 15 | 53.95 | 54.04 |
| 5675 | 63.08 | -2    | 2.74 | 0.59 | 45.619 | 17.459 | 2.74 | -16.44 | 4.75 | 15 | 54.01 | 54.03 |
| 5680 | 68.42 | -1.65 | 3.07 | 0.92 | 49.476 | 18.94  | 3.07 | -15.66 | 4.72 | 15 | 54.11 | 54.19 |
| 5685 | 65    | -1.87 | 2.82 | 0.67 | 46.965 | 18.038 | 2.82 | -15.49 | 4.69 | 15 | 54.1  | 54.23 |
| 5690 | 61.19 | -2.13 | 2.55 | 0.4  | 44.22  | 16.975 | 2.55 | -15.46 | 4.68 | 15 | 54.12 | 54.05 |
| 5695 | 64.09 | -1.93 | 2.71 | 0.56 | 46.346 | 17.741 | 2.71 | -14.76 | 4.64 | 15 | 54.15 | 54.19 |
| 5700 | 62.38 | -2.05 | 2.58 | 0.43 | 45.052 | 17.326 | 2.58 | -14.68 | 4.63 | 15 | 54.07 | 54.28 |
| 5705 | 60.12 | -2.21 | 2.43 | 0.28 | 43.411 | 16.707 | 2.43 | -14.68 | 4.64 | 15 | 54.07 | 54.05 |
| 5710 | 62.89 | -2.01 | 2.64 | 0.49 | 45.418 | 17.467 | 2.64 | -14.94 | 4.65 | 15 | 54.1  | 54.06 |
| 5715 | 61.93 | -2.08 | 2.55 | 0.4  | 44.687 | 17.246 | 2.55 | -14.94 | 4.63 | 15 | 54.07 | 54.16 |
| 5720 | 60.64 | -2.17 | 2.44 | 0.29 | 43.69  | 16.948 | 2.44 | -14.96 | 4.61 | 15 | 54.12 | 54.09 |
| 5725 | 63.5  | -1.97 | 2.58 | 0.43 | 45.733 | 17.766 | 2.58 | -14.61 | 4.55 | 15 | 54.22 | 54.22 |
| 5730 | 62.6  | -2.03 | 2.45 | 0.3  | 44.977 | 17.624 | 2.45 | -14.17 | 4.48 | 15 | 54.19 | 54.3  |
| 5735 | 63.04 | -2    | 2.46 | 0.31 | 45.234 | 17.803 | 2.46 | -13.54 | 4.47 | 15 | 54.31 | 54.21 |
| 5740 | 66.46 | -1.77 | 2.67 | 0.52 | 47.663 | 18.793 | 2.67 | -13.04 | 4.44 | 15 | 54.46 | 54.39 |
| 5745 | 63.83 | -1.95 | 2.43 | 0.28 | 45.673 | 18.16  | 2.43 | -13.74 | 4.38 | 0  | 54.34 | 54.46 |
| 5750 | 62.11 | -2.07 | 2.4  | 0.25 | 44.348 | 17.763 | 2.4  | -14.07 | 4.47 | 0  | 54.33 | 54.22 |
| 5755 | 61.86 | -2.09 | 2.55 | 0.4  | 44.179 | 17.678 | 2.55 | -14.2  | 4.63 | 0  | 54.4  | 54.23 |
| 5760 | 58.3  | -2.34 | 2.38 | 0.23 | 41.526 | 16.771 | 2.38 | -14.18 | 4.72 | 0  | 54.29 | 54.29 |
| 5765 | 60.42 | -2.19 | 2.59 | 0.44 | 42.956 | 17.462 | 2.59 | -13.52 | 4.78 | 0  | 54.38 | 54.23 |
| 5770 | 64.64 | -1.89 | 2.96 | 0.81 | 45.925 | 18.715 | 2.96 | -13.15 | 4.86 | 0  | 54.53 | 54.36 |
| 5775 | 59.07 | -2.29 | 2.7  | 0.55 | 41.843 | 17.23  | 2.7  | -13.78 | 4.99 | 0  | 54.42 | 54.45 |
| 5780 | 58.99 | -2.29 | 2.78 | 0.63 | 41.688 | 17.306 | 2.78 | -14.8  | 5.07 | 0  | 54.48 | 54.35 |
| 5785 | 66.87 | -1.75 | 3.45 | 1.3  | 47.156 | 19.713 | 3.45 | -15.23 | 5.19 | 0  | 54.65 | 54.39 |
| 5790 | 64.87 | -1.88 | 3.4  | 1.25 | 45.634 | 19.239 | 3.4  | -16.43 | 5.28 | 0  | 54.4  | 54.34 |
| 5795 | 63.7  | -1.96 | 3.4  | 1.25 | 44.65  | 19.048 | 3.4  | -17.26 | 5.36 | 0  | 54.28 | 54.21 |
| 5800 | 70.79 | -1.5  | 3.9  | 1.75 | 49.498 | 21.288 | 3.9  | -17.49 | 5.4  | 0  | 54.54 | 54.37 |
| 5805 | 67.8  | -1.69 | 3.79 | 1.64 | 47.304 | 20.499 | 3.79 | -18.12 | 5.48 | 0  | 54.52 | 54.36 |

|      |       |       |      |      |        |        |      |        |      |   |       |       |
|------|-------|-------|------|------|--------|--------|------|--------|------|---|-------|-------|
| 5810 | 64.33 | -1.92 | 3.6  | 1.45 | 44.753 | 19.581 | 3.6  | -18.43 | 5.51 | 0 | 54.38 | 54.21 |
| 5815 | 70.72 | -1.5  | 4.04 | 1.89 | 49.038 | 21.683 | 4.04 | -17.5  | 5.55 | 0 | 54.5  | 54.38 |
| 5820 | 69.37 | -1.59 | 3.97 | 1.82 | 47.955 | 21.412 | 3.97 | -17.02 | 5.56 | 0 | 54.57 | 54.44 |
| 5825 | 65.29 | -1.85 | 3.75 | 1.6  | 44.99  | 20.3   | 3.75 | -16.22 | 5.6  | 0 | 54.54 | 54.29 |

Gain vs Frequency

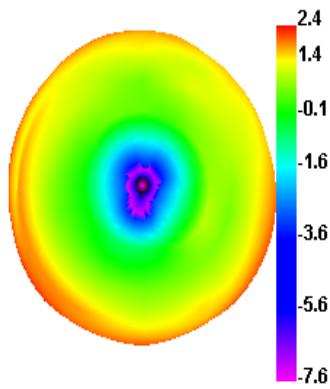


Efficiency vs Frequency

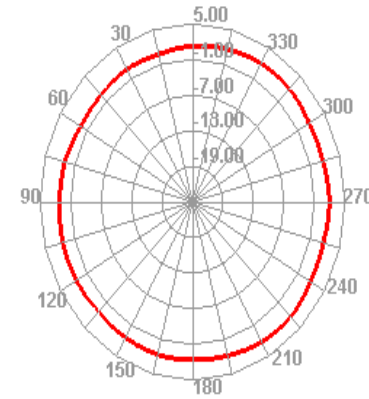


## Radiation Patterns

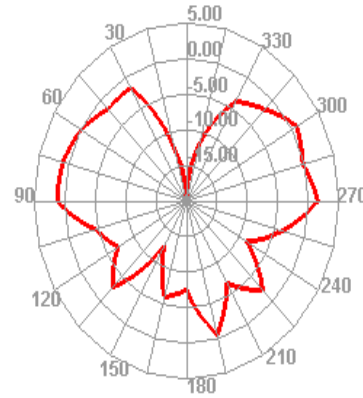
4900.000MHz



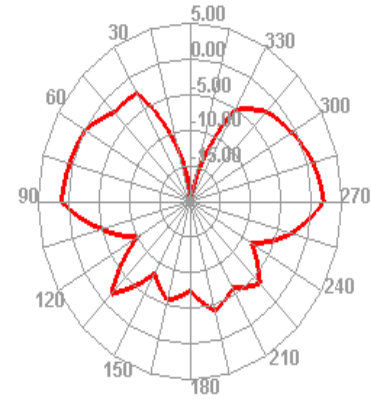
4900.000MHz H



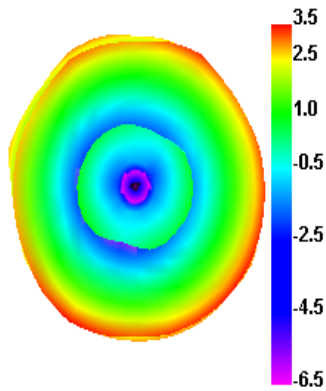
4900.000MHz E1



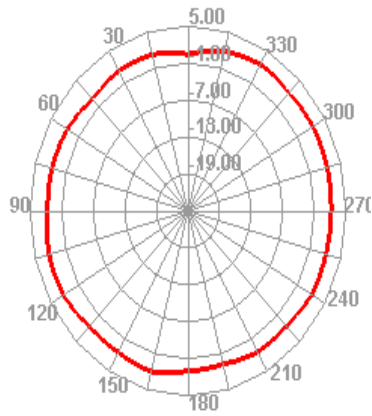
4900.000MHz E2



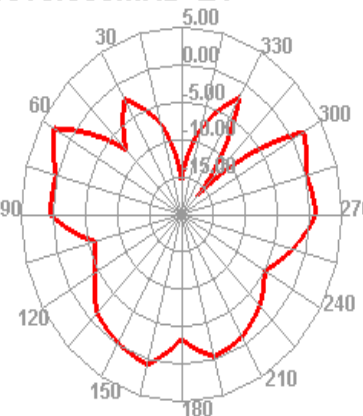
5360.000MHz



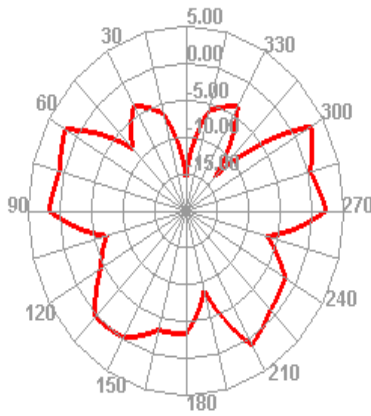
5360.000MHz H



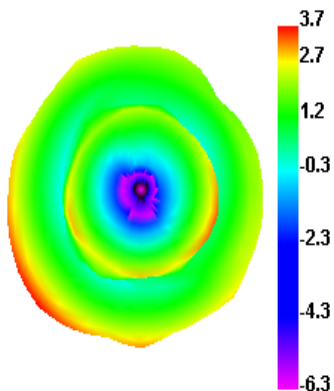
5360.000MHz E1



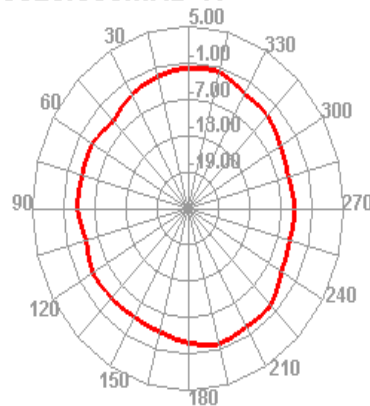
5360.000MHz E2



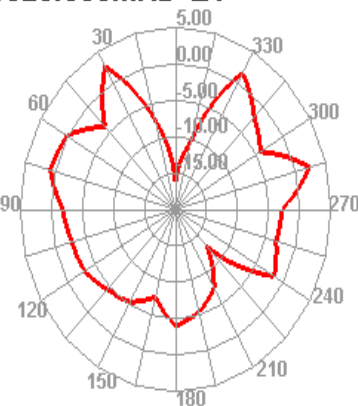
5825.000MHz



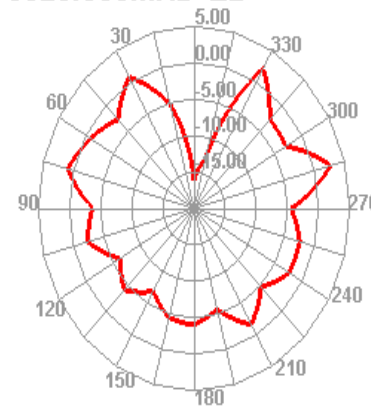
5825.000MHz H



5825.000MHz E1



5825.000MHz E2



**Revision History and Status**

| Revision | Date Issued                 | Details                   | Status    |
|----------|-----------------------------|---------------------------|-----------|
| <b>A</b> | Dec 17 <sup>th</sup> , 2020 | Initial Release (Updated) | Supported |
|          |                             |                           |           |
|          |                             |                           |           |
|          |                             |                           |           |
|          |                             |                           |           |

- NIC Technical Support: [tpmg@niccomp.com](mailto:tpmg@niccomp.com)
- Compliance Support: [rohs@niccomp.com](mailto:rohs@niccomp.com)