Dongguan Hengxin Electronic Technology Co., Ltd.

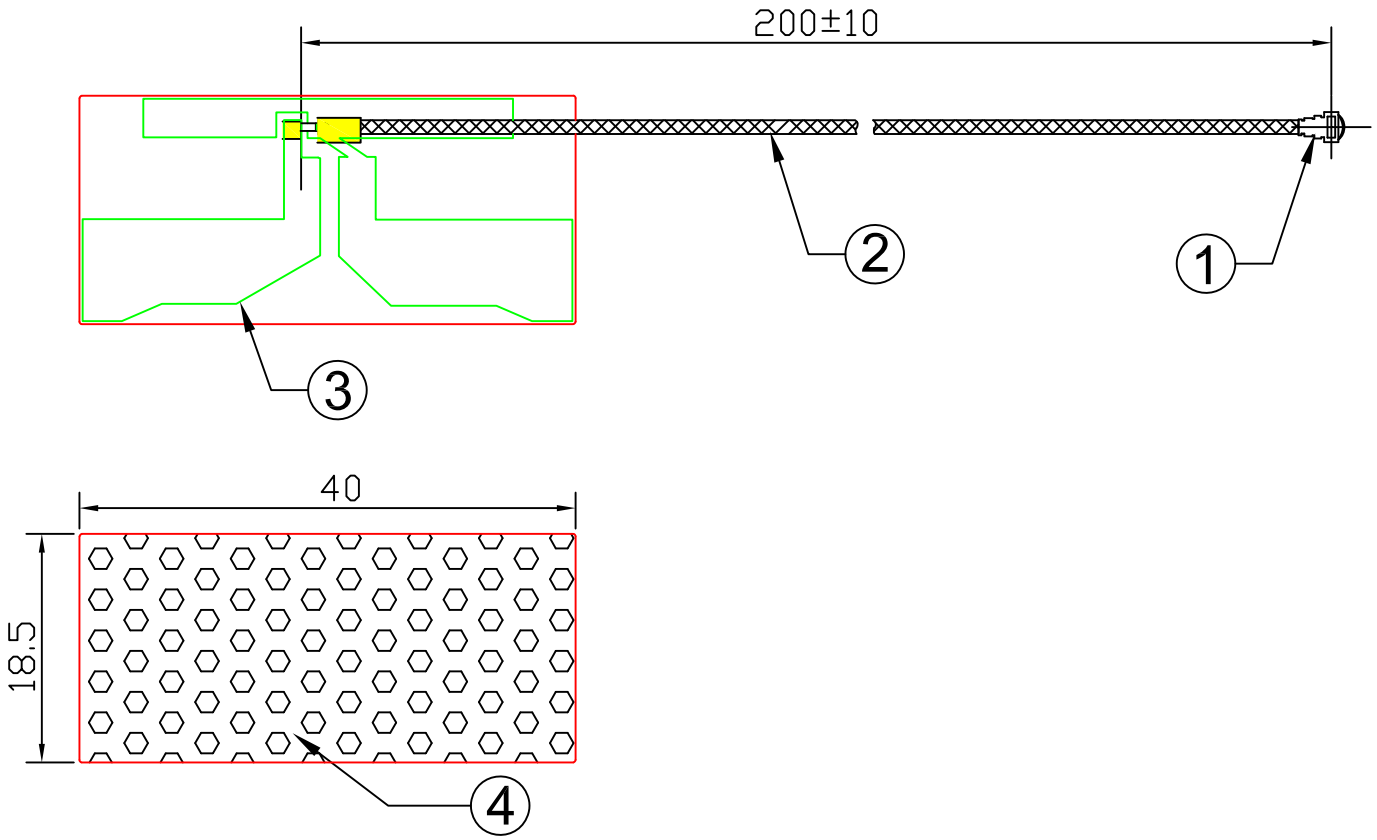
# Specification For Approval

| | |
|---|---|
| Customer | |
| Description | BT Antenna |
| ChaoWei P/N | HX-P510-UFL200B |
| Customer P/N | |
| Date | 2015.06.06 |

| Customers Confirmation | | | Supplier | |
|---|---|---|---|---|
| Engineer | QC | Purchasing | Approval | Check |
| | | | | Shamoer |

TEL ： 0769-81663533 FAX：0769-89361945

RoHS Compatible




| No. | Part Number | Name | Material | Q'ty |
|---|---|---|---|---|
| 4 | HX-3M-300LSE | AL foil | 40*18.5mm | 1 |
| 3 | HX-P510-A01 | FPCB | 40*18.5mm | 1 |
| 2 | HX-CB-113B | Coaxial Cable | SHOWA-O.D. 1.13mm | 1 |
| 1 | HX-CI-UFL-01 | Connector | U.FL Connector | 1 |

Dongguan Hengxin Electronic Technology Co., Ltd.

PART NAME: BT Antenna

PART NO.: HX-P510-UFL200B .W01

DATE: 2024-08-22

| APPROVED BY | CHECKED BY | DESIDNED BY | |
|---|---|---|---|
| | 赵 2024.08.22 守 刚 | 张雅军 | UNITS: mm<br>SCALE: 1/1<br>REVISION:A |

Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

**Index:**



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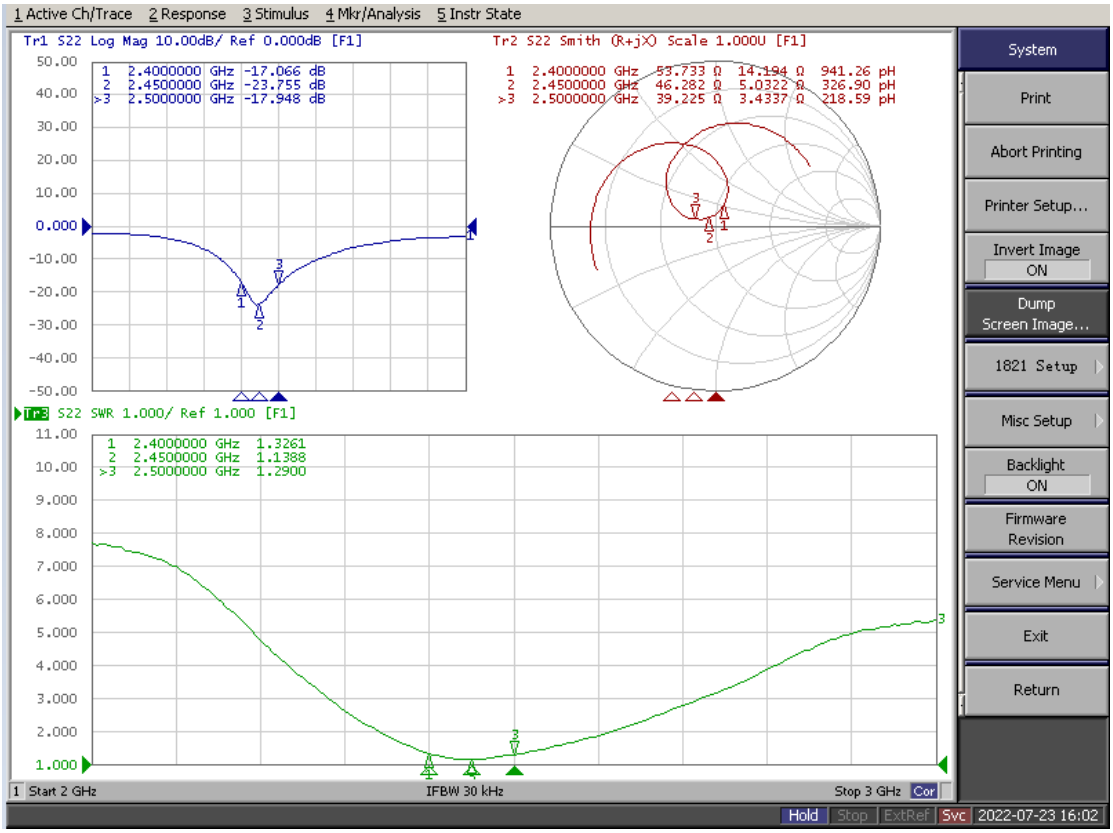
## 1. Reliability Testing

| Test Item | Procedure | Requirement |
|---|---|---|
| **1. Visual inspection and Dimension Check** | Applicable methods using x5 magnification | follow specification |
| **2. Rapid Changing of Temperature** | -40˚C (30minutes) to 80˚C (30minutes); 24 cycles | After 2 hours recovery:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| **3. Damp Heat** | 24 hours at 60˚C; 90 ~ 95% RH | After 2 hours recovery:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| **4. Endurance** | 24 hours at 80˚C | After 2 hours recovery:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |
| **5. Connector Pull Strength Test** | >= 1.0 Kg | Hold 2~3S:<br>1. no visible damage<br>2. bandwidth tolerance < ±5% |

## 2. Specification

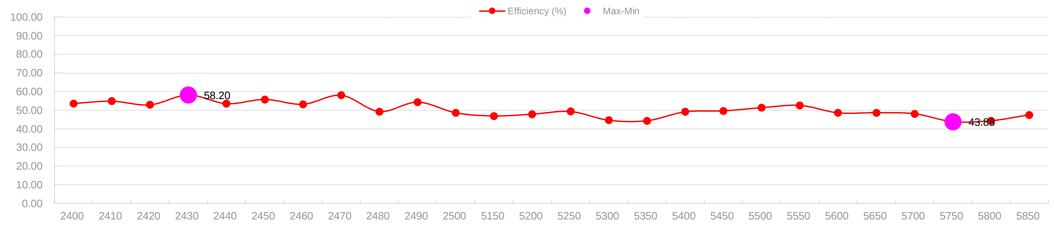
| A. Electrical Characteristics | |
|---|---|
| S.W.R.( Tested in PC ) | <= 2.0 @ 2400~2500 MHz |
| Typical Antenna Gain | 2.74dBi @ 2450 MHz |
| Impedance | 50 Ohm |
| **B. Material** | |
| Material of Radiator | FPC |
| Cable Length | 200mm |
| Connector Type | Mini |
| **C. Environmental** | |
| Operation Temperature | - 40 ˚C ~ + 85 ˚C |
| Storage Temperature | - 40 ˚C ~ + 85 ˚C |

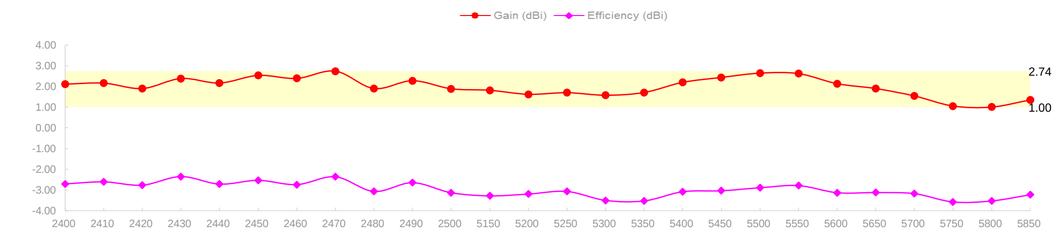
## 3. S.W.R. Testing Result

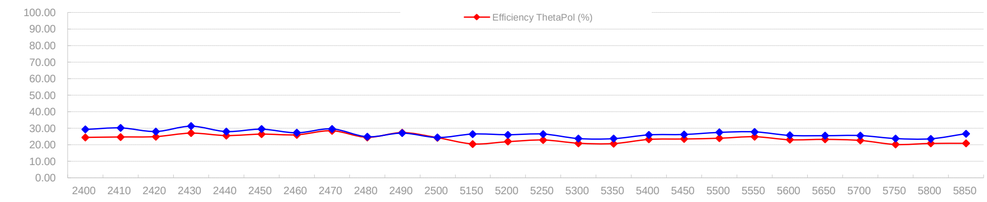


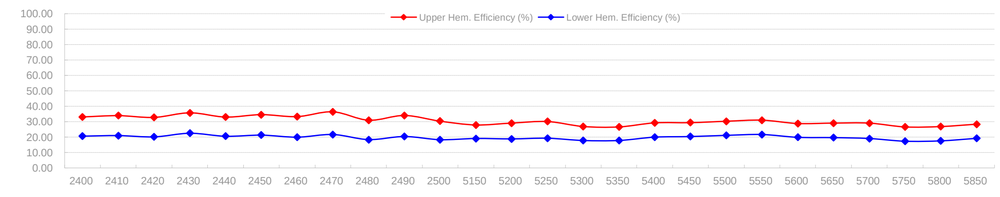
## 东莞市亨松电子科技有限公司

| Frequency ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | 2400 | 2410 | 2420 | 2430 | 2440 | 2450 | 2460 | 2470 | 2480 | 2490 | 2500 | 5150 | 5200 | 5250 | 5300 | 5350 | 5400 | 5450 | 5500 | 5550 | 5600 | 5650 | 5700 | 5750 | 5800 | 5850 |
| Efficiency (dBi) | -2.70 | -2.61 | -2.77 | -2.35 | -2.72 | -2.53 | -2.74 | -2.36 | -3.07 | -2.65 | -3.13 | -3.28 | -3.20 | -3.07 | -3.50 | -3.53 | -3.08 | -3.04 | -2.89 | -2.79 | -3.13 | -3.12 | -3.18 | -3.58 | -3.53 | -3.23 |
| Gain (dBi) | 2.11 | 2.16 | 1.90 | 2.38 | 2.17 | 2.53 | 2.39 | 2.74 | 1.90 | 2.28 | 1.89 | 1.82 | 1.62 | 1.70 | 1.58 | 1.71 | 2.20 | 2.44 | 2.64 | 2.62 | 2.13 | 1.90 | 1.54 | 1.06 | 1.00 | 1.35 |
| Efficiency (%) | 53.65 | 54.87 | 52.89 | 58.20 | 53.51 | 55.81 | 53.21 | 58.04 | 49.31 | 54.36 | 48.62 | 46.95 | 47.90 | 49.32 | 44.64 | 44.38 | 49.17 | 49.68 | 51.38 | 52.62 | 48.62 | 48.71 | 48.13 | 43.88 | 44.37 | 47.54 |
| Directivity (dB) | 4.82 | 4.77 | 4.67 | 4.73 | 4.88 | 5.07 | 5.13 | 5.10 | 4.97 | 4.93 | 5.02 | 5.10 | 4.82 | 4.77 | 5.08 | 5.24 | 5.28 | 5.47 | 5.54 | 5.41 | 5.27 | 5.02 | 4.72 | 4.63 | 4.53 | 4.58 |
| Peak Gain Position (Theta) | 87.00 | 87.00 | 88.00 | 88.00 | 89.00 | 89.00 | 89.00 | 90.00 | 90.00 | 91.00 | 92.00 | 91.00 | 93.00 | 13.00 | 93.00 | 95.00 | 95.00 | 68.00 | 70.00 | 97.00 | 98.00 | 73.00 | 73.00 | 74.00 | 75.00 | 83.00 |
| Peak Gain Position (Phi) | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 0.00 | 0.00 | 240.00 | 0.00 | 0.00 | 0.00 | 330.00 | 330.00 | 0.00 | 0.00 | 330.00 | 330.00 | 330.00 | 330.00 | 330.00 |
| Efficiency ThetaPol (%) | 24.42 | 24.69 | 24.90 | 27.01 | 25.54 | 26.41 | 26.00 | 28.46 | 24.49 | 27.34 | 24.26 | 20.48 | 21.85 | 22.86 | 20.91 | 20.70 | 23.21 | 23.47 | 23.93 | 24.83 | 23.00 | 23.24 | 22.59 | 20.15 | 20.78 | 20.83 |
| Efficiency PhiPol (%) | 29.22 | 30.17 | 27.99 | 31.19 | 27.97 | 29.40 | 27.21 | 29.59 | 24.82 | 27.02 | 24.36 | 26.47 | 26.05 | 26.46 | 23.73 | 23.68 | 25.96 | 26.21 | 27.45 | 27.79 | 25.62 | 25.47 | 25.54 | 23.73 | 23.59 | 26.71 |
| Upper Hem. Efficiency (%) | 33.06 | 33.89 | 32.76 | 35.73 | 32.98 | 34.55 | 33.27 | 36.38 | 30.93 | 34.00 | 30.30 | 27.86 | 29.08 | 30.07 | 26.86 | 26.58 | 29.21 | 29.33 | 30.26 | 30.96 | 28.79 | 29.07 | 29.05 | 26.57 | 26.82 | 28.36 |
| Lower Hem. Efficiency (%) | 20.59 | 20.98 | 20.13 | 22.47 | 20.53 | 21.26 | 19.94 | 21.66 | 18.38 | 20.36 | 18.31 | 19.09 | 18.82 | 19.25 | 17.78 | 17.80 | 19.96 | 20.34 | 21.12 | 21.66 | 19.83 | 19.64 | 19.08 | 17.31 | 17.55 | 19.18 |
| T90(H)圆度 | 8.84 | 8.81 | 8.67 | 8.41 | 8.58 | 8.82 | 9.01 | 8.94 | 8.95 | 9.02 | 9.08 | 15.86 | 14.07 | 12.24 | 13.81 | 12.25 | 11.54 | 11.90 | 10.46 | 9.11 | 9.33 | 8.81 | 8.85 | 9.45 | 9.16 | 8.44 |
| Gain 15deg (dBi) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E1(XZ)波瓣宽度 | 21.00 | 21.00 | 51.00 | 53.00 | 25.00 | 32.00 | 48.00 | 47.00 | 48.00 | 48.00 | 47.00 | 26.00 | 29.00 | 30.00 | 27.00 | 25.00 | 23.00 | 22.00 | 21.00 | 20.00 | 20.00 | 22.00 | 25.00 | 58.00 | 59.00 | 60.00 |
| E1(XZ)前后比 | 2.51 | 2.50 | 2.49 | 2.26 | 2.29 | 2.08 | 2.21 | 2.28 | 2.40 | 2.54 | 2.60 | 2.39 | 2.33 | 2.24 | 2.48 | 2.52 | 2.76 | 2.89 | 2.93 | 3.40 | 3.47 | 3.53 | 3.90 | 3.59 | 3.69 | 4.03 |
| E2(YZ)波瓣宽度 | 58.00 | 58.00 | 60.00 | 61.00 | 61.00 | 64.00 | 70.00 | 82.00 | 95.00 | 94.00 | 86.00 | 14.00 | 14.00 | 54.00 | 56.00 | 55.00 | 62.00 | 64.00 | 20.00 | 20.00 | 20.00 | 22.00 | 23.00 | 95.00 | 96.00 | 98.00 |
| E2(YZ)前后比 | 1.73 | 1.36 | 1.02 | 0.73 | 0.98 | 1.33 | 1.62 | 1.41 | 1.03 | 0.70 | 0.60 | 1.67 | 1.65 | 1.33 | 1.77 | 1.43 | 1.11 | 1.07 | 0.95 | 0.77 | 0.65 | 0.63 | 0.60 | 0.93 | 1.74 | 2.12 |
| 最大增益处轴比(P) | 6.29 | 6.64 | 5.88 | 6.95 | 6.75 | 7.73 | 8.28 | 7.38 | 9.21 | 8.65 | 8.30 | 16.32 | 16.78 | 5.99 | 20.81 | 17.65 | 22.73 | 4.91 | 5.56 | 17.43 | 19.74 | 5.38 | 5.08 | 6.93 | 6.32 | 6.07 |
| 顶点(Theta=0)处轴比(P) | 9.72 | 9.96 | 10.00 | 10.82 | 10.65 | 9.94 | 8.72 | 8.28 | 8.83 | 11.28 | 15.05 | 7.06 | 7.17 | 6.52 | 8.19 | 8.00 | 6.57 | 6.17 | 6.00 | 6.40 | 5.88 | 6.86 | 8.83 | 10.48 | 12.15 | 12.75 |
| 仰角10度最差(大)轴比(P) | 78.87 | 56.58 | 68.03 | 55.16 | 73.55 | 67.34 | 56.83 | 66.33 | 62.51 | 46.57 | 46.56 | 56.90 | 57.10 | 61.99 | 46.74 | 57.56 | 50.05 | 56.98 | 69.78 | 55.02 | 63.28 | 60.89 | 47.28 | 50.07 | 51.18 | 57.14 |
| Hc(XY)波瓣宽度 | 31.00 | 33.00 | 33.00 | 32.00 | 31.00 | 30.00 | 29.00 | 29.00 | 29.00 | 28.00 | 28.00 | 98.00 | 101.00 | 108.00 | 102.00 | 106.00 | 109.00 | 113.00 | 121.00 | 128.00 | 128.00 | 124.00 | 118.00 | 109.00 | 109.00 | 107.00 |
| Hc(XY)前后比 | 5.03 | 5.17 | 5.35 | 5.81 | 6.01 | 6.05 | 5.83 | 5.67 | 5.58 | 5.66 | 5.78 | 3.63 | 3.56 | 3.30 | 3.39 | 3.08 | 2.80 | 2.31 | 1.86 | 1.46 | 1.81 | 2.00 | 2.48 | 3.25 | 3.33 | 3.57 |
| 左旋圆极化效率(%) | 23.41 | 24.12 | 23.01 | 25.47 | 23.32 | 24.83 | 23.85 | 26.37 | 22.11 | 24.55 | 21.72 | 19.96 | 19.01 | 18.54 | 18.97 | 19.61 | 21.56 | 22.11 | 22.55 | 23.93 | 21.88 | 22.00 | 22.15 | 20.10 | 20.94 | 22.38 |
| 右旋圆极化效率(%) | 30.24 | 30.75 | 29.88 | 32.73 | 30.19 | 30.98 | 29.36 | 31.67 | 27.21 | 29.81 | 26.90 | 26.99 | 28.88 | 30.78 | 25.67 | 24.77 | 27.60 | 27.57 | 28.83 | 28.69 | 26.74 | 26.71 | 25.98 | 23.78 | 23.43 | 25.16 |
| 最大增益处交极比(+/-45极化) | 2.87 | 2.69 | 3.06 | 3.07 | 4.03 | 4.53 | 4.89 | 5.25 | 5.27 | 5.93 | 7.16 | 2.76 | 3.17 | 5.36 | 6.11 | 6.10 | 7.11 | 4.19 | 4.64 | 7.66 | 7.84 | 5.20 | 5.04 | 6.88 | 5.92 | 4.67 |
| 最大增益处交极比(水平垂直极化 | 5.14 | 5.62 | 4.57 | 5.64 | 4.61 | 5.08 | 5.22 | 4.00 | 5.62 | 4.49 | 2.72 | 12.94 | 12.47 | 2.09 | 8.95 | 8.51 | 7.96 | 2.20 | 2.53 | 6.82 | 6.98 | 1.12 | 0.50 | 0.61 | 1.64 | 3.19 |
| T60度Phi一圈最差交极比(+/-4 | 0.03 | 0.05 | 0.07 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.04 | 0.06 | 0.00 | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.04 | 0.03 | 0.09 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.16 |
| T60度Phi一圈最差交极比(水平 | 0.02 | 0.01 | 0.01 | 0.01 | 0.08 | 0.00 | 0.06 | 0.08 | 0.01 | 0.04 | 0.00 | 0.05 | 0.01 | 0.02 | 0.05 | 0.01 | 0.00 | 0.04 | 0.02 | 0.01 | 0.03 | 0.00 | 0.03 | 0.01 | 0.05 | 0.03 |
| T90度(H)Phi一圈最差交极比(+ | 0.00 | 0.02 | 0.03 | 0.05 | 0.01 | 0.02 | 0.00 | 0.02 | 0.09 | 0.01 | 0.22 | 0.01 | 0.20 | 0.22 | 0.28 | 0.07 | 0.02 | 0.00 | 0.03 | 0.28 | 0.40 | 0.12 | 0.21 | 0.11 | 0.01 | 0.09 |
| T90度(H)Phi一圈最差交极比(水 | 0.06 | 0.01 | 0.00 | 0.05 | 0.01 | 0.10 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.01 | 0.02 | 0.00 | 0.01 | 0.00 | 0.03 | 0.03 | 0.02 | 0.03 | 0.01 | 0.04 | 0.02 | 0.00 | 0.02 | 0.03 |
| 轴对称天线主瓣下倾角度(平均值 | -0.09 | 1.89 | 4.13 | 5.72 | 7.90 | 9.73 | 11.23 | 11.66 | 10.20 | 9.36 | 9.03 | 25.36 | 35.69 | 53.50 | 62.95 | 66.68 | 66.89 | 67.69 | 72.85 | 72.69 | 62.95 | 56.24 | 51.25 | 46.81 | 45.69 | 30.37 |
| 轴向(Z+)水平垂直极化隔离度 | 9.38 | 9.94 | 10.00 | 10.77 | 10.64 | 9.88 | 8.54 | 7.30 | 6.43 | 5.89 | 6.36 | 6.79 | 6.91 | 6.23 | 7.83 | 7.59 | 6.42 | 5.67 | 5.54 | 4.91 | 4.40 | 4.04 | 4.41 | 5.56 | 6.29 | 7.36 |
| Theta85.0一周最大增益 | 2.11 | 2.16 | 1.90 | 2.38 | 2.17 | 2.53 | 2.39 | 2.74 | 1.90 | 2.28 | 1.89 | 1.82 | 1.62 | 1.56 | 1.58 | 1.71 | 2.20 | 2.38 | 2.52 | 2.62 | 2.13 | 1.78 | 1.50 | 0.99 | 0.78 | 1.28 |
| Theta85.0一周圆度(为最大最小 | 14.24 | 13.88 | 13.43 | 13.91 | 14.62 | 14.71 | 14.30 | 13.77 | 13.65 | 13.91 | 14.19 | 17.13 | 17.85 | 17.64 | 16.83 | 19.22 | 18.90 | 21.66 | 23.61 | 21.05 | 15.16 | 11.60 | 12.12 | 12.30 | 11.74 | 11.87 |
| Empty | | | | | | | | | | | | | | | | | | | | | | | | | | |

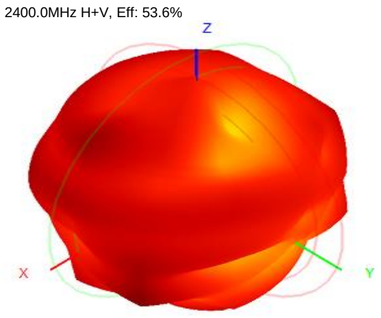


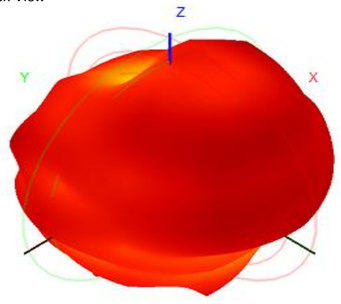



2400.0MHz H+V, Eff: 53.6%

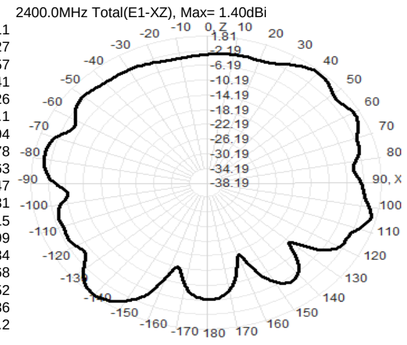



Back View

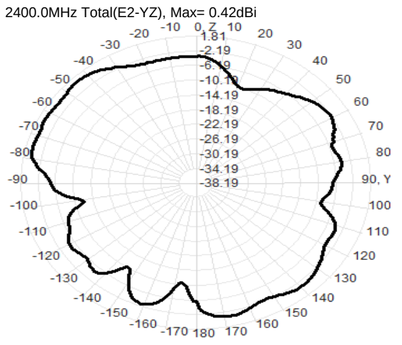




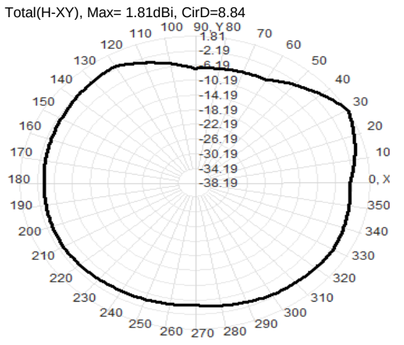
2400.0MHz Total(E1-XZ), Max= 1.40dBi



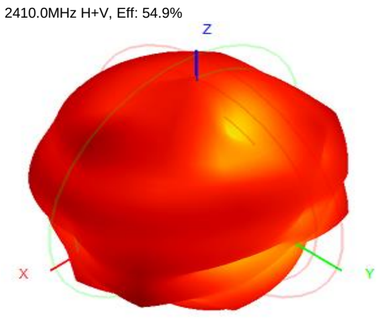

2400.0MHz Total(E2-YZ), Max= 0.42dBi



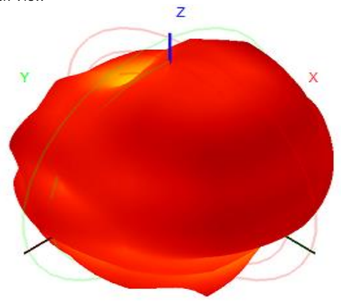

Total(H-XY), Max= 1.81dBi, CirD=8.84




2410.0MHz H+V, Eff: 54.9%

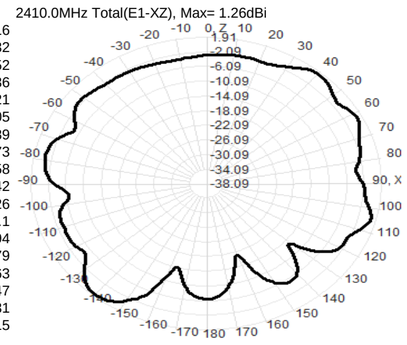



Back View

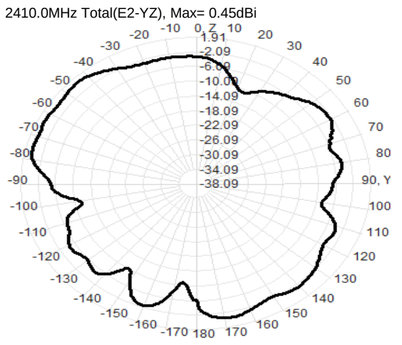




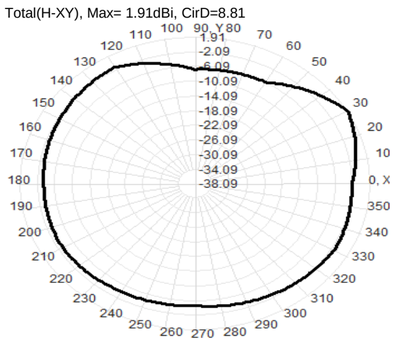
2410.0MHz Total(E1-XZ), Max= 1.26dBi



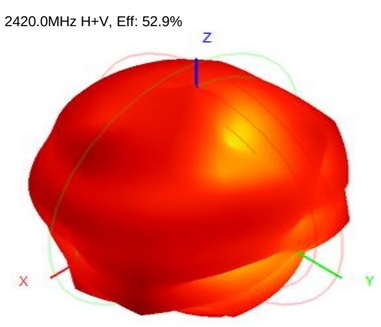

2410.0MHz Total(E2-YZ), Max= 0.45dBi



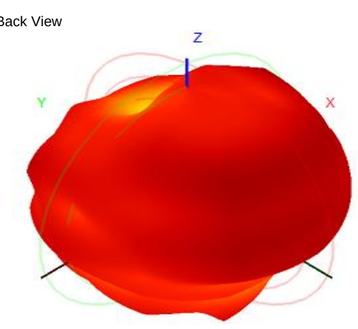

Total(H-XY), Max= 1.91dBi, CirD=8.81




2420.0MHz H+V, Eff: 52.9%

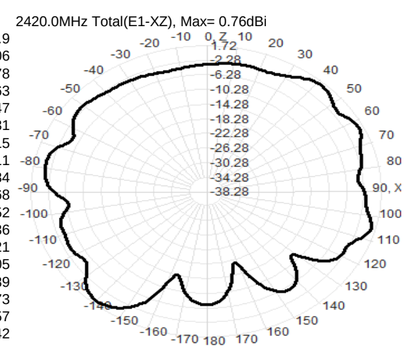



Back View

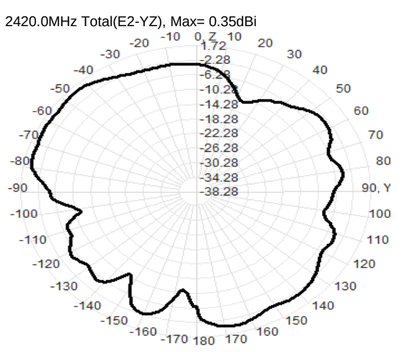




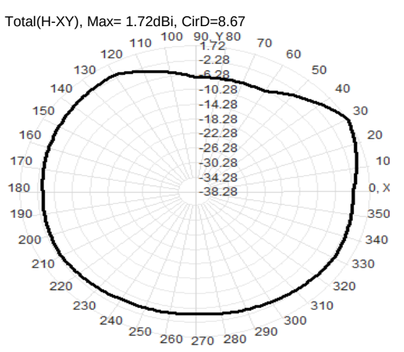
2420.0MHz Total(E1-XZ), Max= 0.76dBi



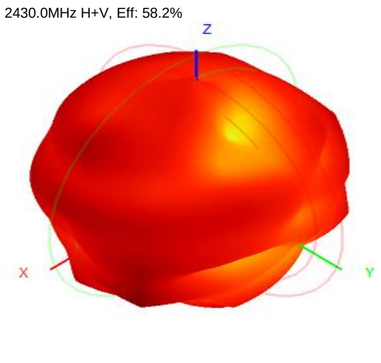

2420.0MHz Total(E2-YZ), Max= 0.35dBi



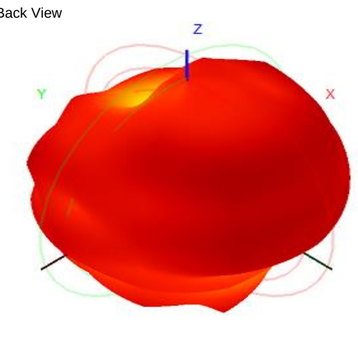

Total(H-XY), Max= 1.72dBi, CirD=8.67




2430.0MHz H+V, Eff: 58.2%

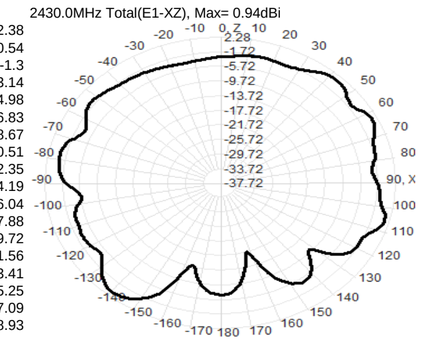



Back View

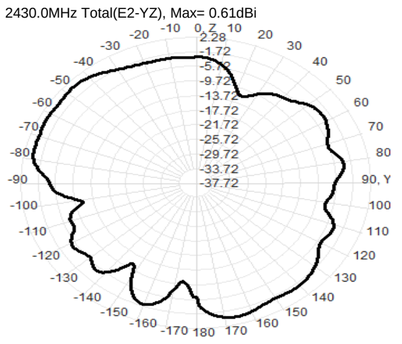




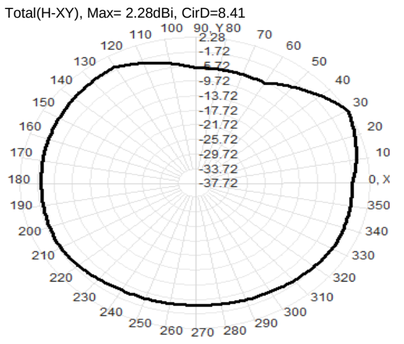
2430.0MHz Total(E1-XZ), Max= 0.94dBi



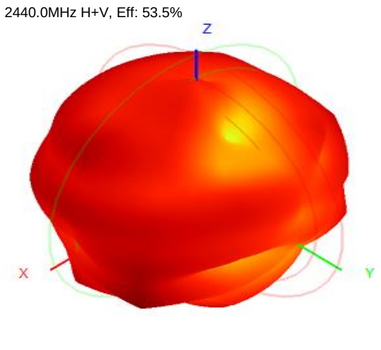

2430.0MHz Total(E2-YZ), Max= 0.61dBi



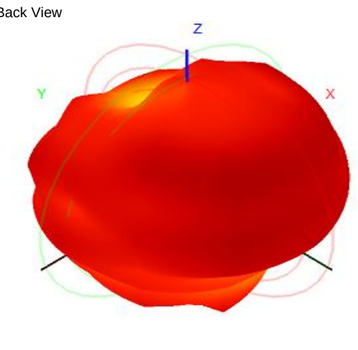

Total(H-XY), Max= 2.28dBi, CirD=8.41




2440.0MHz H+V, Eff: 53.5%

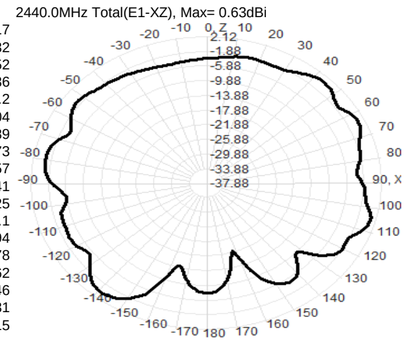



Back View

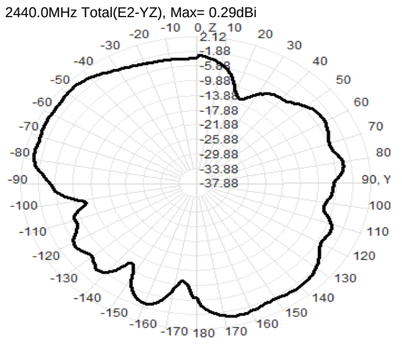




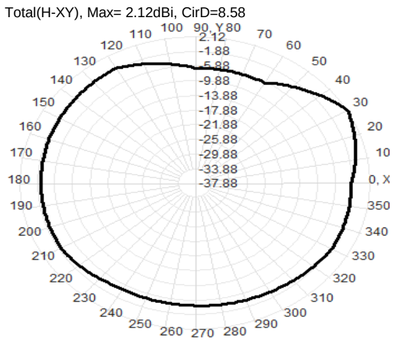
2440.0MHz Total(E1-XZ), Max= 0.63dBi



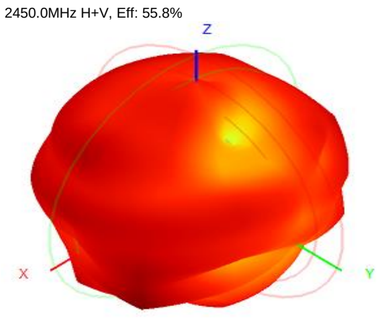

2440.0MHz Total(E2-YZ), Max= 0.29dBi



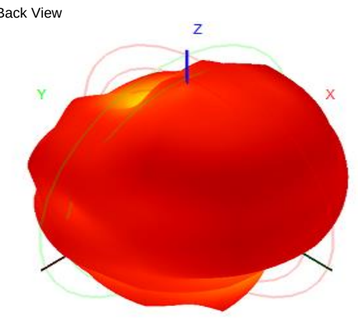

Total(H-XY), Max= 2.12dBi, CirD=8.58




2450.0MHz H+V, Eff: 55.8%

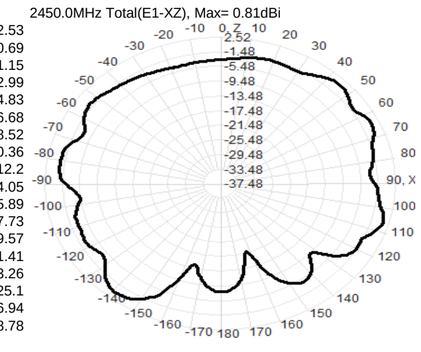



Back View

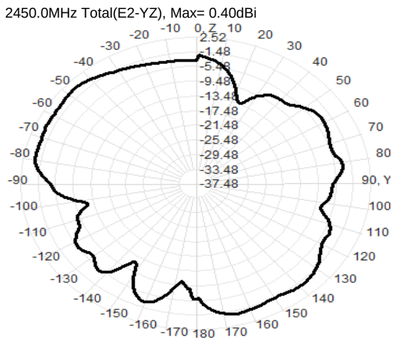




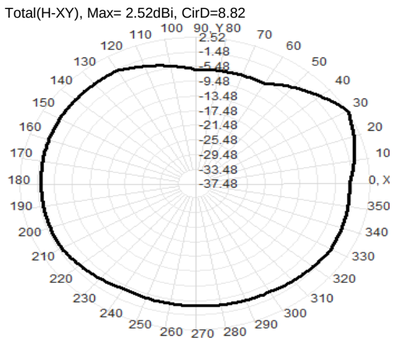
2450.0MHz Total(E1-XZ), Max= 0.81dBi



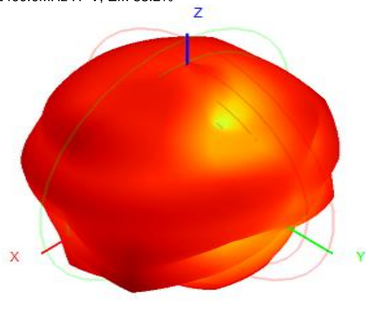

2450.0MHz Total(E2-YZ), Max= 0.40dBi



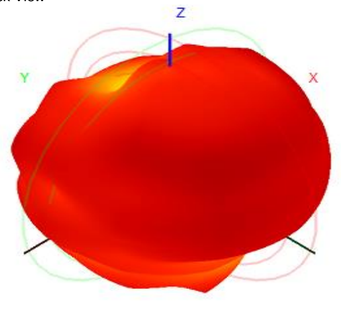

Total(H-XY), Max= 2.52dBi, CirD=8.82




2460.0MHz H+V, Eff: 53.2%

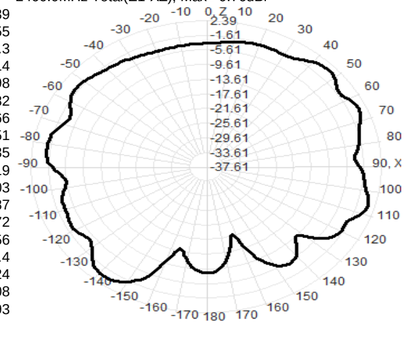



Back View





2460.0MHz Total(E1-XZ), Max= 0.76dBi




2460.0MHz Total(E2-YZ), Max= 0.22dBi




Total(H-XY), Max= 2.39dBi, CirD=9.01




2470.0MHz H+V, Eff: 58.0%




Back View







2470.0MHz Total(E1-XZ), Max= 1.26dBi




2470.0MHz Total(E2-YZ), Max= 0.45dBi




Total(H-XY), Max= 2.74dBi, CirD=8.94




2480.0MHz H+V, Eff: 49.3%




Back View







2480.0MHz Total(E1-XZ), Max= 0.59dBi




2480.0MHz Total(E2-YZ), Max= -0.32dBi




Total(H-XY), Max= 1.90dBi, CirD=8.95




2490.0MHz H+V, Eff: 54.4%




Back View







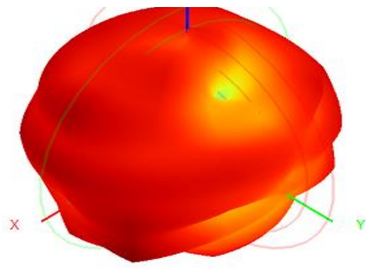
2490.0MHz Total(E1-XZ), Max= 0.97dBi



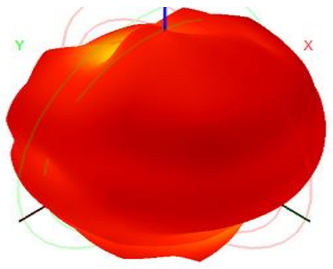

2490.0MHz Total(E2-YZ), Max= 0.09dBi



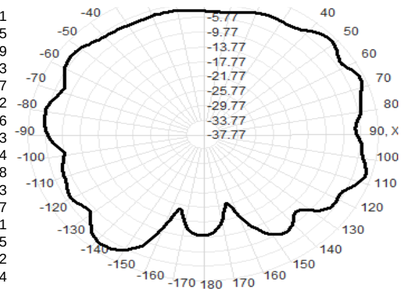

Total(H-XY), Max= 2.23dBi, CirD=9.02



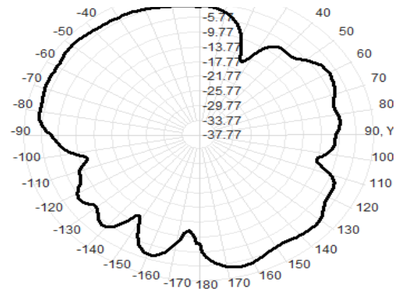

2500.0MHz H+V, Eff: 48.6%



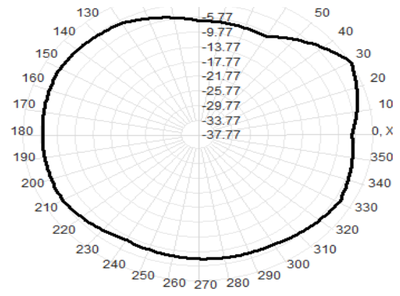

Back View

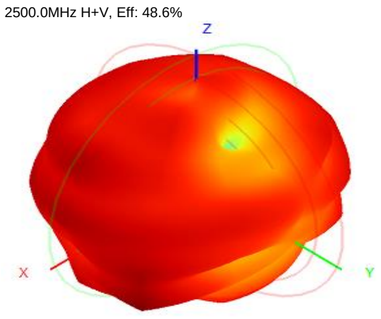

2500.0MHz Total(E1-XZ), Max= 0.48dBi



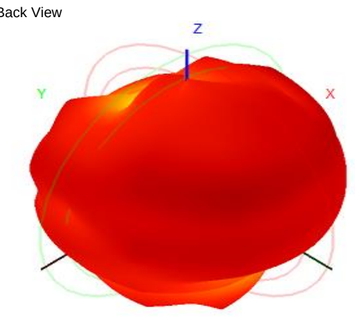

2500.0MHz Total(E2-YZ), Max= -0.32dBi



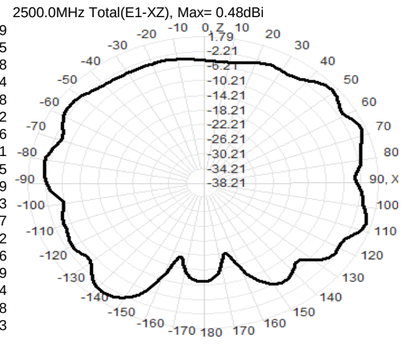

Total(H-XY), Max= 1.79dBi, CirD=9.08



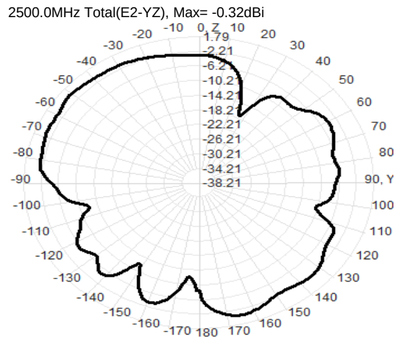

5150.0MHz H+V, Eff: 46.9%



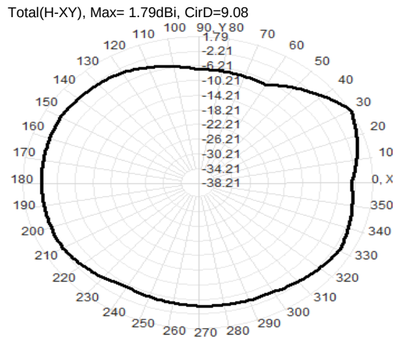

Back View

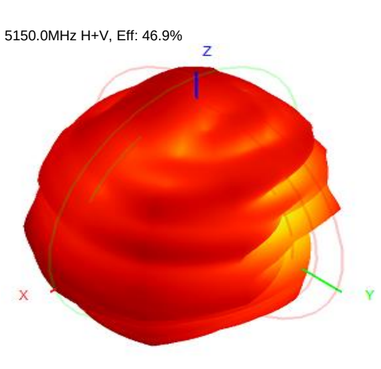

5150.0MHz Total(E1-XZ), Max= 1.82dBi



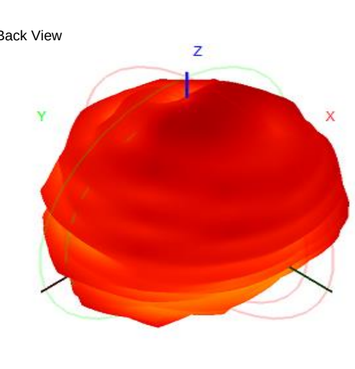

5150.0MHz Total(E2-YZ), Max= 0.88dBi



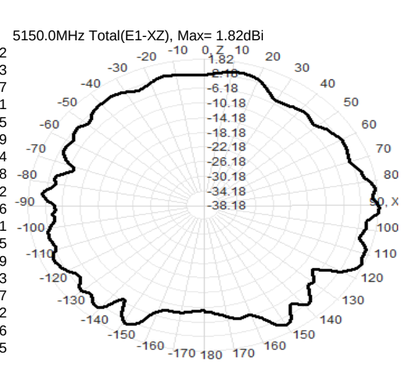

Total(H-XY), Max= 1.58dBi, CirD=15.86



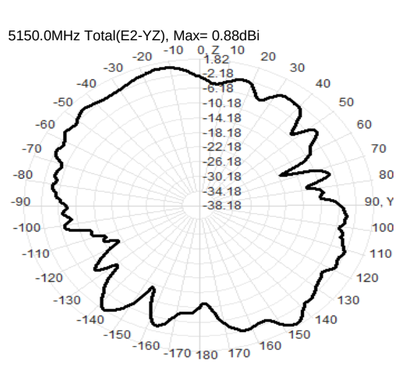

5200.0MHz H+V, Eff: 47.9%



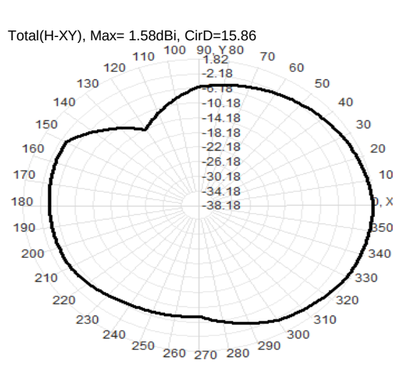

Back View

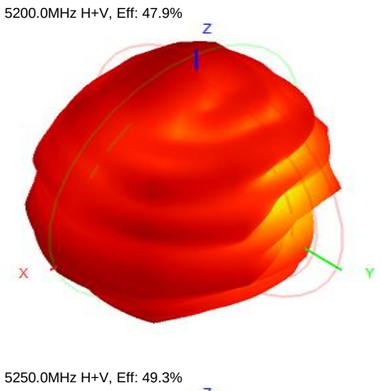

5200.0MHz Total(E1-XZ), Max= 1.62dBi



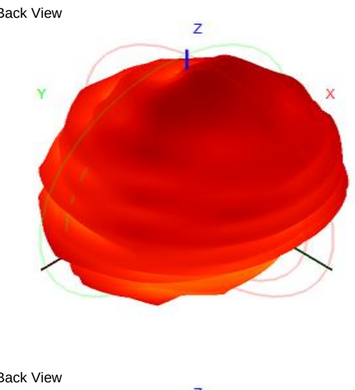

5200.0MHz Total(E2-YZ), Max= 1.26dBi



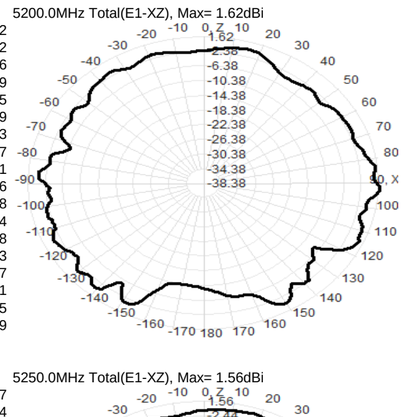

Total(H-XY), Max= 1.09dBi, CirD=14.07



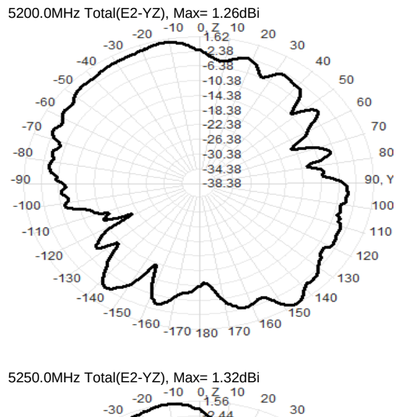

5250.0MHz H+V, Eff: 49.3%



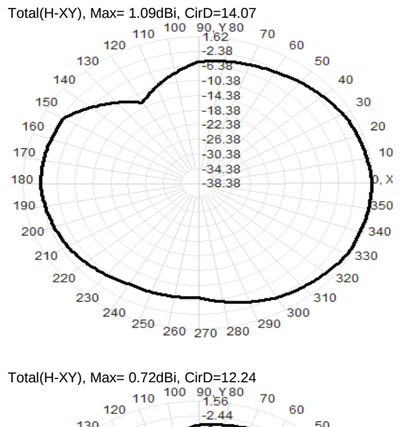

Back View

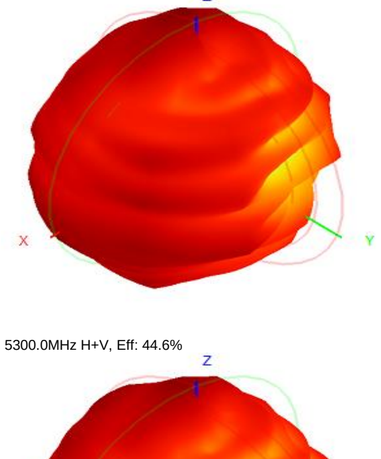

5250.0MHz Total(E1-XZ), Max= 1.56dBi



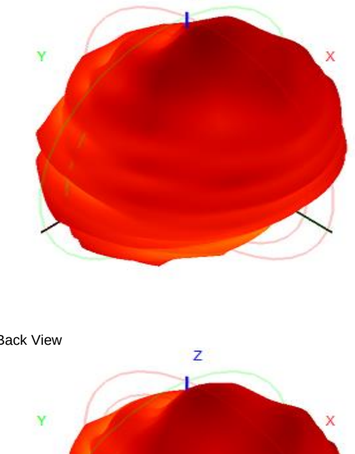

5250.0MHz Total(E2-YZ), Max= 1.32dBi



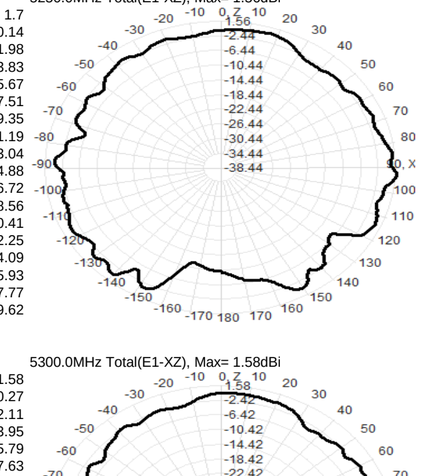

Total(H-XY), Max= 0.72dBi, CirD=12.24



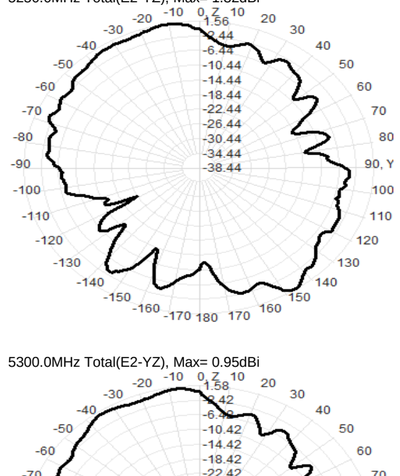

5300.0MHz H+V, Eff: 44.6%



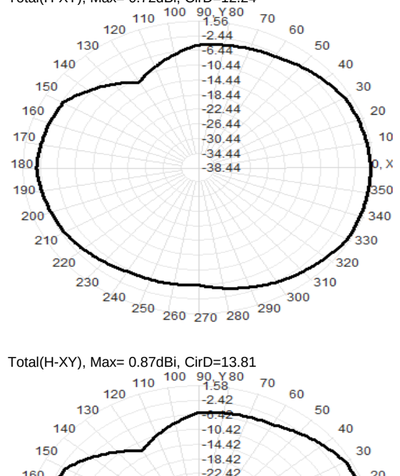

Back View

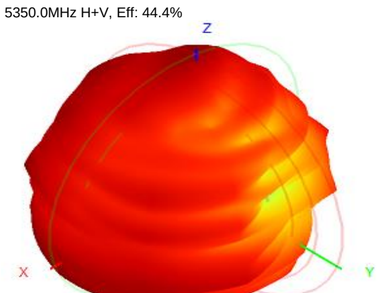

5300.0MHz Total(E1-XZ), Max= 1.58dBi



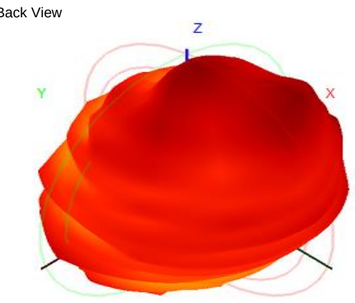

5300.0MHz Total(E2-YZ), Max= 0.95dBi



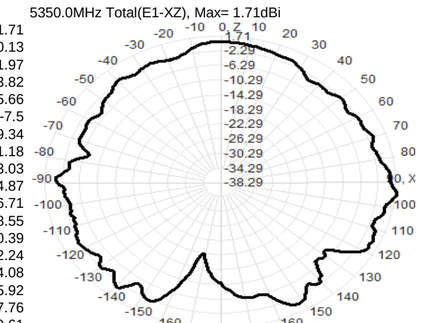

Total(H-XY), Max= 0.87dBi, CirD=13.81



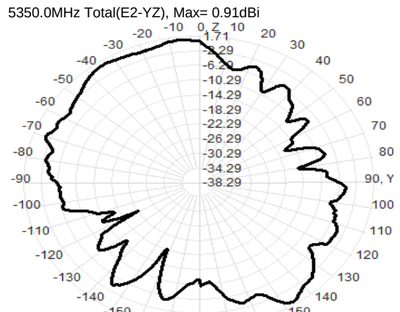

5350.0MHz H+V, Eff: 44.4%



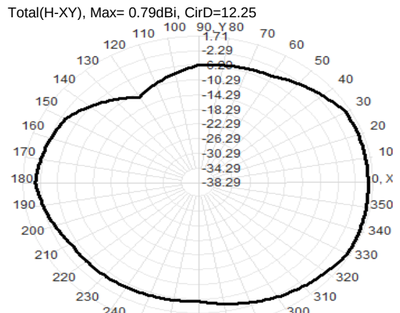

Back View


5350.0MHz Total(E1-XZ), Max= 1.71dBi




5350.0MHz Total(E2-YZ), Max= 0.91dBi




Total(H-XY), Max= 0.79dBi, CirD=12.25




5400.0MHz H+V, Eff: 49.2%




Back View







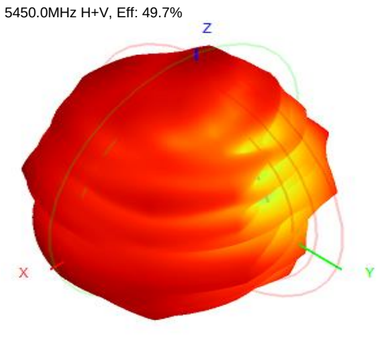
5400.0MHz Total(E1-XZ), Max= 2.20dBi



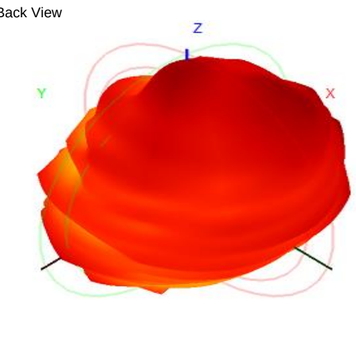

5400.0MHz Total(E2-YZ), Max= 1.01dBi



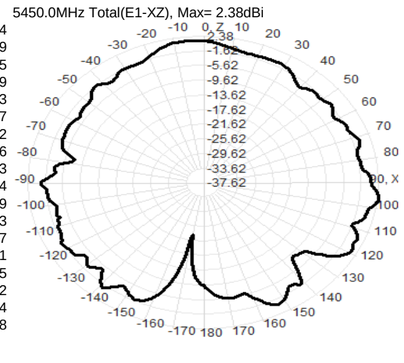

Total(H-XY), Max= 1.24dBi, CirD=11.54




5450.0MHz H+V, Eff: 49.7%




Back View


5450.0MHz Total(E1-XZ), Max= 2.38dBi




5450.0MHz Total(E2-YZ), Max= 0.96dBi




Total(H-XY), Max= 1.09dBi, CirD=11.90




5500.0MHz H+V, Eff: 51.4%




Back View







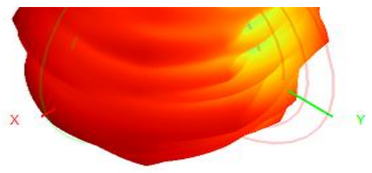
5500.0MHz Total(E1-XZ), Max= 2.52dBi

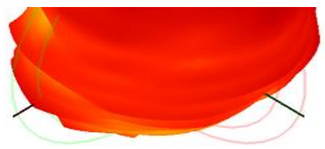


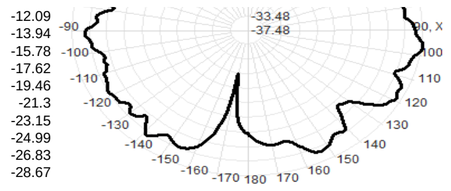

5500.0MHz Total(E2-YZ), Max= 1.21dBi

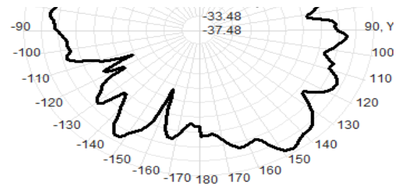


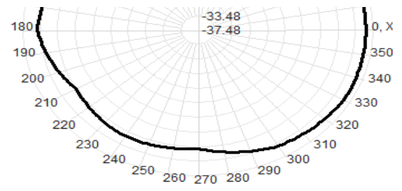

Total(H-XY), Max= 0.85dBi, CirD=10.46



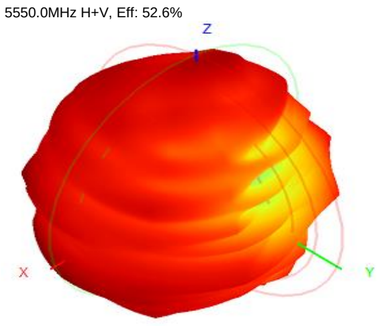



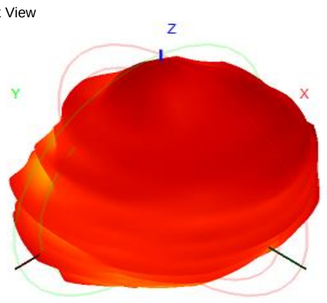




5550.0MHz H+V, Eff: 52.6%

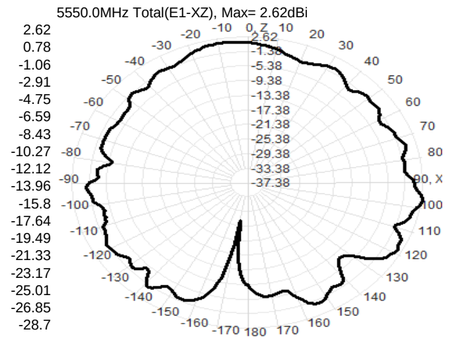



Back View

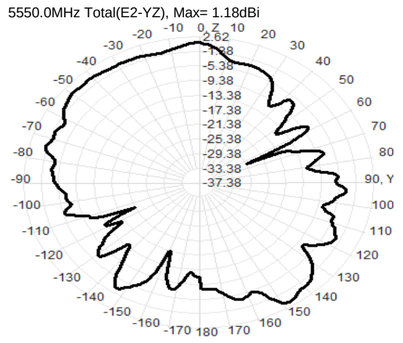




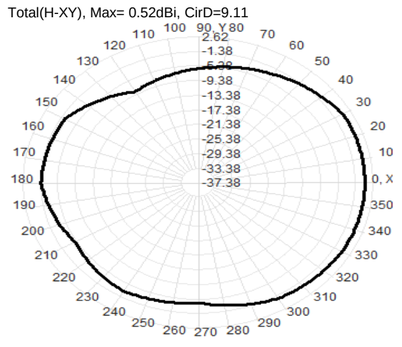
5550.0MHz Total(E1-XZ), Max= 2.62dBi



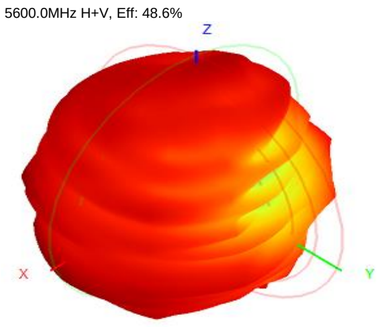

5550.0MHz Total(E2-YZ), Max= 1.18dBi



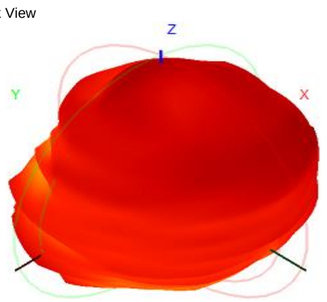

Total(H-XY), Max= 0.52dBi, CirD=9.11




5600.0MHz H+V, Eff: 48.6%

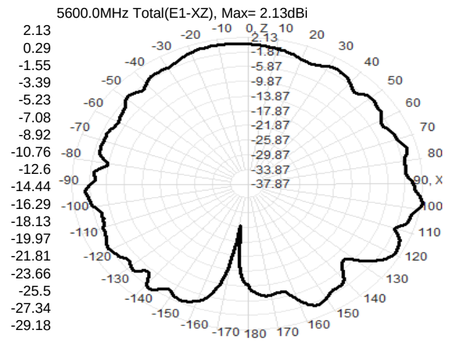



Back View

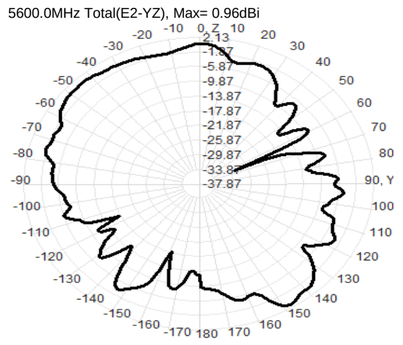




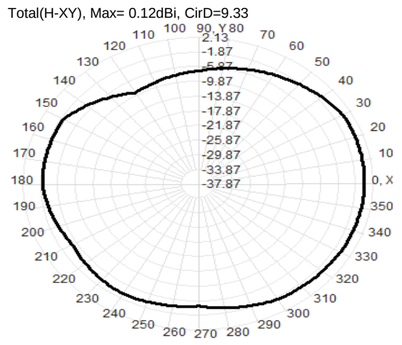
5600.0MHz Total(E1-XZ), Max= 2.13dBi



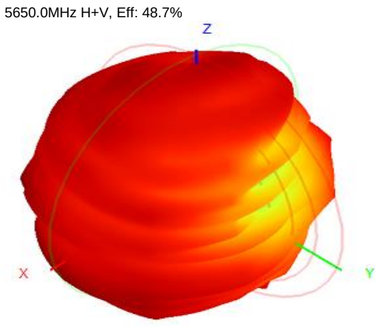

5600.0MHz Total(E2-YZ), Max= 0.96dBi



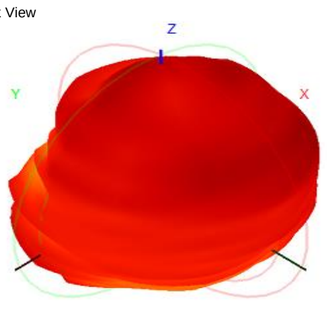

Total(H-XY), Max= 0.12dBi, CirD=9.33




5650.0MHz H+V, Eff: 48.7%

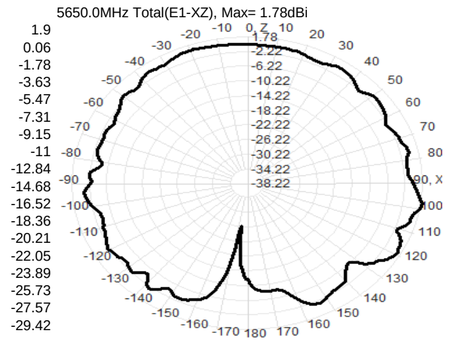



Back View

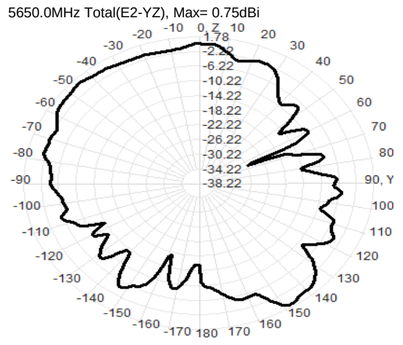




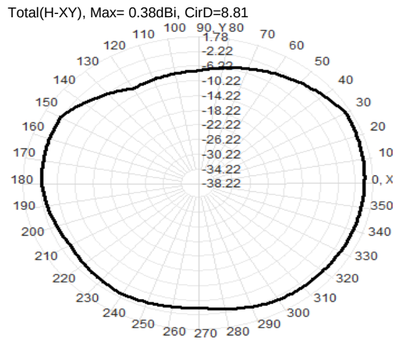
5650.0MHz Total(E1-XZ), Max= 1.78dBi



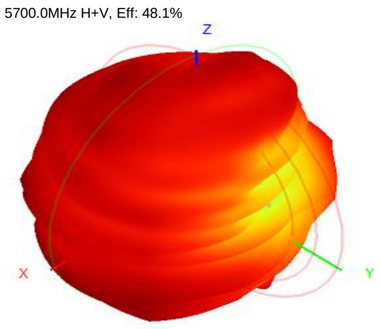

5650.0MHz Total(E2-YZ), Max= 0.75dBi



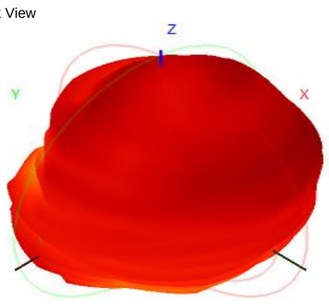

Total(H-XY), Max= 0.38dBi, CirD=8.81




5700.0MHz H+V, Eff: 48.1%

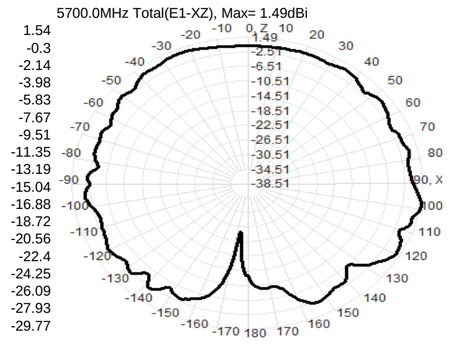



Back View

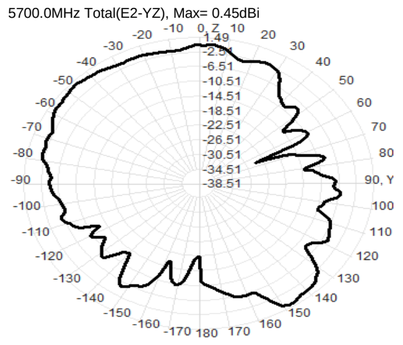




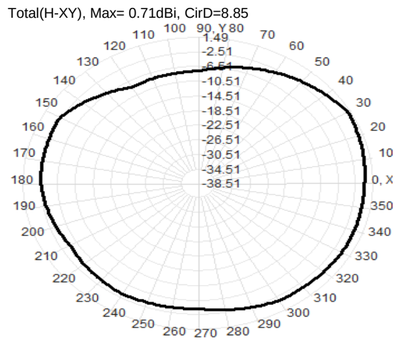
5700.0MHz Total(E1-XZ), Max= 1.49dBi



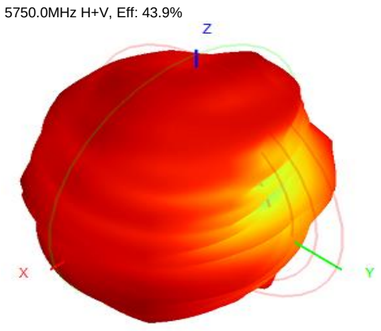

5700.0MHz Total(E2-YZ), Max= 0.45dBi



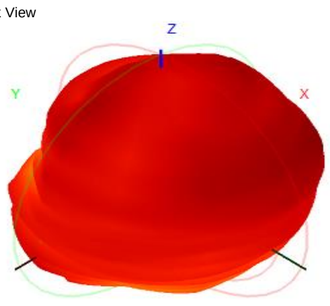

Total(H-XY), Max= 0.71dBi, CirD=8.85




5750.0MHz H+V, Eff: 43.9%

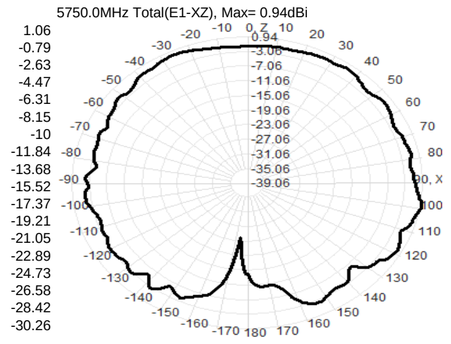



Back View

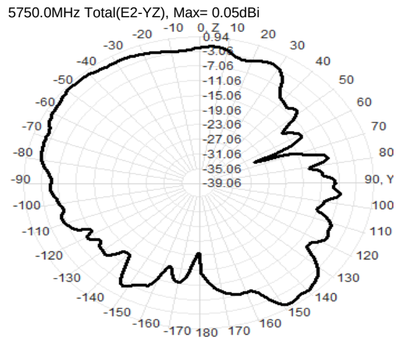




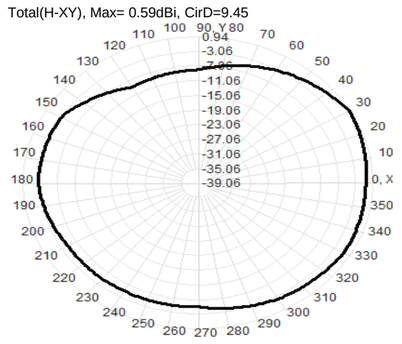
5750.0MHz Total(E1-XZ), Max= 0.94dBi



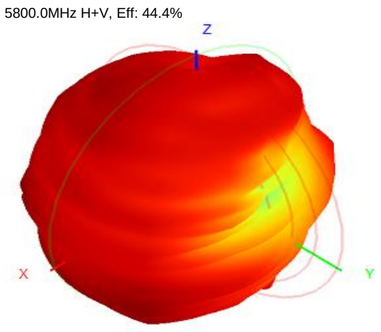

5750.0MHz Total(E2-YZ), Max= 0.05dBi



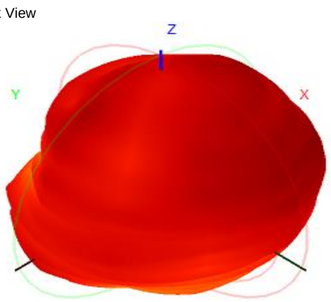

Total(H-XY), Max= 0.59dBi, CirD=9.45




5800.0MHz H+V, Eff: 44.4%

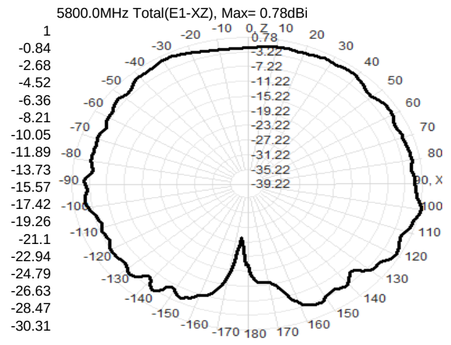



Back View





5800.0MHz Total(E1-XZ), Max= 0.78dBi




5800.0MHz Total(E2-YZ), Max= 0.16dBi




Total(H-XY), Max= 0.56dBi, CirD=9.16




5850.0MHz H+V, Eff: 47.5%




Back View







5850.0MHz Total(E1-XZ), Max= 1.04dBi




5850.0MHz Total(E2-YZ), Max= 0.06dBi




Total(H-XY), Max= 0.90dBi, CirD=8.44

## 4. Antenna Radiation Pattern

**Testing Equipment Specification:**

**Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m**
**Quite Zone: 600mm @1 GHz**
**Isolation: >100dB @ 1 MHz ~ 10 GHz**
**Testing Equipment: Agilent 5071B**
**Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration**
**Double Ridged Horn Antenna**