

## 2.4 GHz – 2.5 GHz Dipole 2dBi Antenna for Reverse Polarity SMA



### ORDERING INFORMATION

| Order Number    | Description                                                |
|-----------------|------------------------------------------------------------|
| <b>001-0001</b> | 2.4 GHz Dipole Antenna for Reverse Polarity SMA Connector. |
| <b>080-0001</b> | U.FL to Reverse Polarity SMA Cable, 105mm                  |
| Manufacturer    | LS Research, LLC                                           |

Table 1 Orderable Part Numbers

### SPECIFICATIONS

| Specification  | Value             |
|----------------|-------------------|
| Peak Gain      | +2 dBi            |
| Impedance      | 50 ohms, Nominal  |
| Type           | Dipole            |
| Polarization   | Linear Vertical   |
| VSWR           | ≤2.5 : 1, Maximum |
| Frequency      | 2400-2500MHz      |
| Weight         | 13g               |
| Size           | 105×10 mm         |
| Antenna Color  | Black             |
| Operating Temp | -20°C to +65°C    |
| UL Rating      | UL 94HB           |

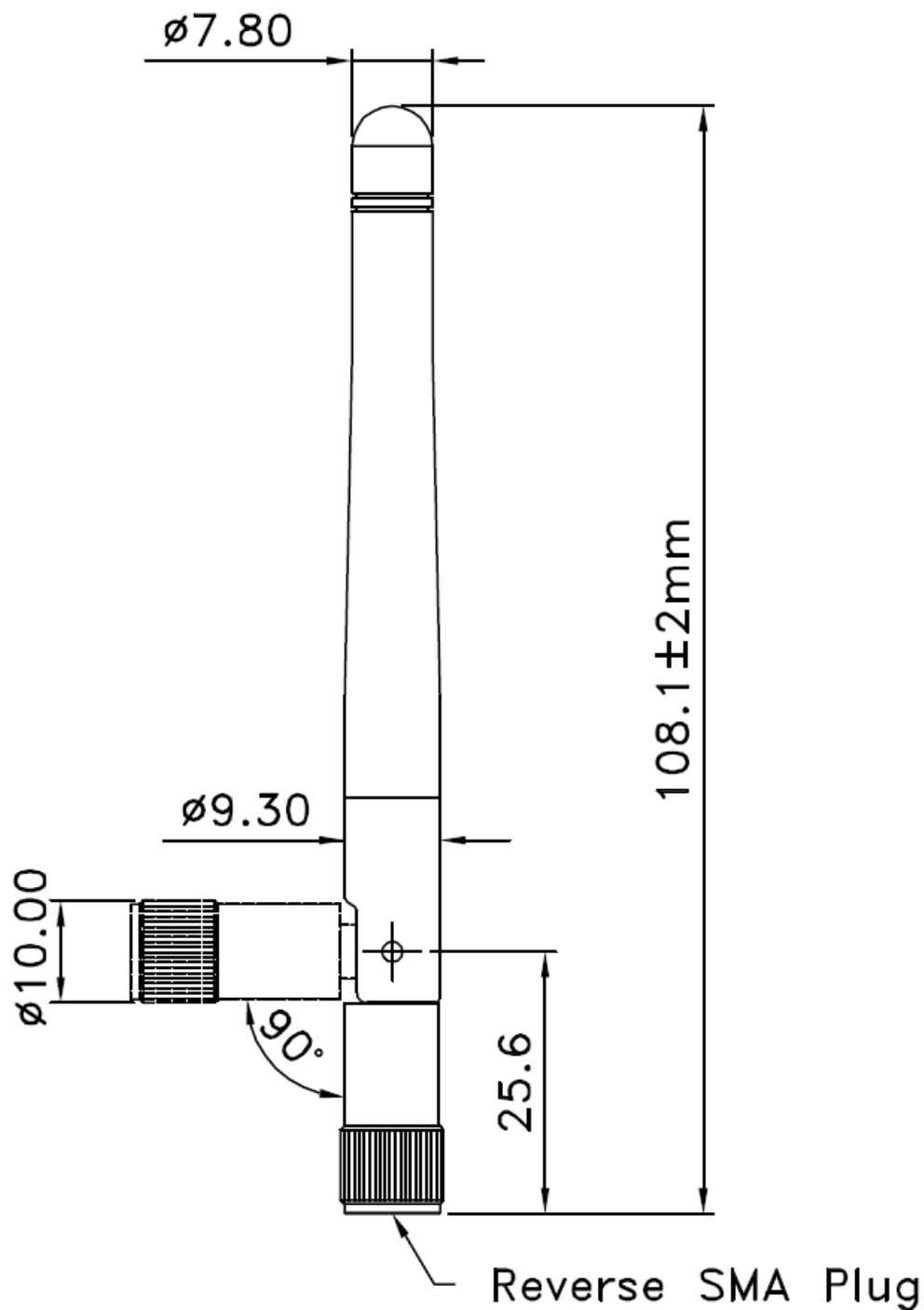
Table 2 Specifications

### Antenna Gain

| Frequency/MHz | 2400 | 2410 | 2420 | 2430 | 2440 | 2450 | 2460 | 2470 | 2480 | 2490 | 2500 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|
| Peak Gain/dBi | 2.00 | 1.90 | 1.76 | 1.55 | 1.77 | 1.88 | 1.82 | 1.67 | 1.62 | 1.55 | 1.4  |

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**PHYSICAL DIMENSIONS (MM)**



**Figure 1 Physical Dimensions**

## TYPICAL ANTENNA REFLECTION PERFORMANCE

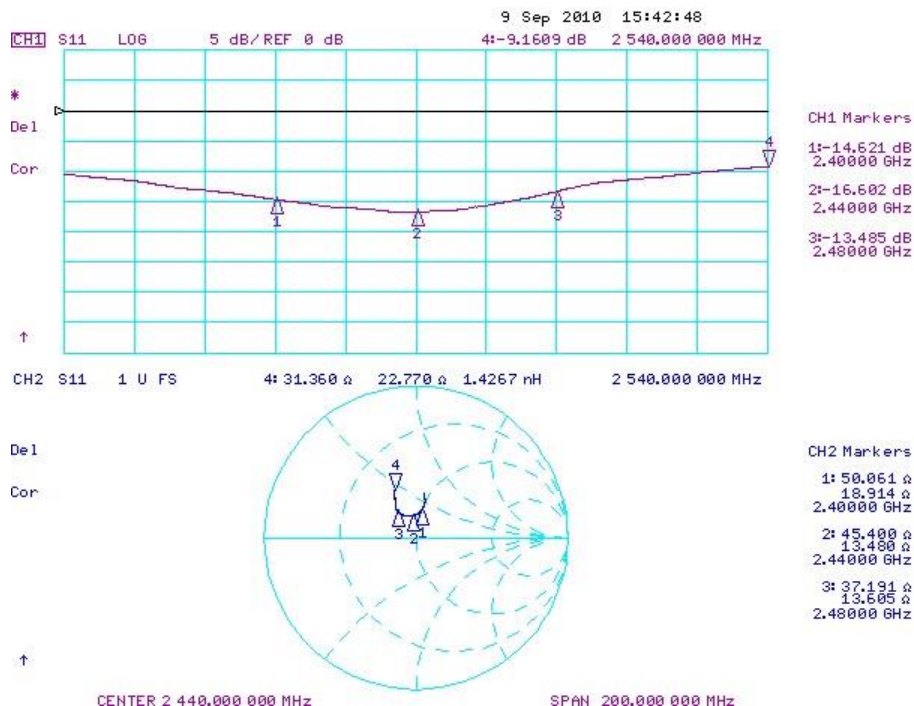


Figure 2 Reflection Parameters for Extended Configuration (S11)

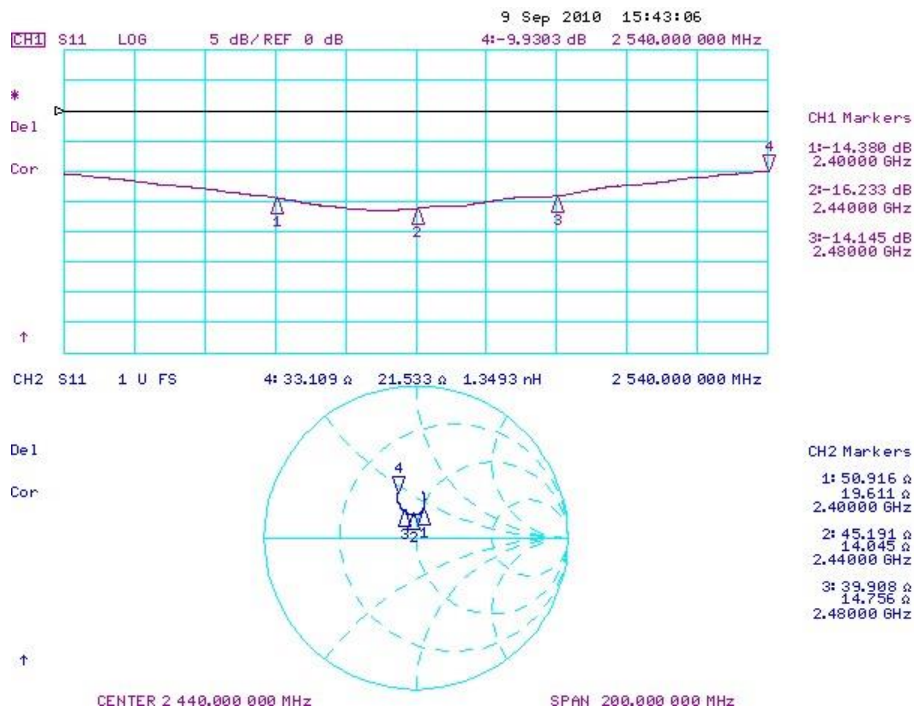
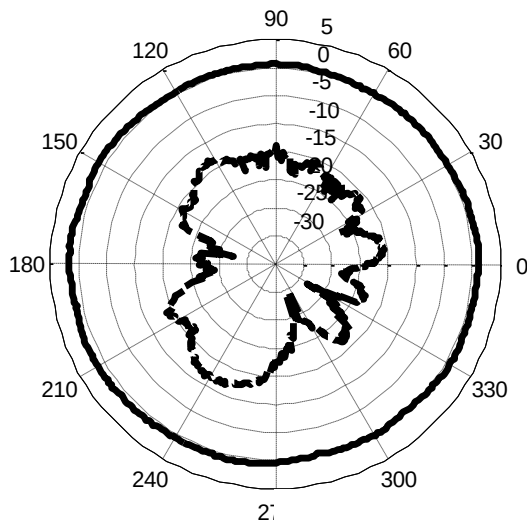


Figure 3 Reflection Parameters for Folded Configuration (S11)

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## TYPICAL ANTENNA RADIATION PERFORMANCE

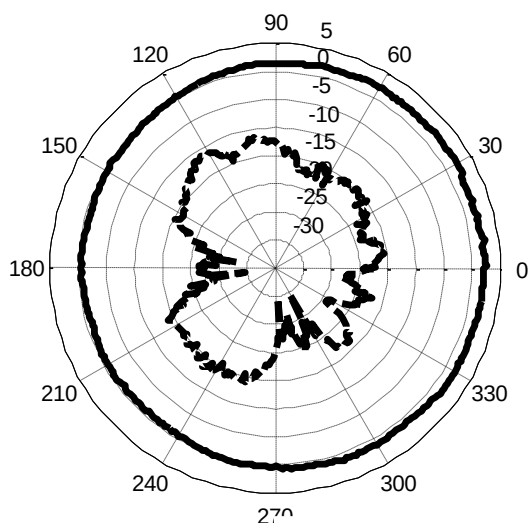
### LSR ANTENNA STRAIGHT 2405 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi) min: -29.7 max: -11.2 avg: -17.7

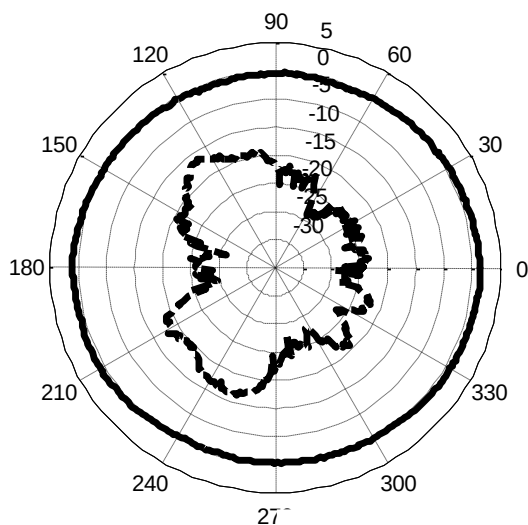
## LSR ANTENNA STRAIGHT 2440 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi) min: -29.8 max: -11.2 avg: -17.3

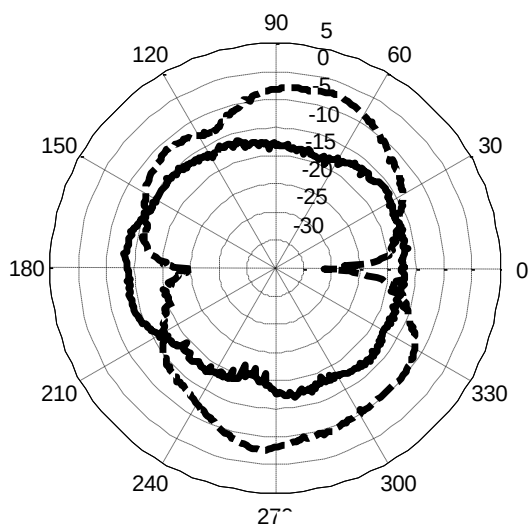
## LSR ANTENNA STRAIGHT 2480 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi) min: -26.0 max: -11.1 avg: -17.7

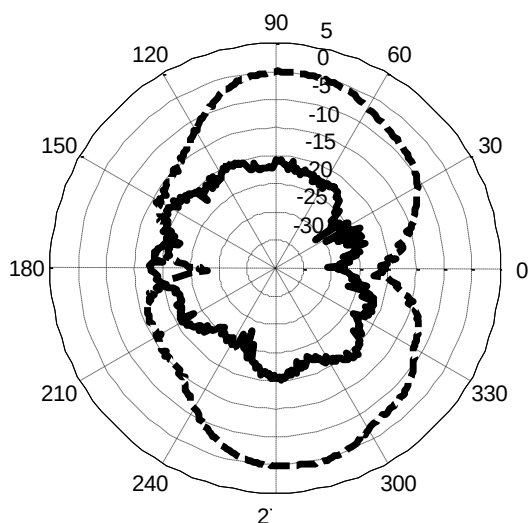
## LSR ANTENNA BENT 2405 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi)    min: -26.2    max: -2.1    avg: -8.6

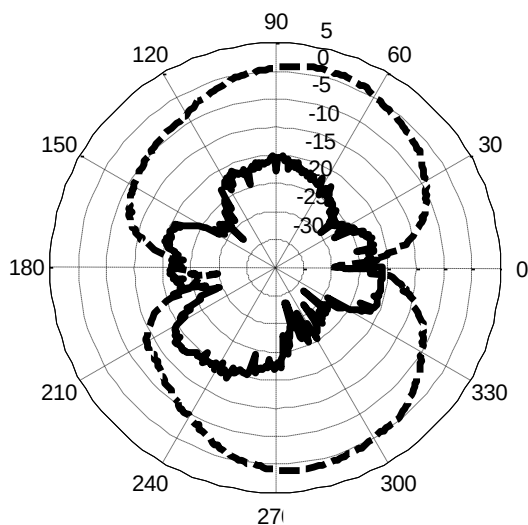
## LSR ANTENNA BENT 2440 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi) min: -22.8 max: +0.6 avg: -7.1

## LSR ANTENNA BENT 2480 MHz



\_\_\_\_ Vertical Polarization Gain (dBi)

----- Horizontal Polarization Gain (dBi) min: -24.7 max: +1.4 avg: -5.7

## CONTACTING LS RESEARCH

|                          |                                                                                                                                |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|
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