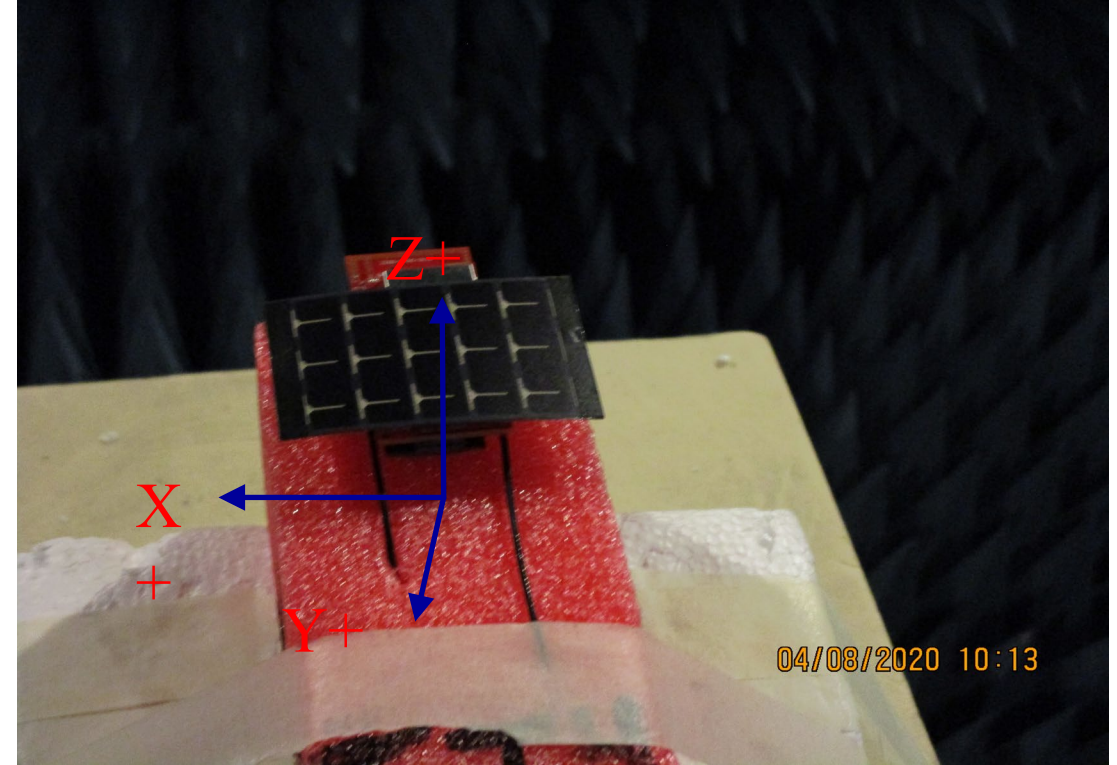
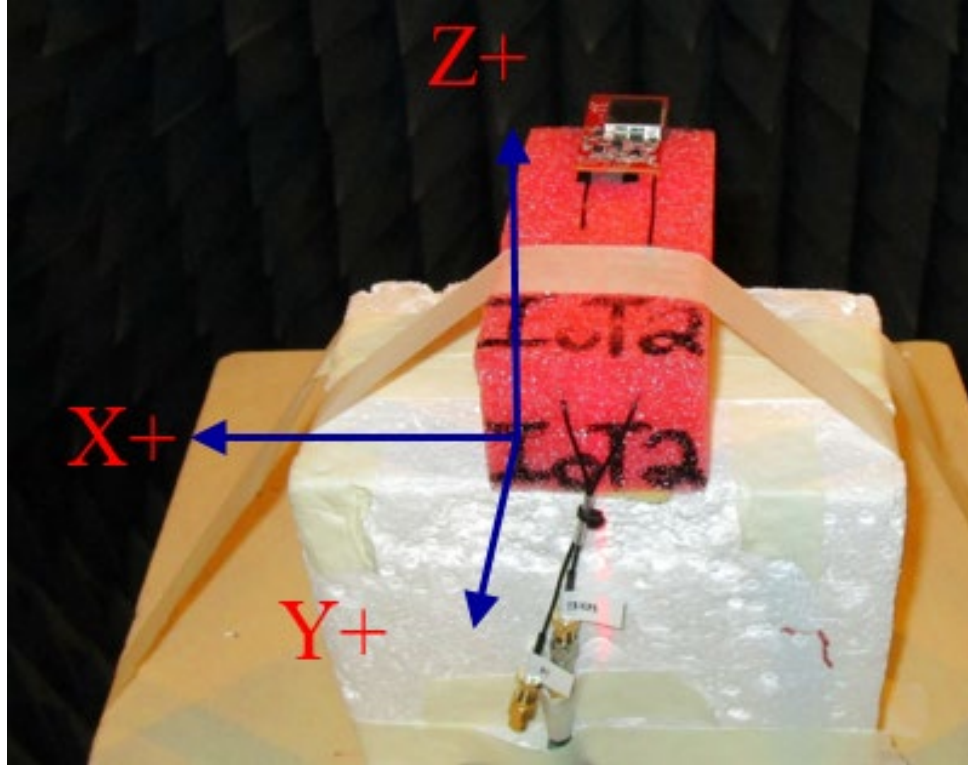


Satellite Antenna

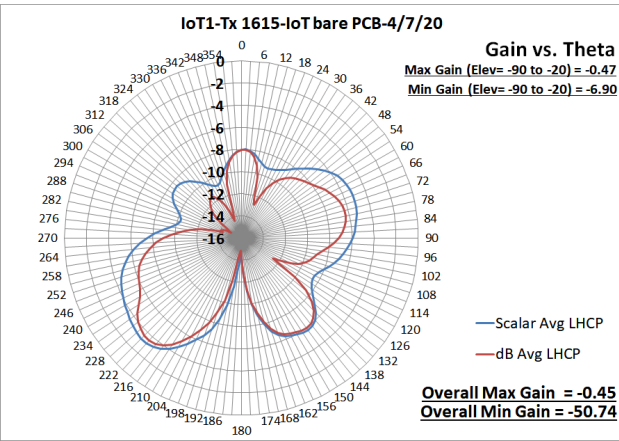
Antenna Supplier	Antenna Model	Antenna Type	Centre Frequency	Peak Gain
Globalstar	Globalstar IoT	PCB Inverted-F Antenna	1615 MHz	1.06 dBi



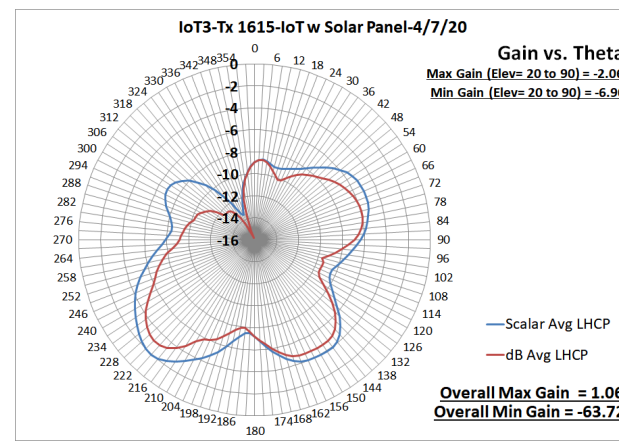
Satellite Antenna (Globalstar IoT)

Gain vs Theta

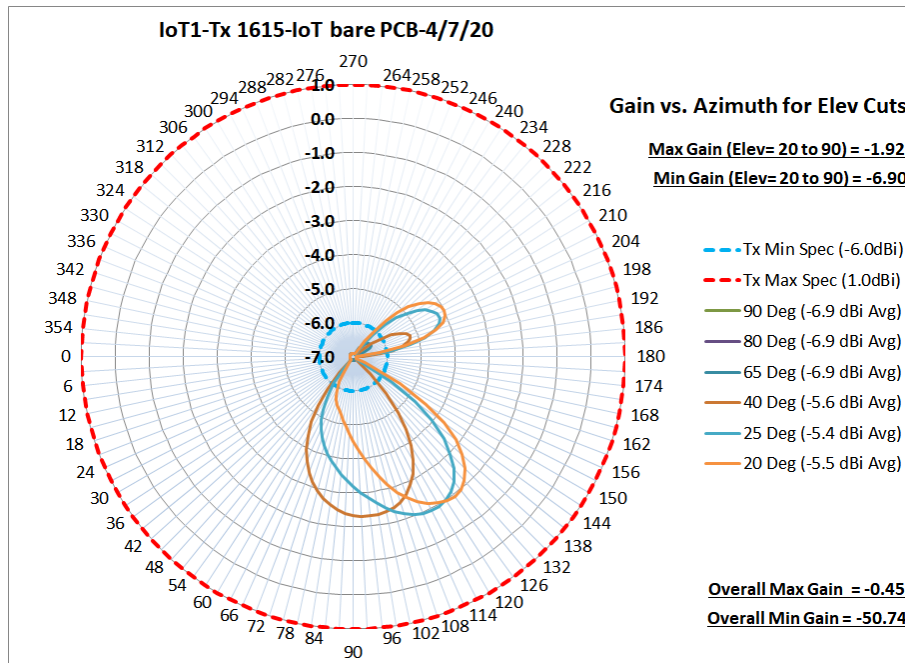
LHCP dominant beneath board. Theta [90,180] or [-90 to -180]



LHCP null is above the board. LHCP dominant beneath board
 RHCP null is beneath board



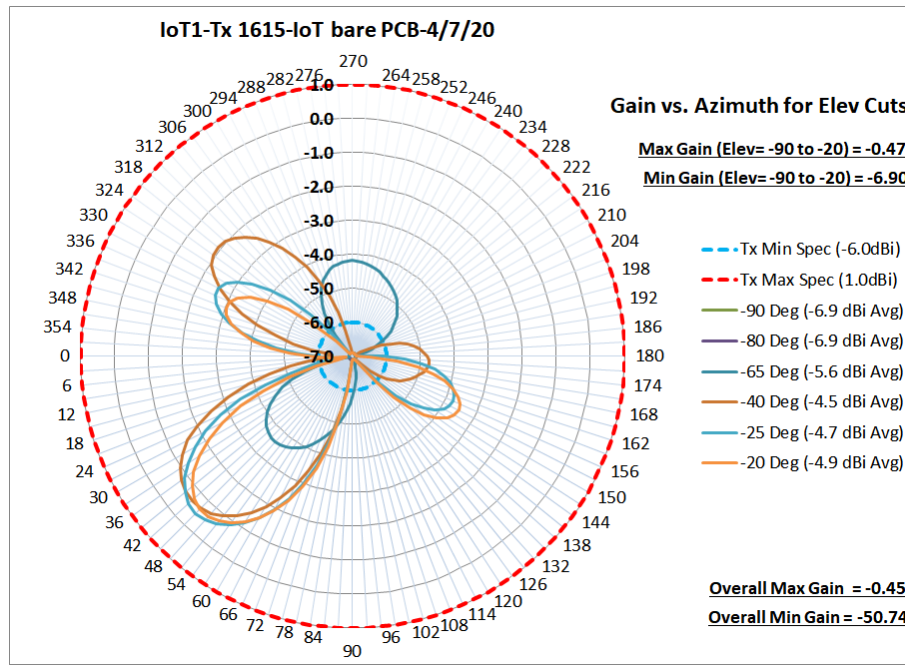
Satellite Antenna (Globalstar IoT - without Solar Cells)



Antenna Pattern vs. Elevation

Elevation 0 to 90

Orientation as pictured



Antenna Pattern vs. Elevation

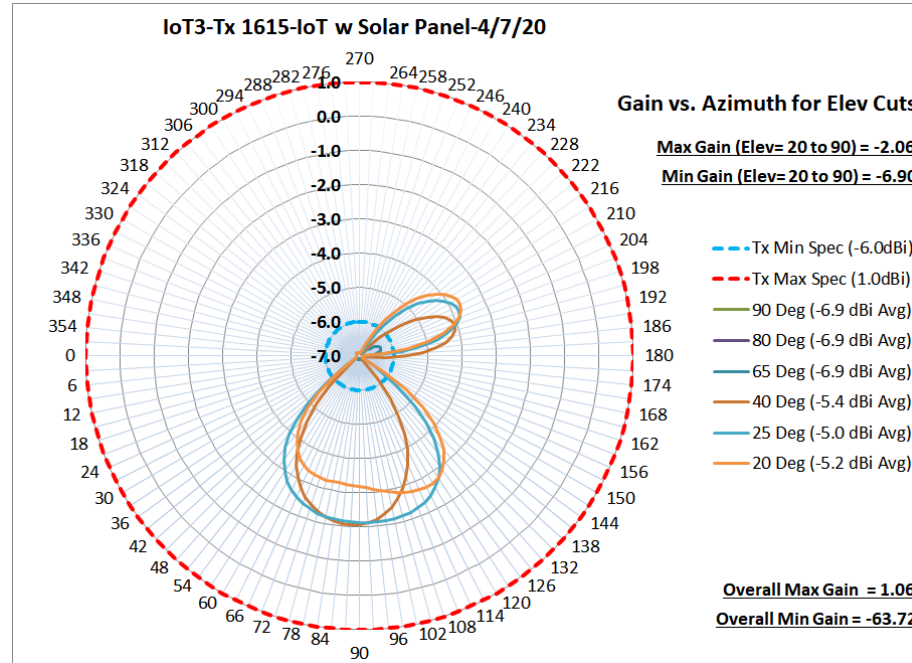
Elevation 0 to 90

Looking up from underneath

Upside down orientation

Not good for solar cells, but
much better for antennas

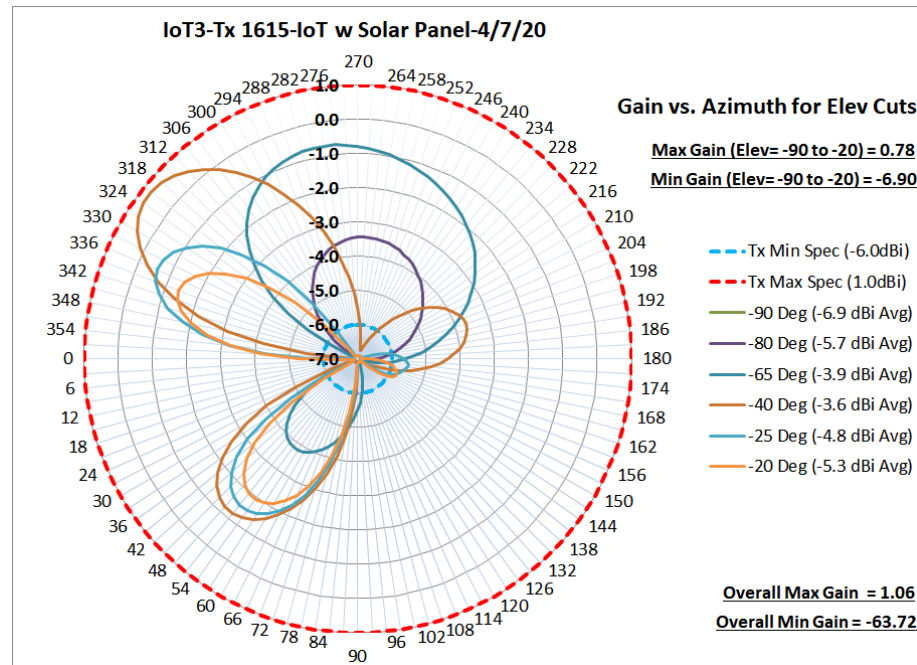
Satellite Antenna (Globalstar IoT - with Solar Cells)



Antenna Pattern vs. Elevation

Elevation 0 to 90

Orientation as pictured



Antenna Pattern vs. Elevation

Elevation 0 to 90

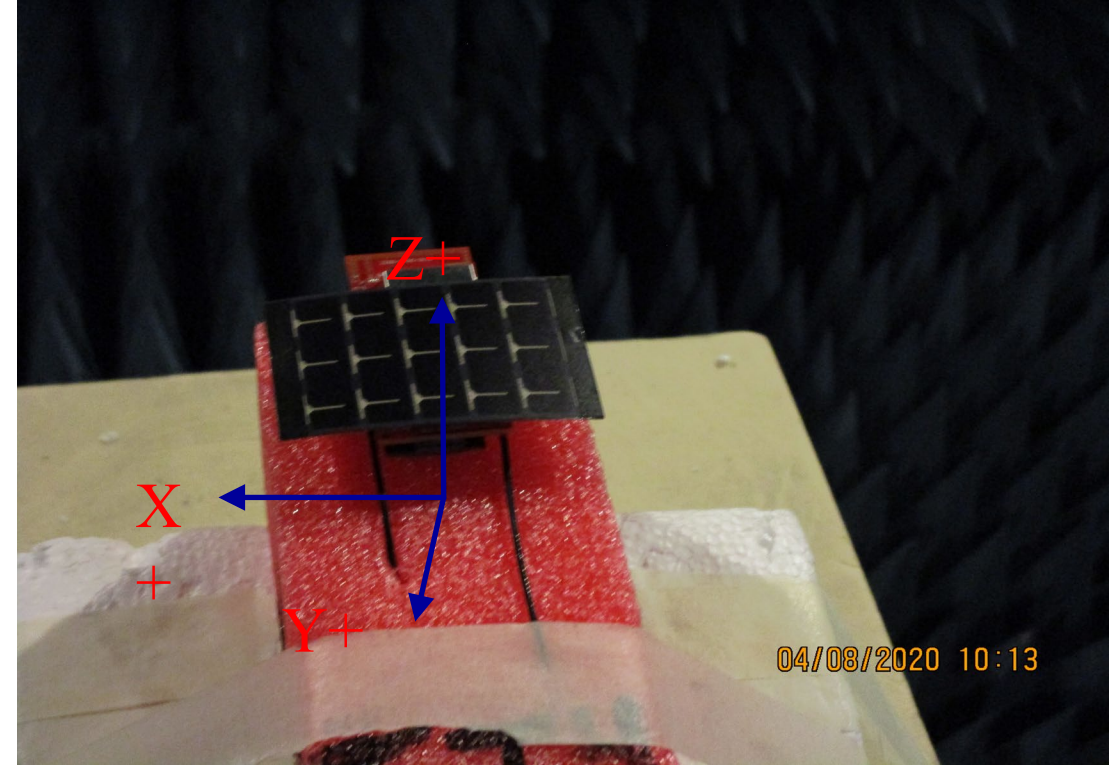
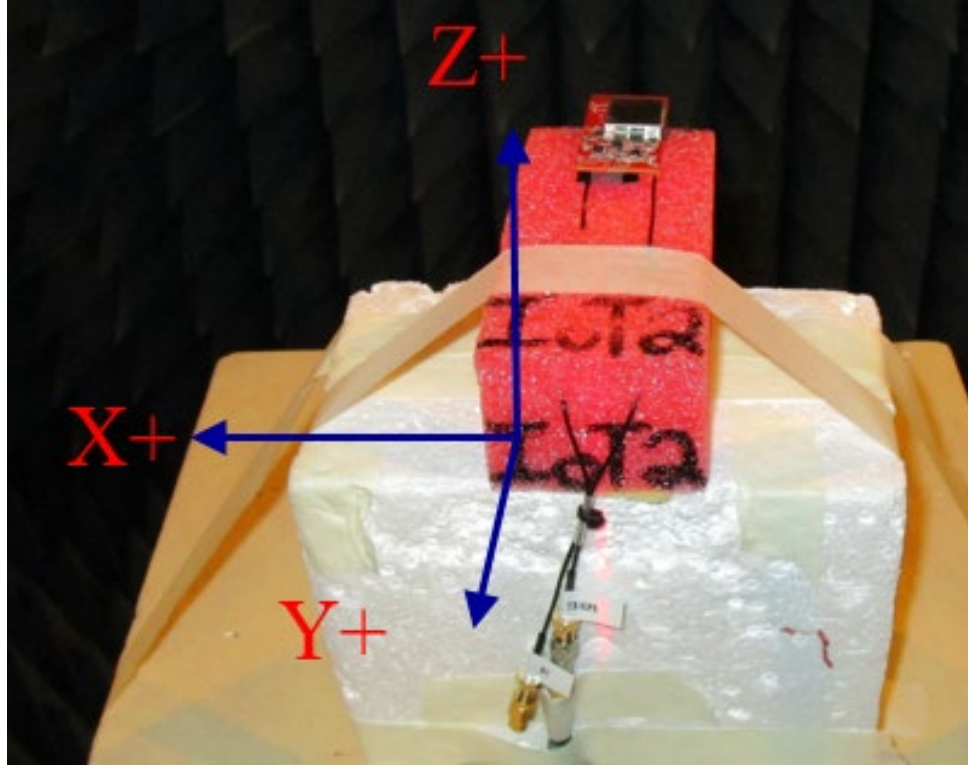
Looking up from underneath

Upside down orientation

Not good for solar cells, but much better for antennas

GPS Antenna

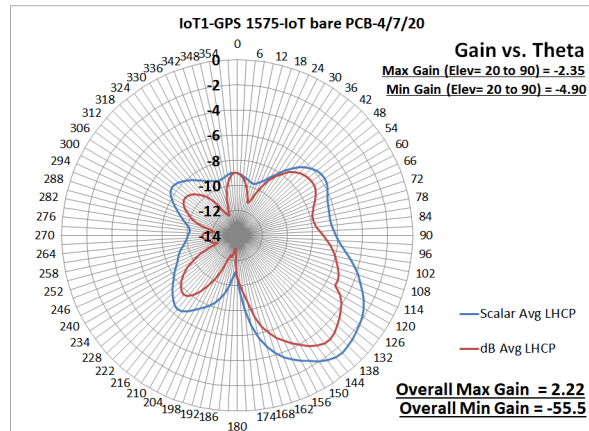
Antenna Supplier	Antenna Model	Antenna Type	Centre Frequency	Peak Gain
Globalstar	Globalstar IoT	PCB Inverted-F Antenna	1575 MHz	1.24 dBi



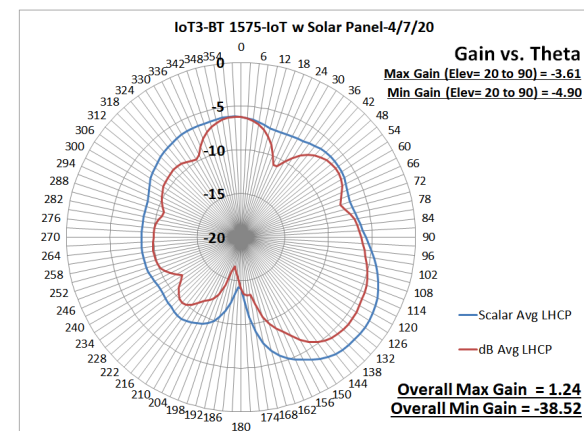
GPS Antenna (Globalstar IoT)

Gain vs Theta

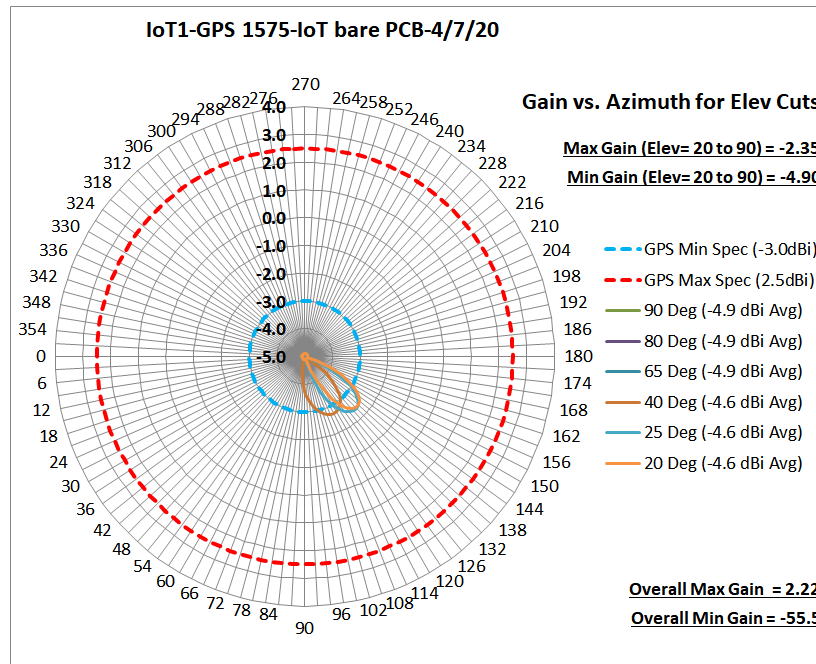
LHCP dominant beneath board. Theta [90,180] or [-90 to -180]



LHCP null is above the board. LHCP dominant beneath board
 RHCP null is beneath board



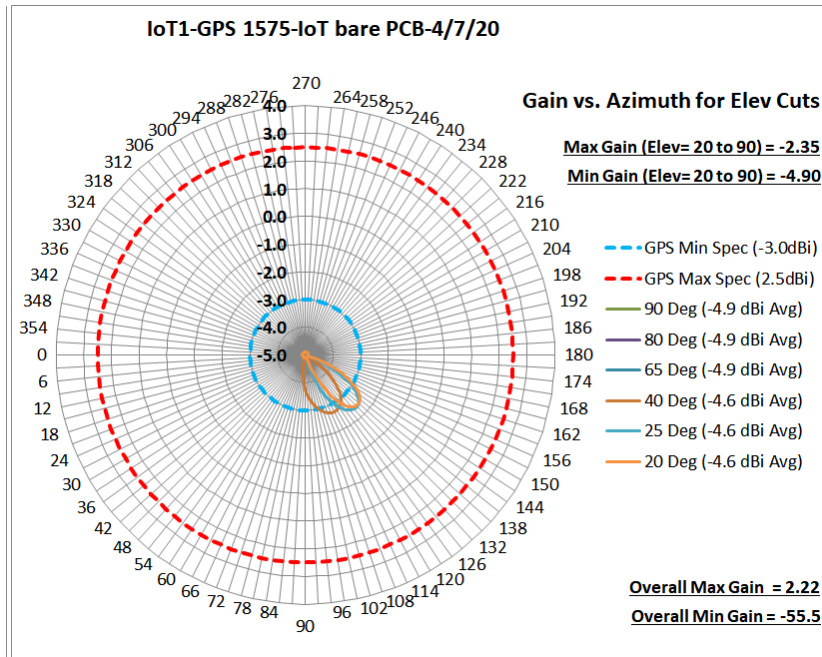
GPS Antenna (Globalstar IoT - without Solar Cells)



Antenna Pattern vs. Elevation

Elevation 0 to 90

Orientation as pictured



Antenna Pattern vs. Elevation

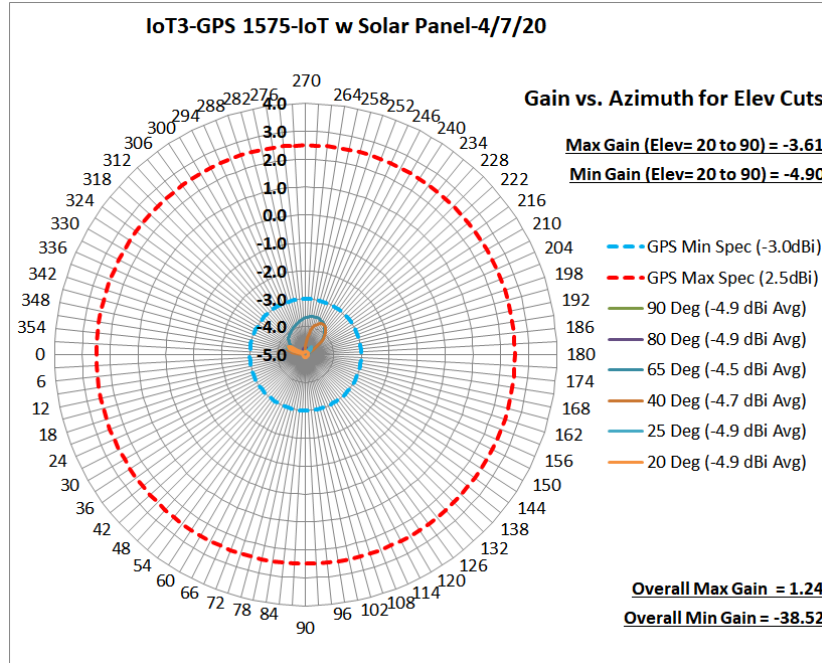
Elevation 0 to 90

Looking up from underneath

Upside down orientation

Not good for solar cells, but
much better for antennas

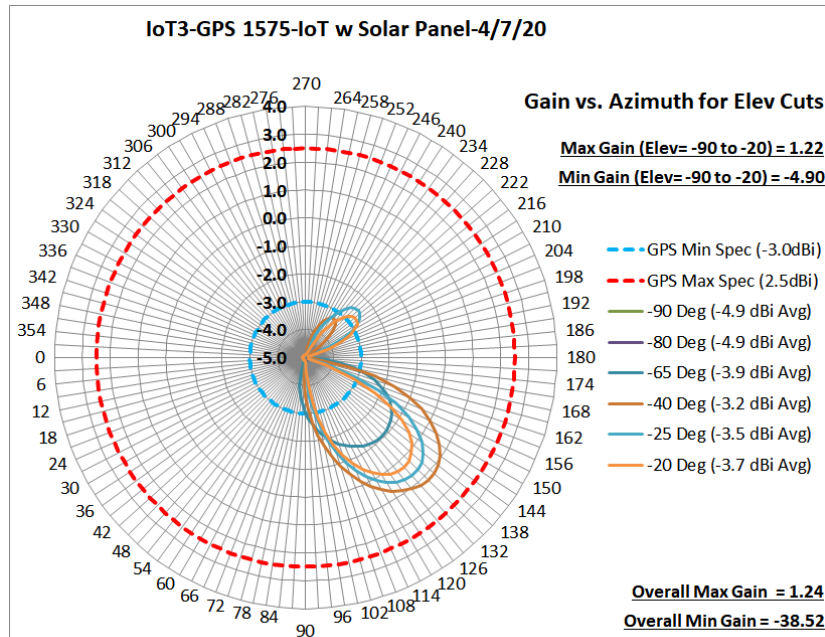
GPS Antenna (Globalstar IoT - with Solar Cells)



Antenna Pattern vs. Elevation

Elevation 0 to 90

Orientation as pictured



Antenna Pattern vs. Elevation

Elevation 0 to 90

Looking up from underneath

Upside down orientation

Not good for solar cells, but much better for antennas

Bluetooth Antenna

Antenna Supplier	Antenna Model	Antenna Type	Frequencies	Peak Gain
Johanson Technology Inc.	2450AT07A0100T	Chip	2400 – 2500 MHz	1.0dBi

Bluetooth Antenna (2450AT07A0100T)

Typical Radiation Patterns @25C

