

GALTRONICS

WHEN CONNECTIONS COUNT



Askey Charter Adant Star Robin MDU Antenna Performance Report

Galtronics Project: 7795

Antenna Locations



Z-direction

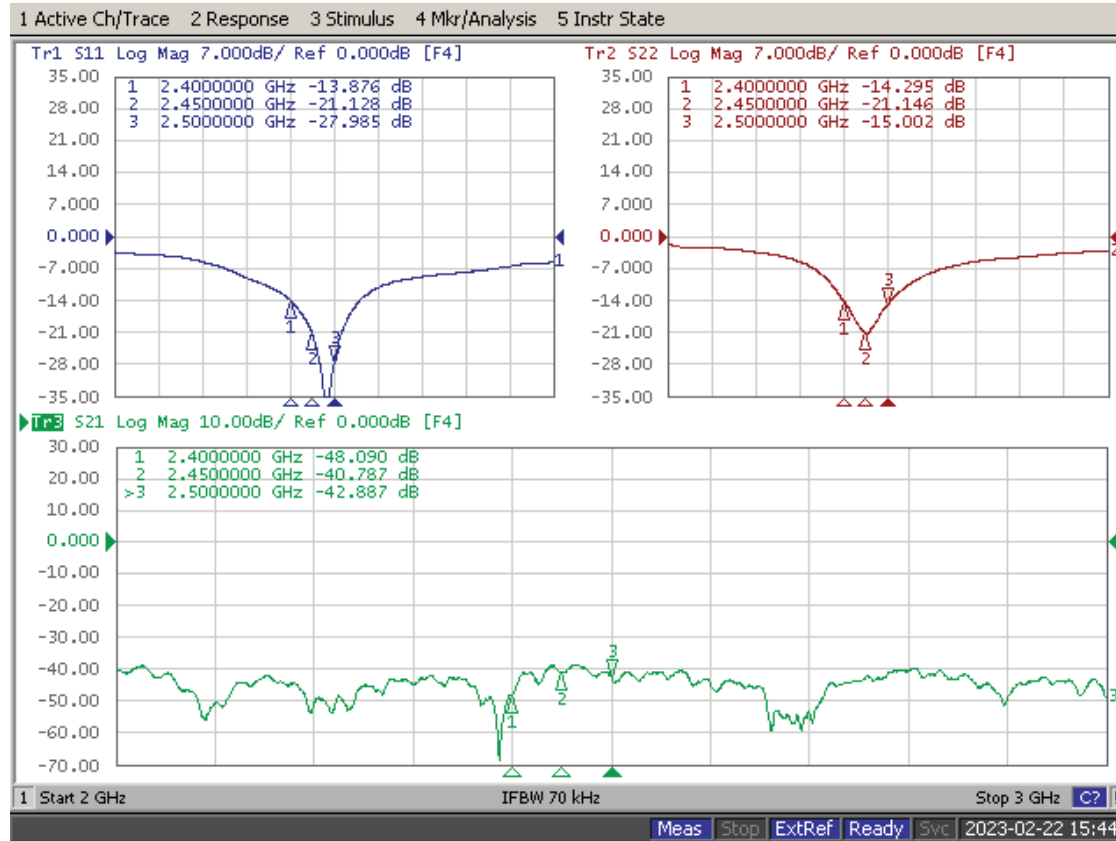
Cable length and orientation

Antenna	Part Number	Cable Length	Orientation	Cable Color
IoT1	02102073-07795-1(GALTRONICS)	235mm	V	Blue
IoT2	02102073-07795-2(GALTRONICS)	60mm	V	Black
6G1	02102475-07795-1(GALTRONICS)	175mm	H	Yellow
6G2	02102475-07795-2(GALTRONICS)	165mm	V	Orange
6G3	02102475-07795-3(GALTRONICS)	110mm	V	Red
6G4	02102475-07795-4(GALTRONICS)	165mm	H pol Omni	Green

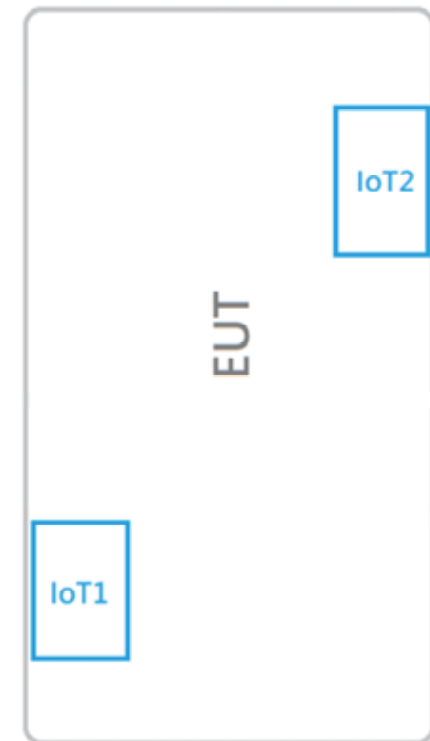
V = vertical

H = horizontal

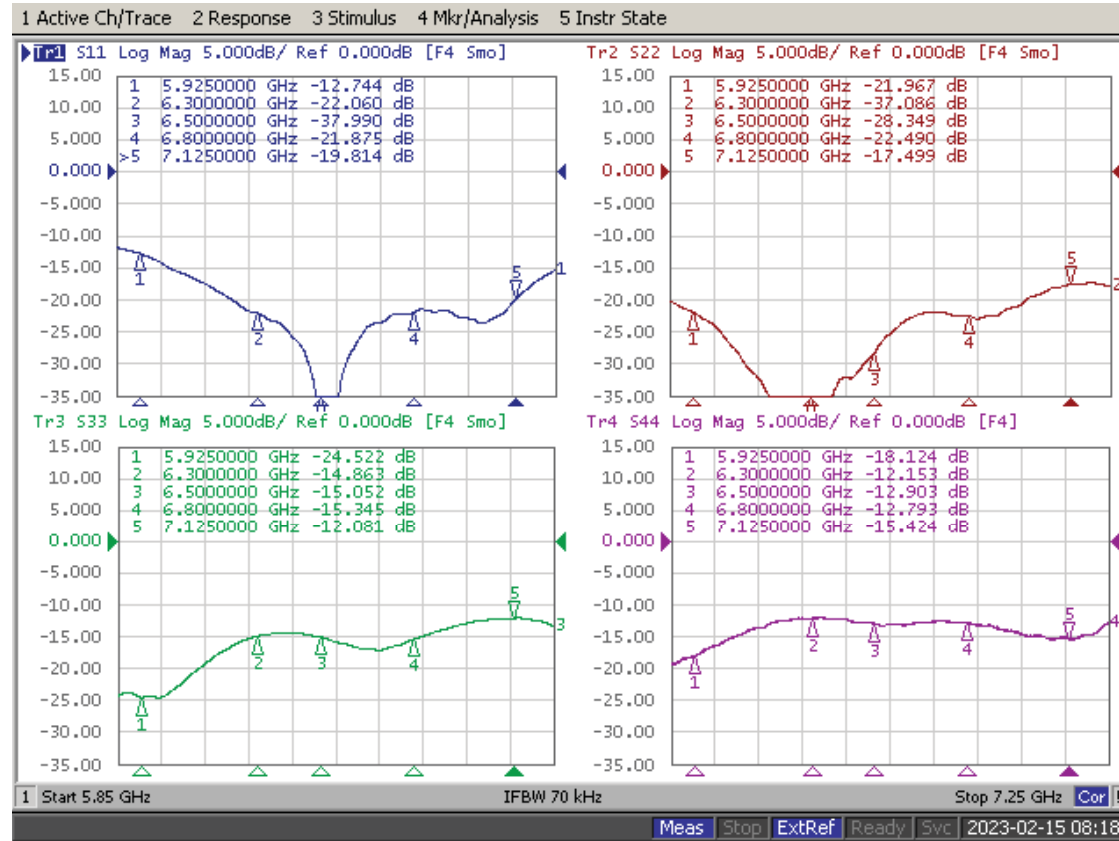
Return Loss and Isolation of IoT antennas



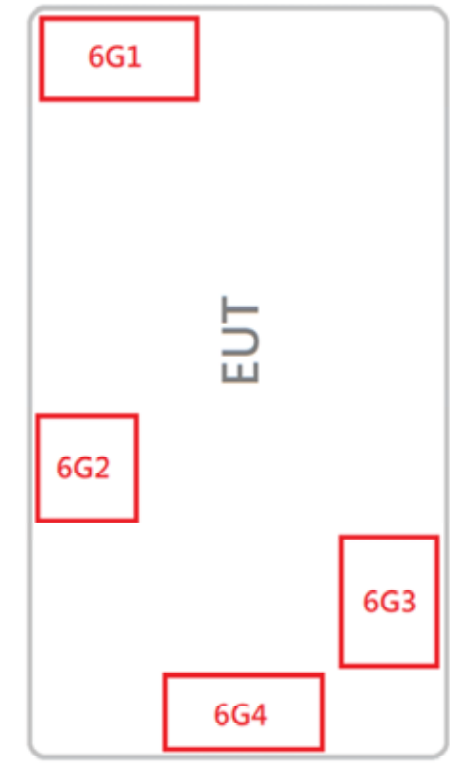
Port 1= IoT1 | Port 2= IoT2



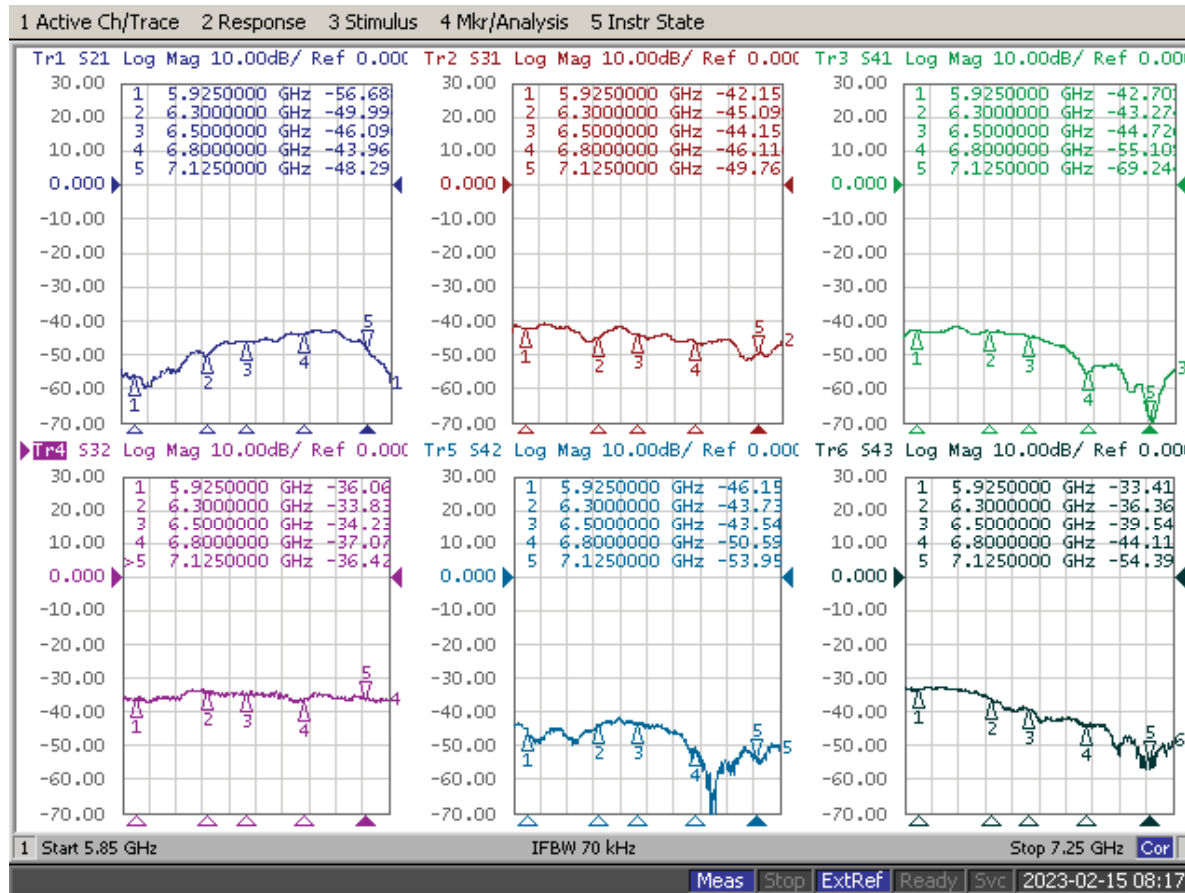
Return Loss of the 6GHz Antennas



Port 1= 6G1	Port 2= 6G2
Port 3= 6G3	Port 4= 6G4



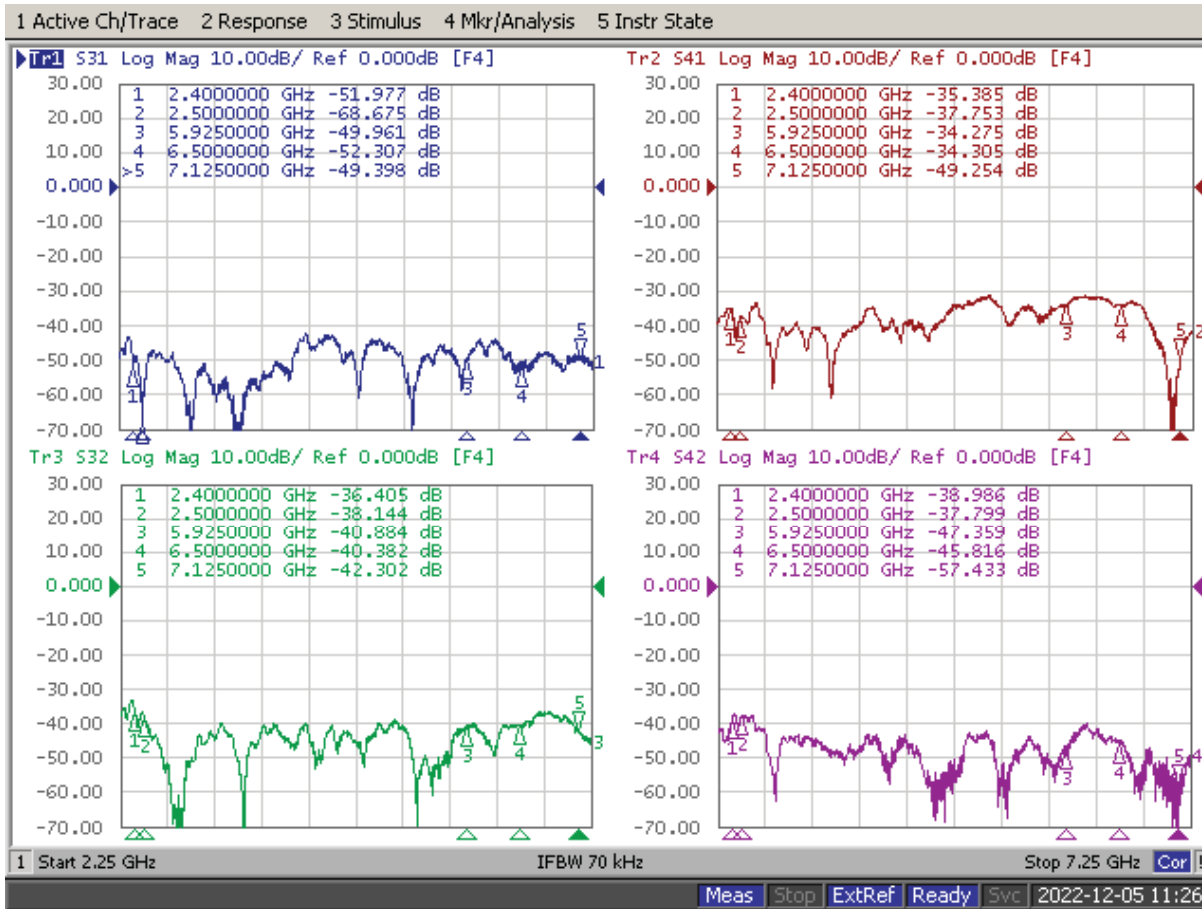
Isolation of the 6GHz Antennas



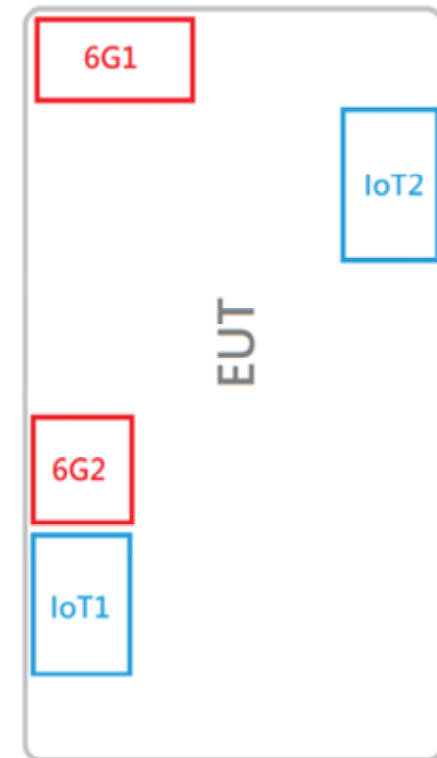
Port 1= 6G1	Port 2= 6G2
Port 3= 6G3	Port 4= 6G4



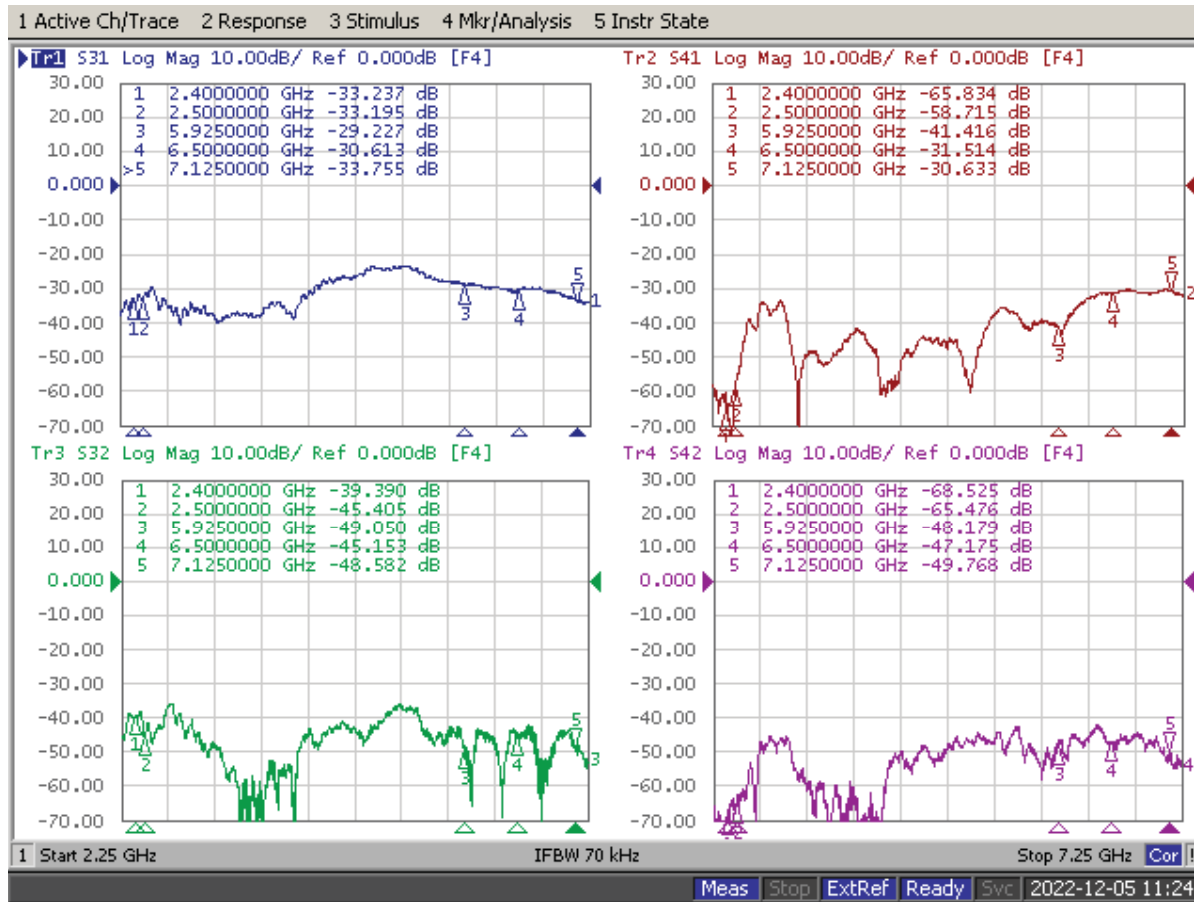
Isolation between IoTs and 6GHz Antennas



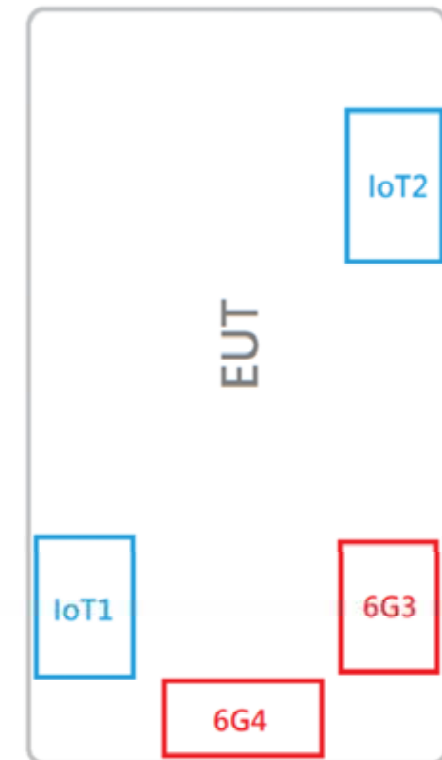
Port 1= IoT1	Port 2= IoT2
Port 3= 6G1	Port 4= 6G2



Isolation between IoTs and 6GHz Isolation



Port 1= IoT1	Port 2= IoT2
Port 3= 6G3	Port 4= 6G4



Antenna Peak Gain and Efficiency

IoT1	Freq (MHz)	Peak Gain (dBi)	Directivity (dBi)	Efficiency
	2400	2.983	5.171	60.43 %
	2450	3.355	5.295	63.97 %
	2500	3.273	5.402	61.25 %
	Average			61.88 %

IoT2	Freq (MHz)	Peak Gain (dBi)	Directivity (dBi)	Efficiency
	2400	4.420	5.941	70.45 %
	2450	4.950	6.188	75.20 %
	2500	4.545	5.901	73.18 %
	Average			72.94 %

6G1	Freq (MHz)	Peak Gain (dBi)	Directivity (dB)	Efficiency
	5925	4.365	6.238	64.97 %
	6300	5.555	7.293	67.03 %
	6500	5.539	7.323	66.31 %
	6800	5.259	7.199	63.97 %
	7125	4.785	6.730	63.90 %
Average			65.24 %	

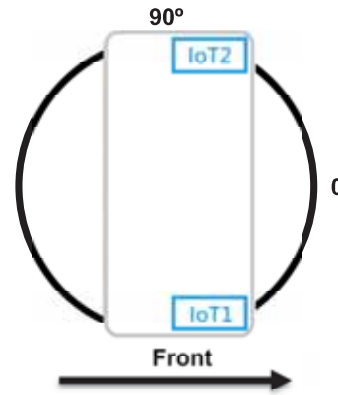
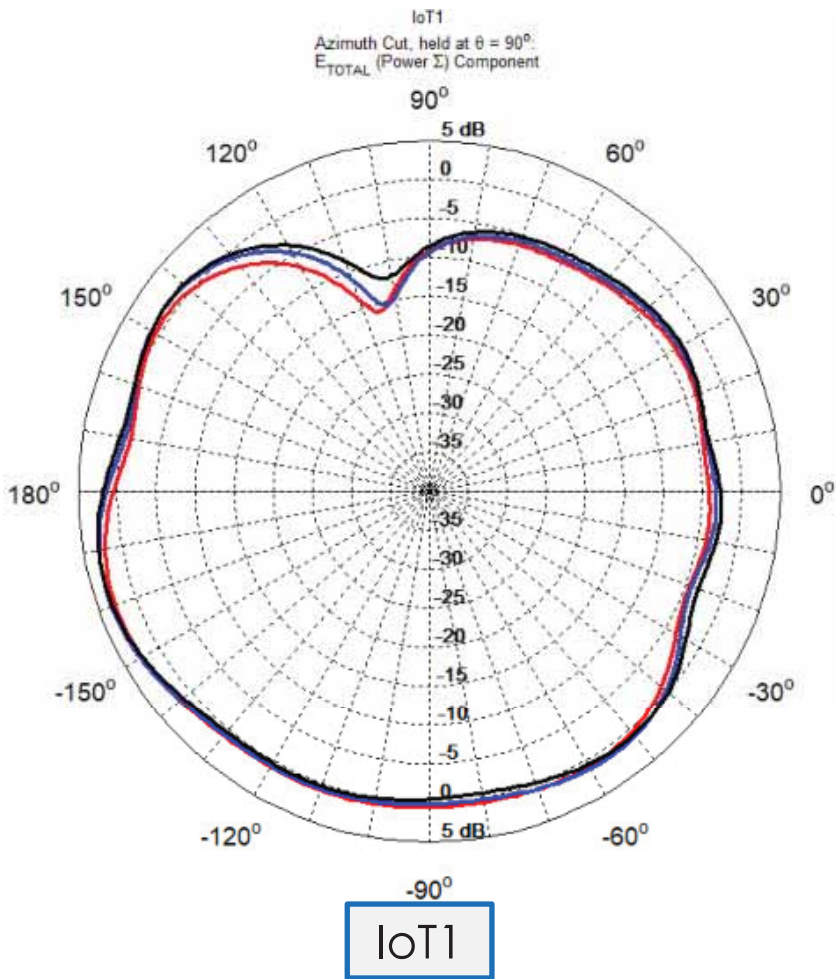
6G2	Freq (MHz)	Peak Gain (dBi)	Directivity (dB)	Efficiency
	5925	3.933	5.245	73.94 %
	6300	4.931	6.392	71.44 %
	6500	4.494	6.027	70.25 %
	6800	3.604	5.367	66.63 %
	7125	4.123	5.932	65.94 %
Average			69.64 %	

6G3	Freq (MHz)	Peak Gain (dBi)	Directivity (dB)	Efficiency
	5925	5.166	6.309	76.85 %
	6300	5.382	6.616	75.26 %
	6500	5.247	6.696	71.62 %
	6800	4.903	6.663	66.68 %
	7125	4.711	6.289	69.54 %
Average			71.99 %	

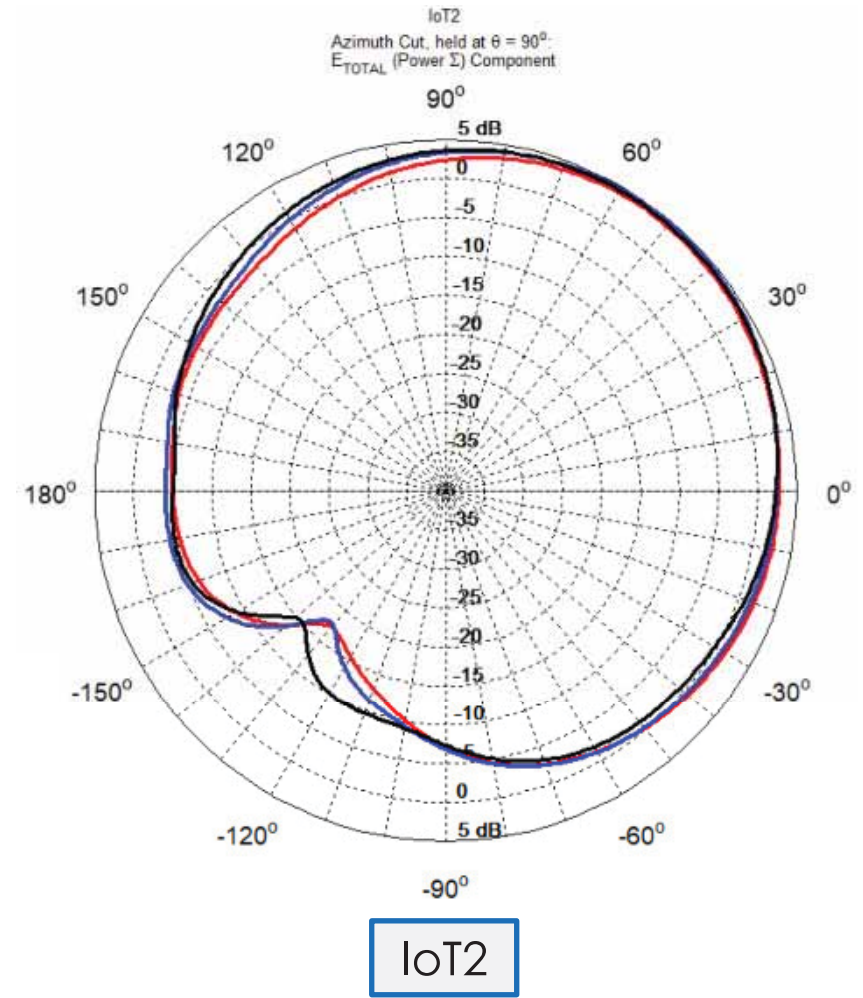
6G4	Freq (MHz)	Peak Gain (dBi)	Directivity (dB)	Efficiency
	5925	2.728	4.495	66.57 %
	6300	3.534	5.470	64.03 %
	6500	3.451	5.277	65.68 %
	6800	4.063	5.933	65.01 %
	7125	4.325	6.187	65.13 %
Average			65.28 %	

Azimuth Cut - Power Sum

IoT Antennas

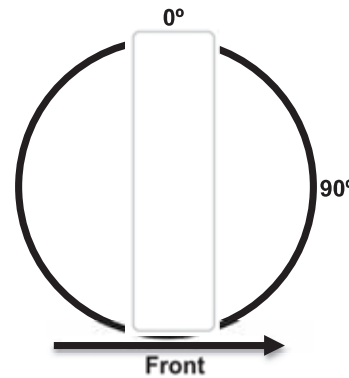
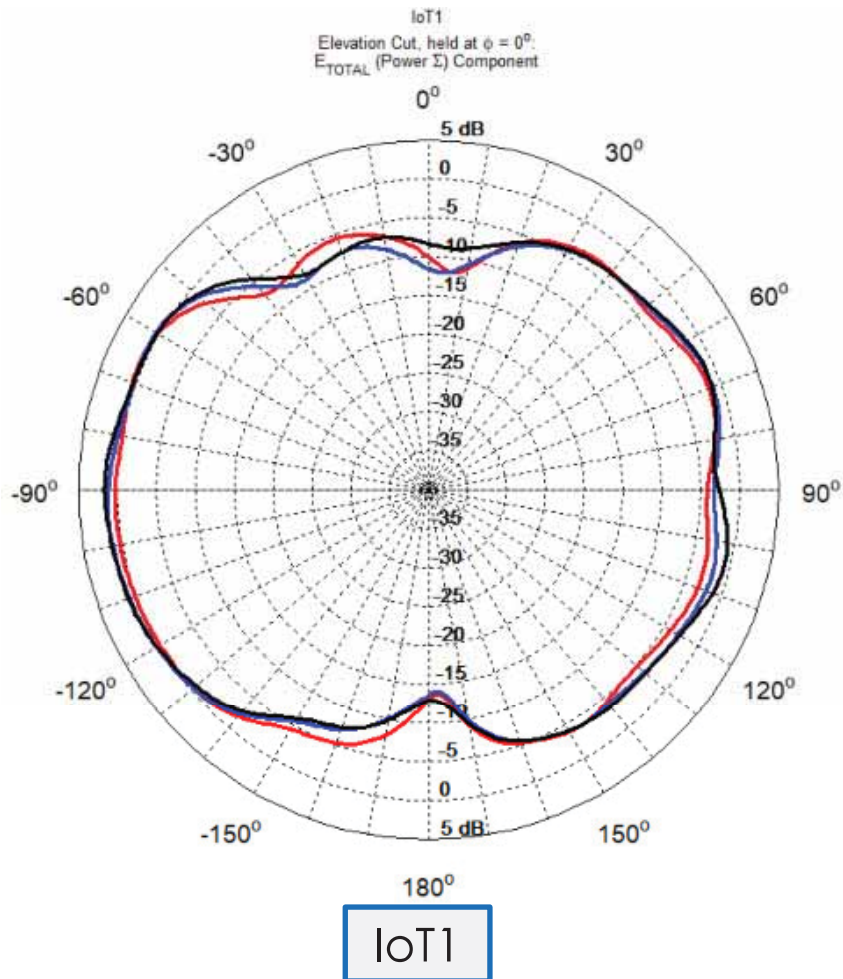


- 2400 MHz
- 2450 MHz
- 2500 MHz

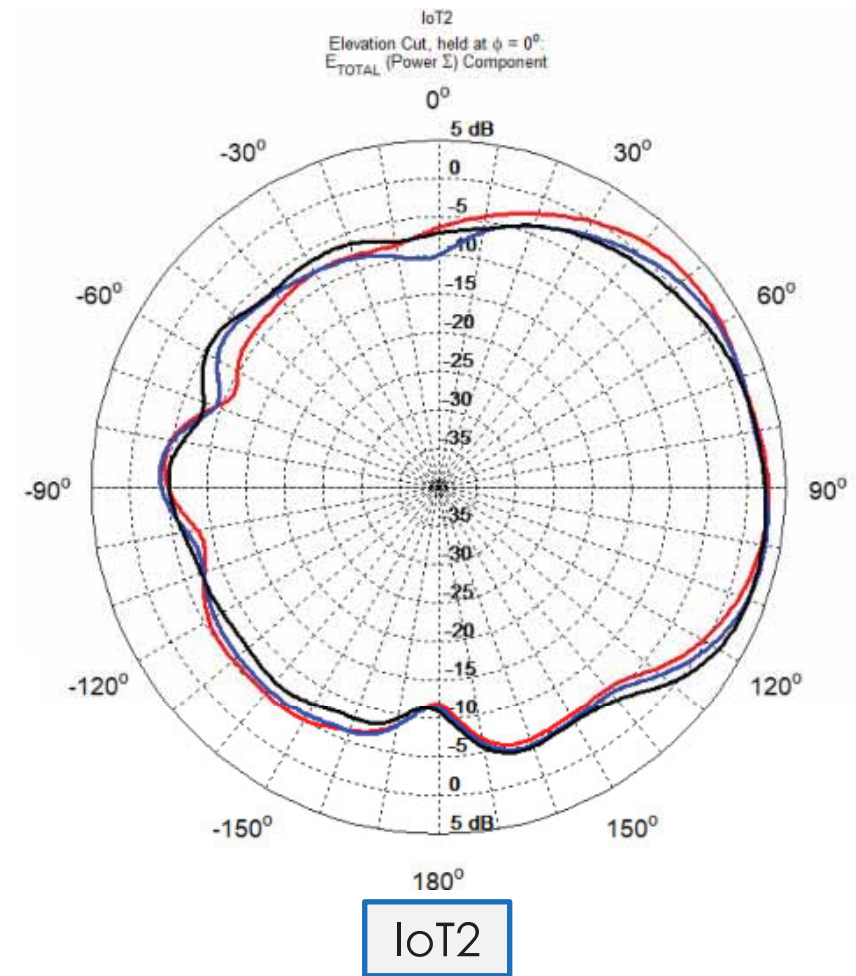


Elevation (Front to Back) Cut - Power Sum

IoT Antennas

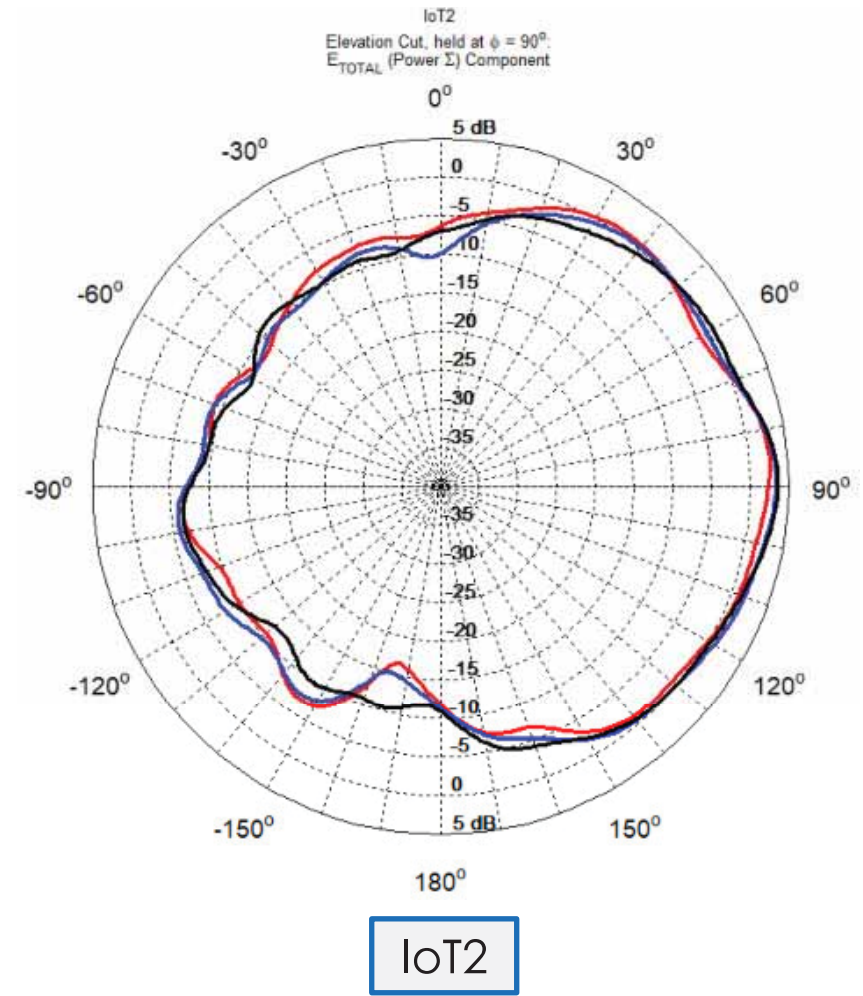
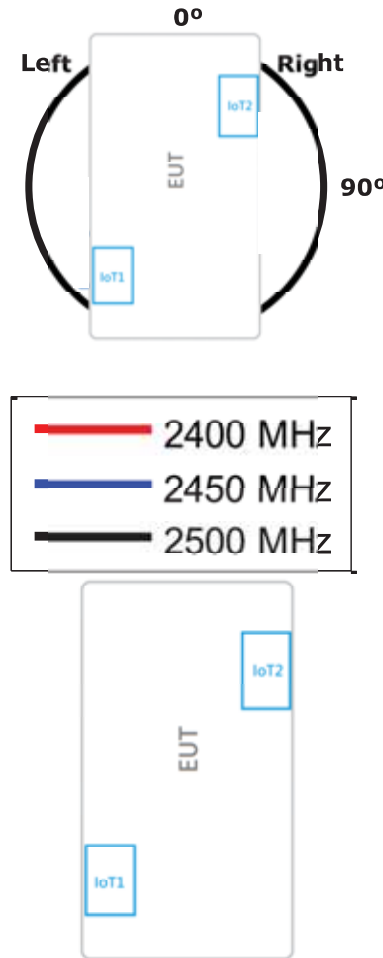
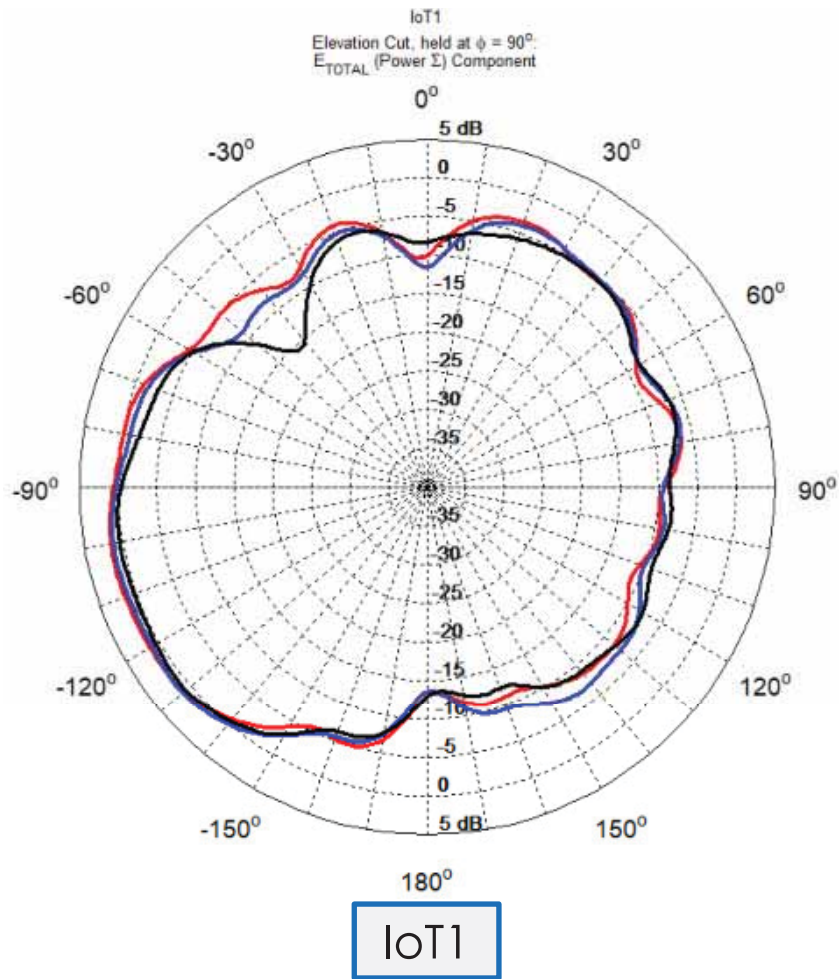


- 2400 MHz
- 2450 MHz
- 2500 MHz



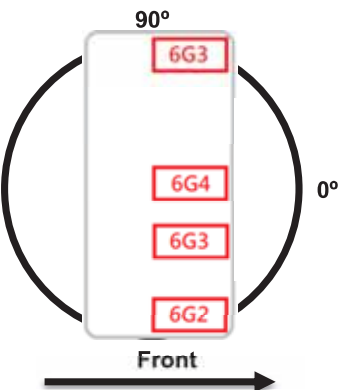
Elevation (Side to Side) Cut - Power Sum

IoT Antennas



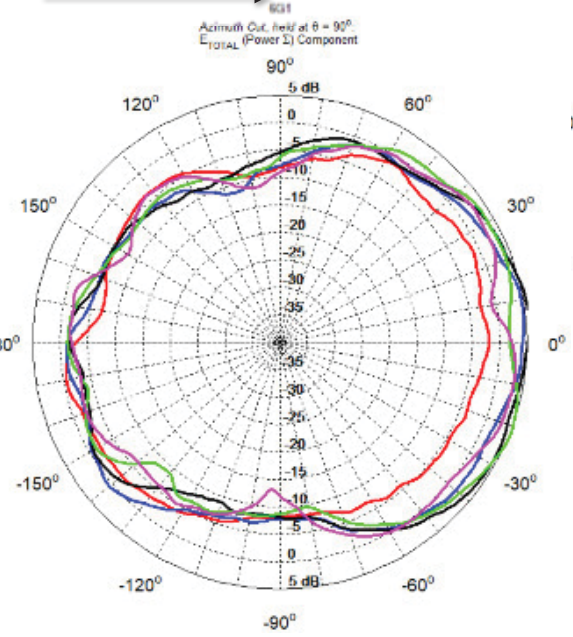
Azimuth Cut - Power Sum

6 GHz Antennas

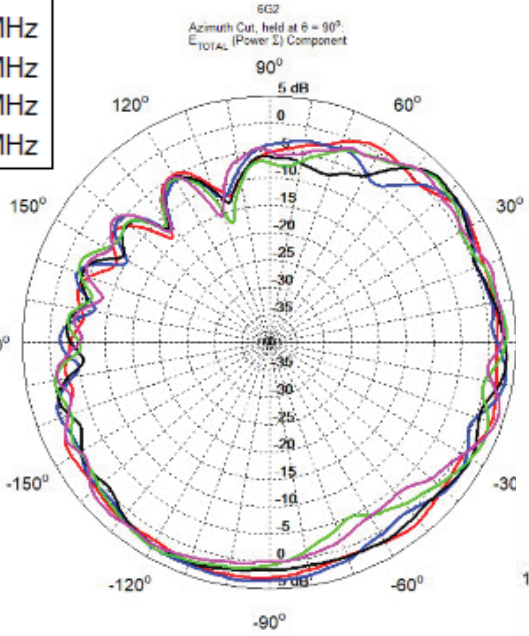


- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz

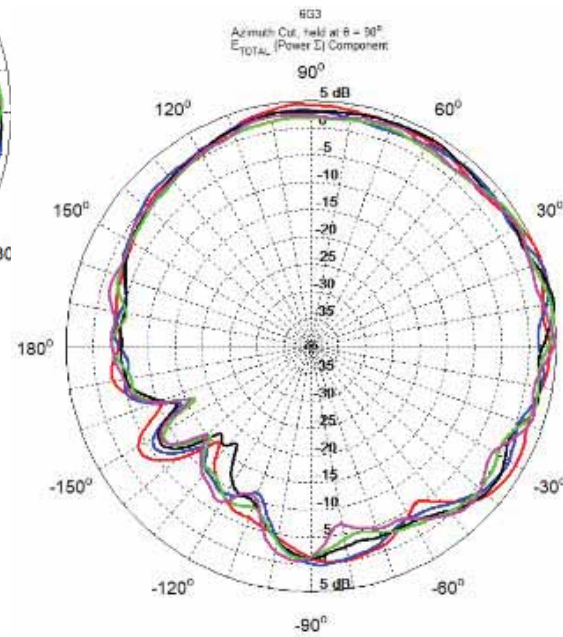
- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz



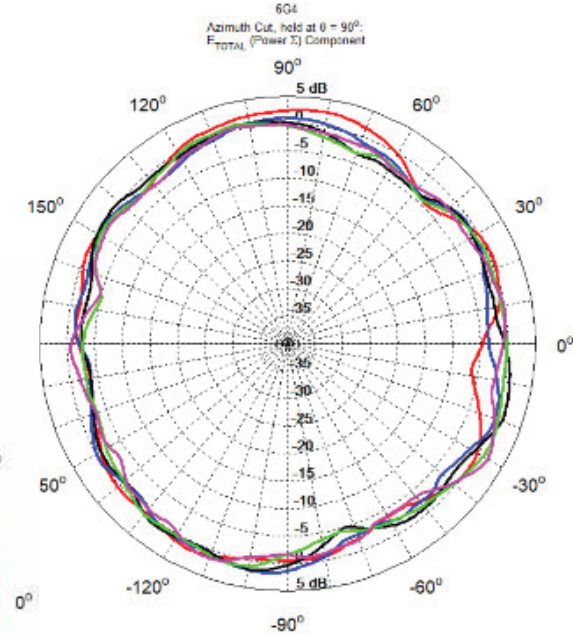
6G1



6G2



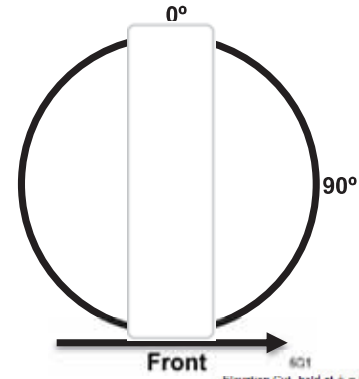
6G3



6G4

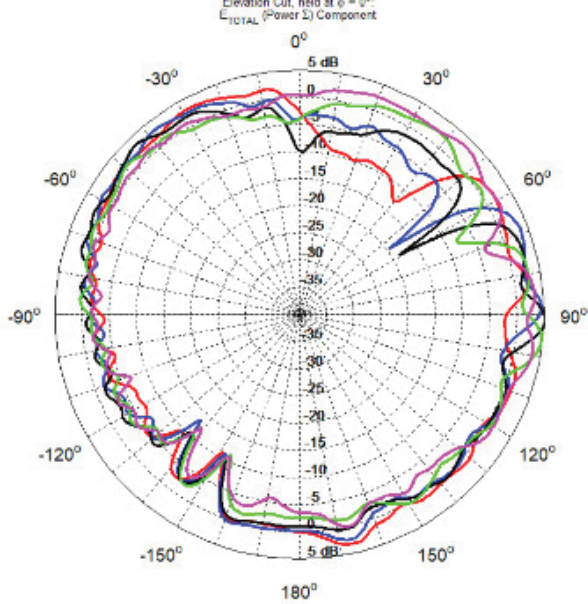
Elevation (Front to Back) Cut - Power Sum

6 GHz Antennas

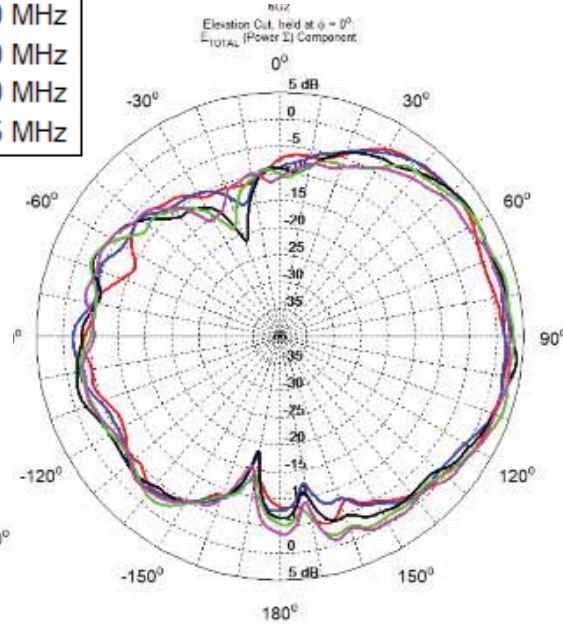


- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz

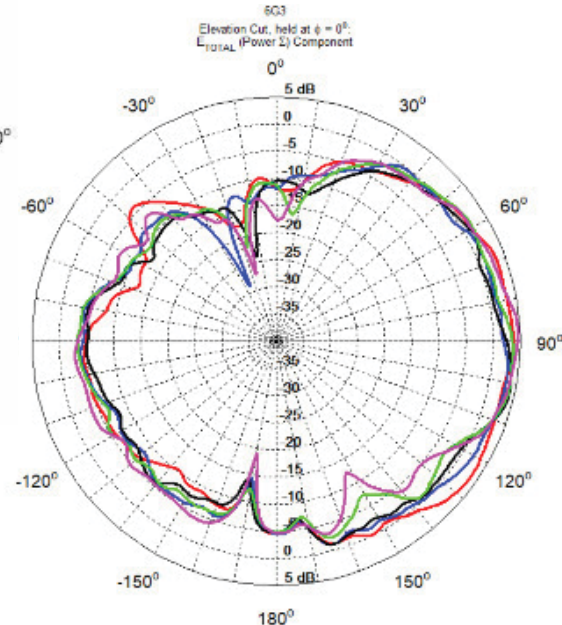
- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz



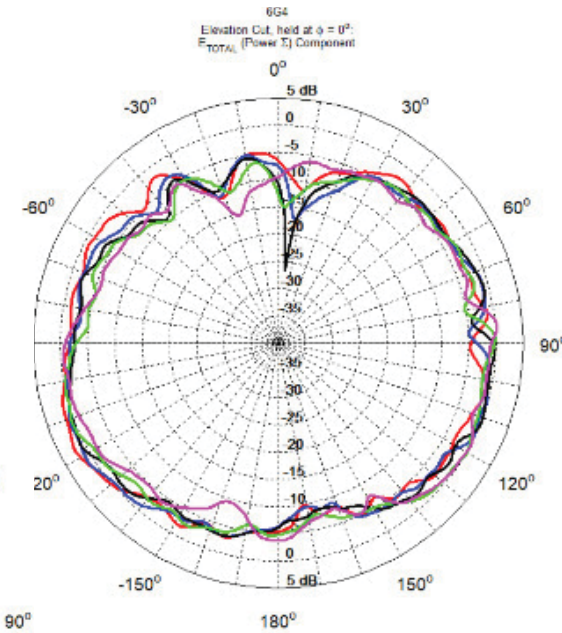
6G1



6G2



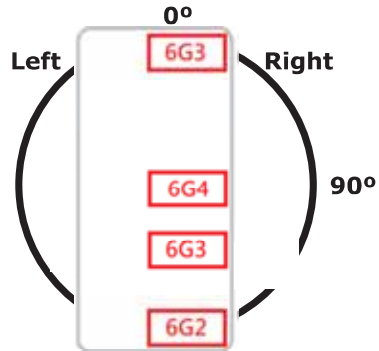
6G3



6G4

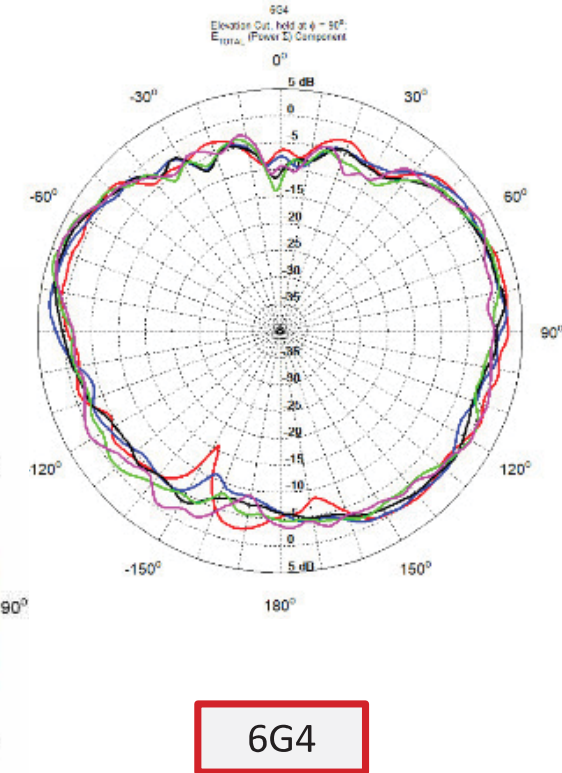
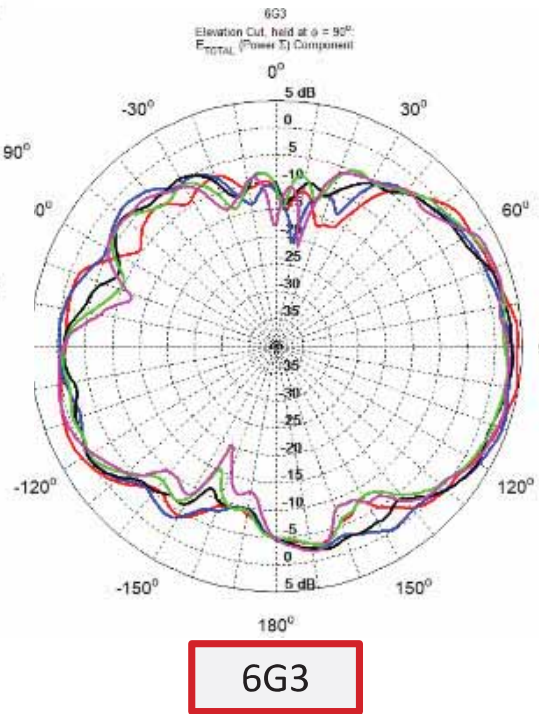
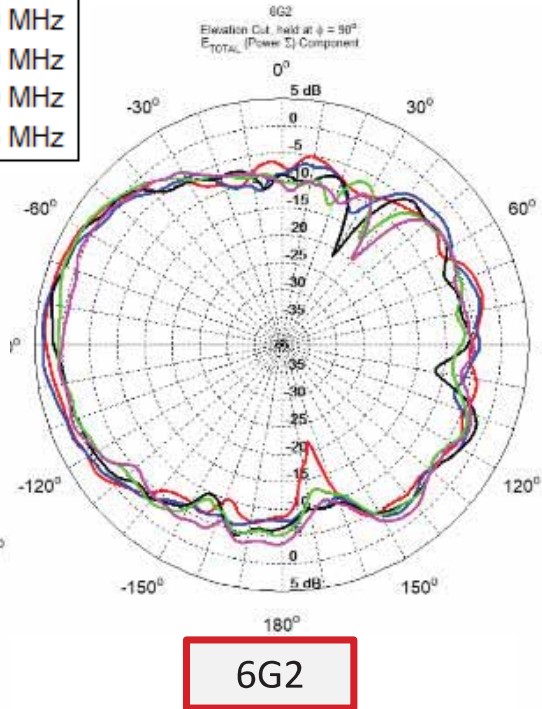
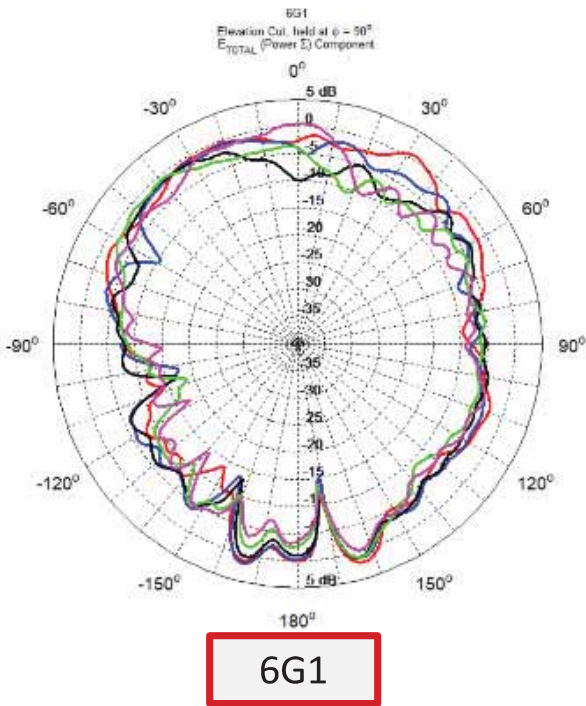
Elevation (Side to Side) Cut - Power Sum

6 GHz Antennas

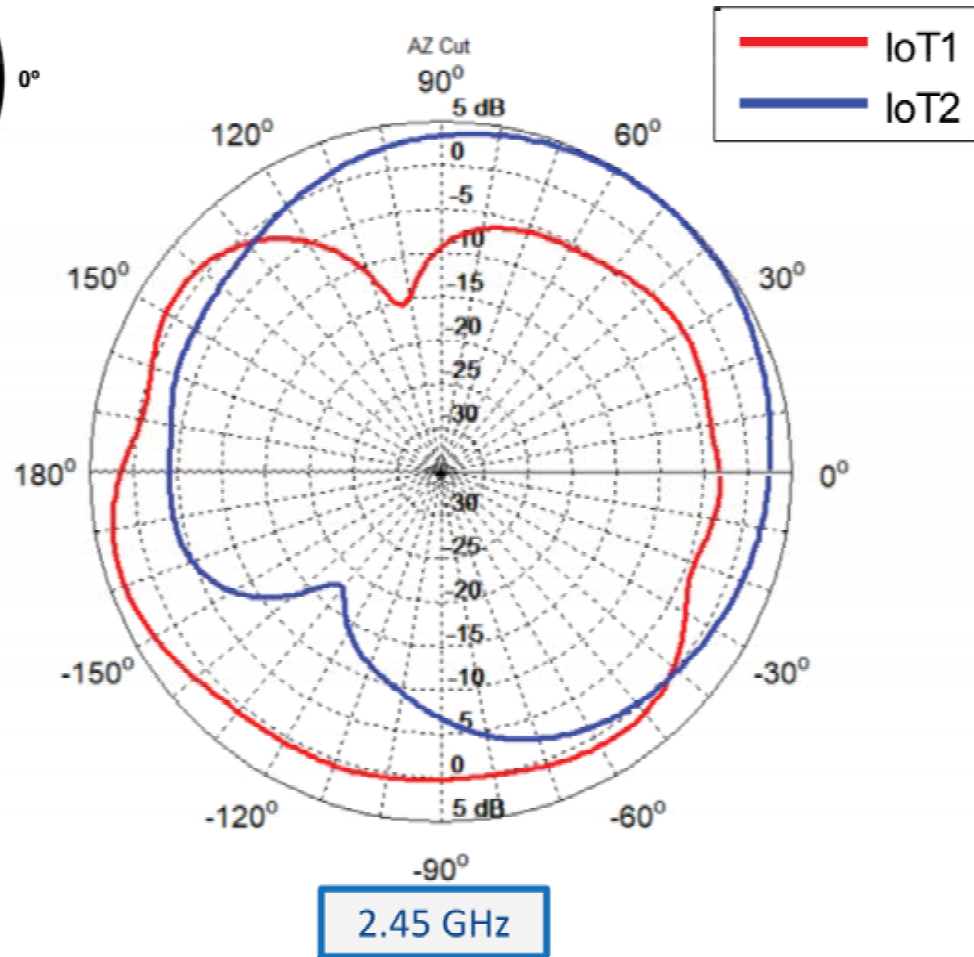
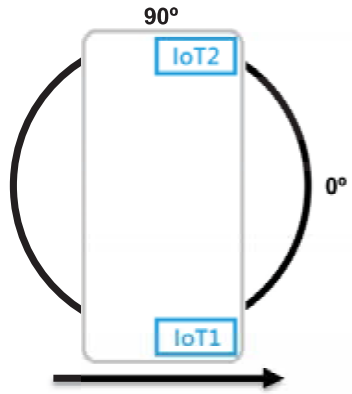


- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz

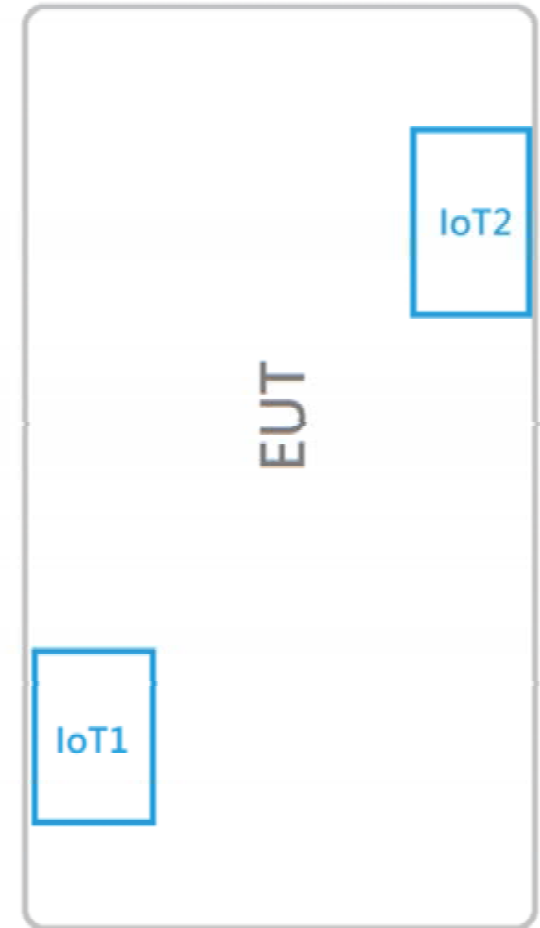
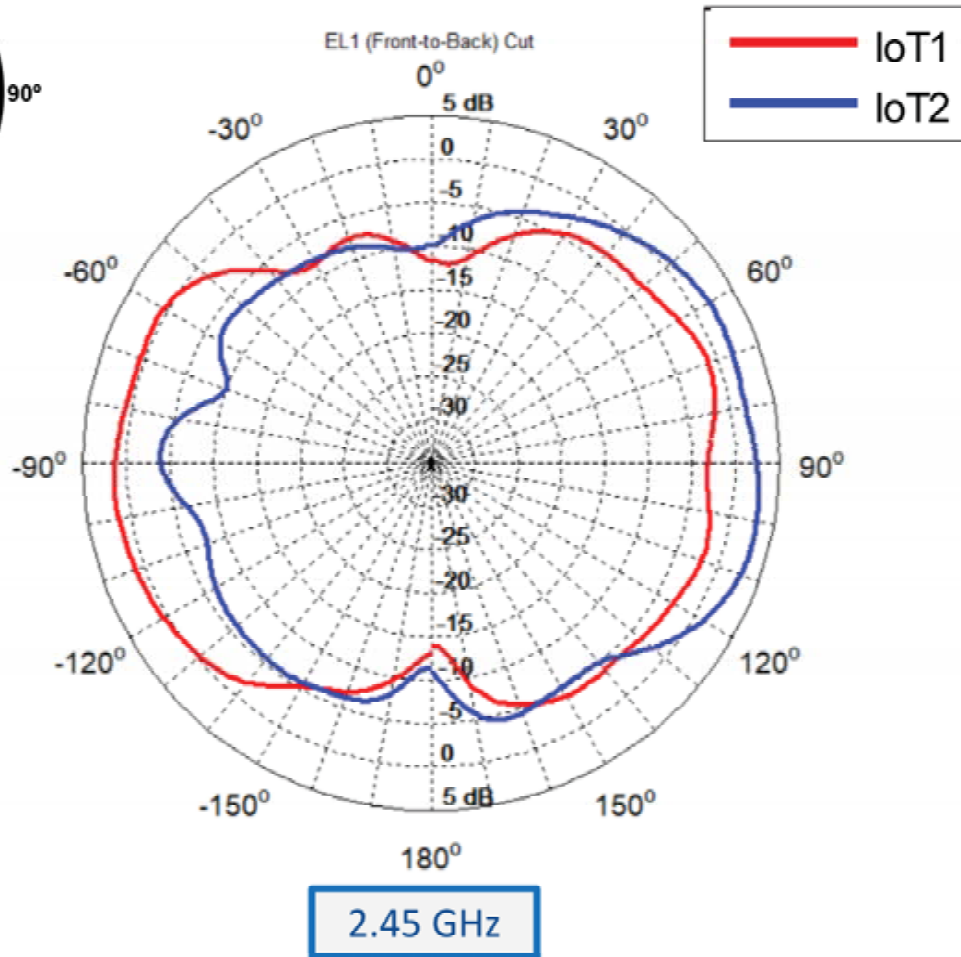
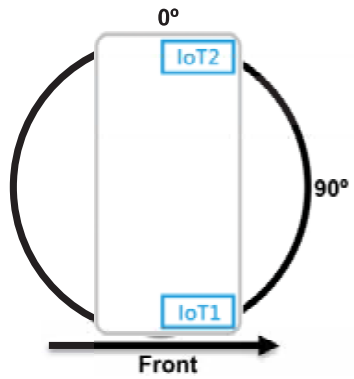
- 5925 MHz
- 6300 MHz
- 6500 MHz
- 6800 MHz
- 7125 MHz



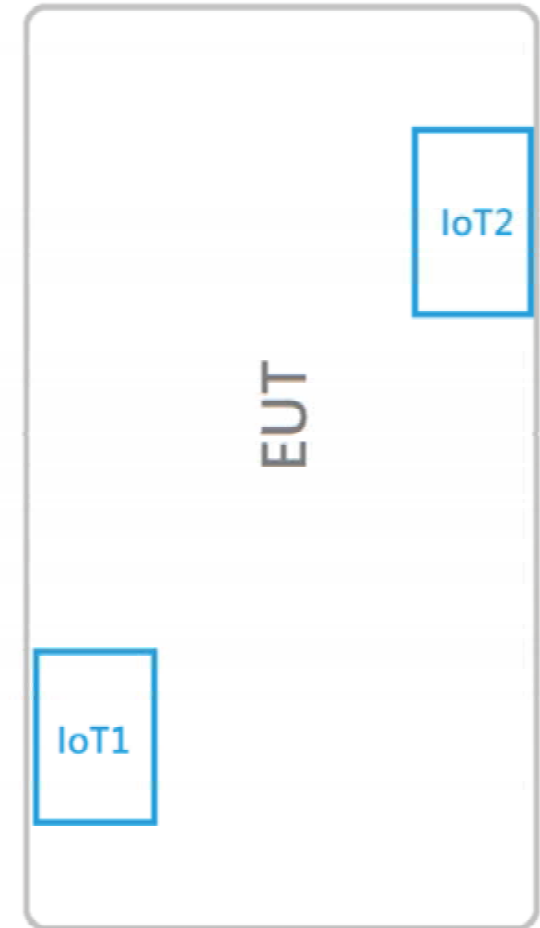
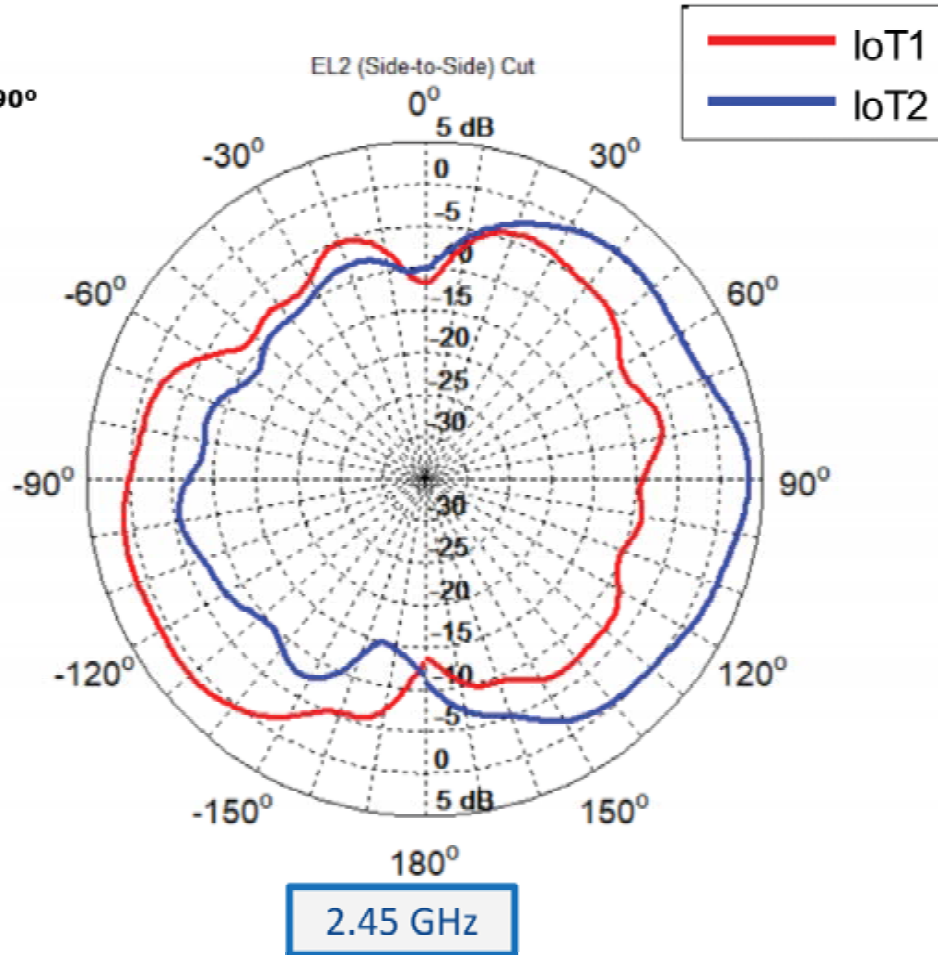
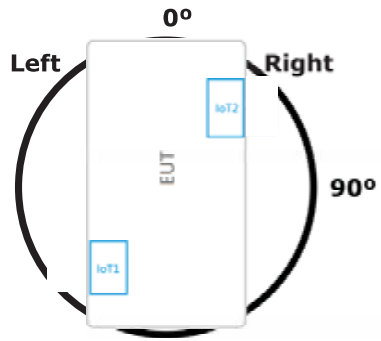
Azimuth Cut - Power Sum System Coverage – IoT Antennas



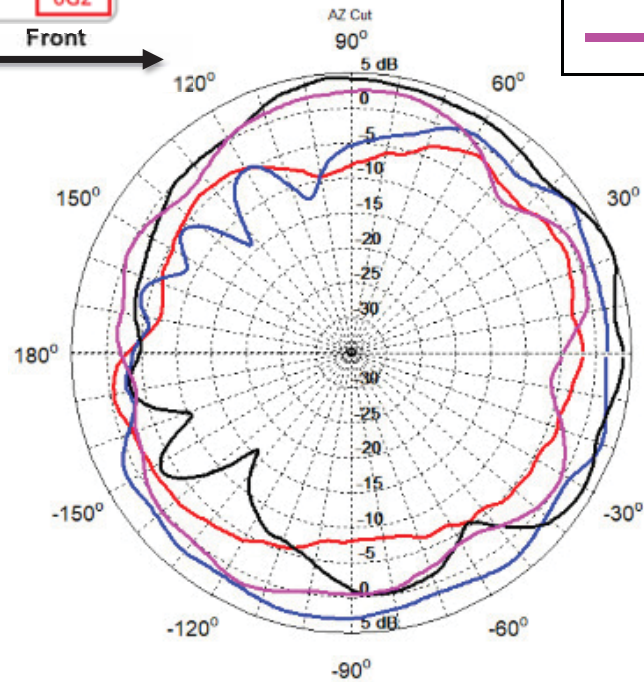
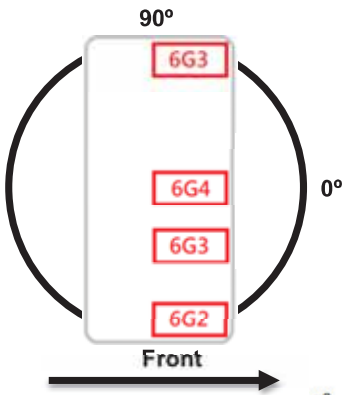
Elevation (Front to Back) Cut - Power Sum System Coverage – IoT Antennas



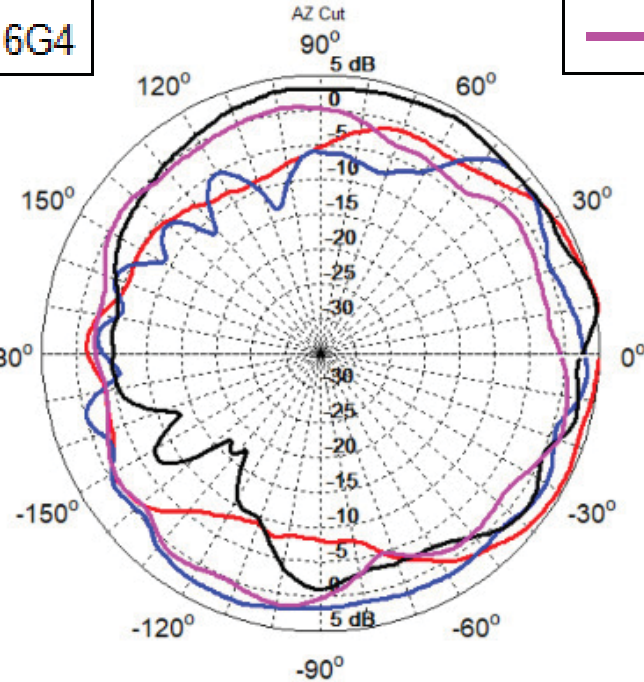
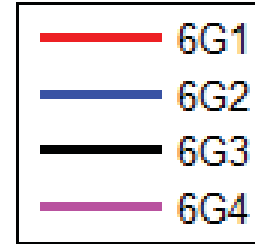
Elevation (Side to Side) Cut - Power Sum System Coverage – IoT Antennas



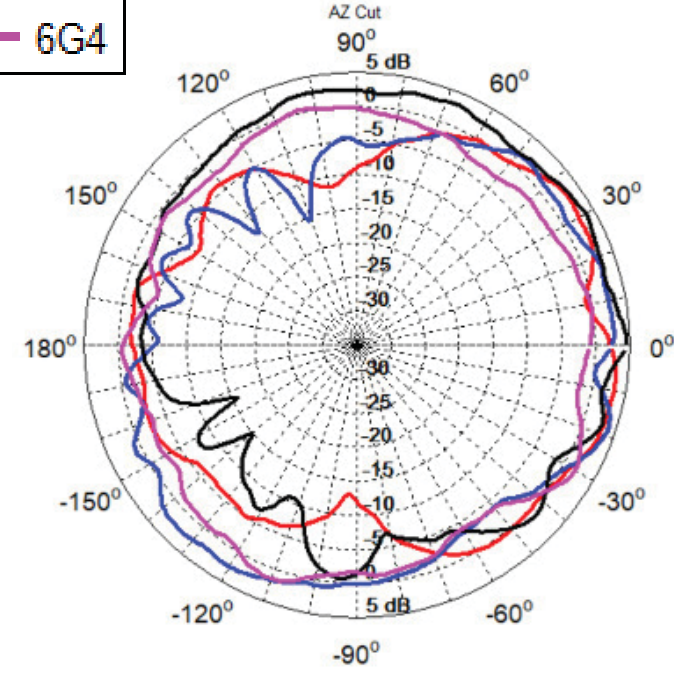
Azimuth Cut - Power Sum System Coverage – 6GHz Antennas



5925 MHz

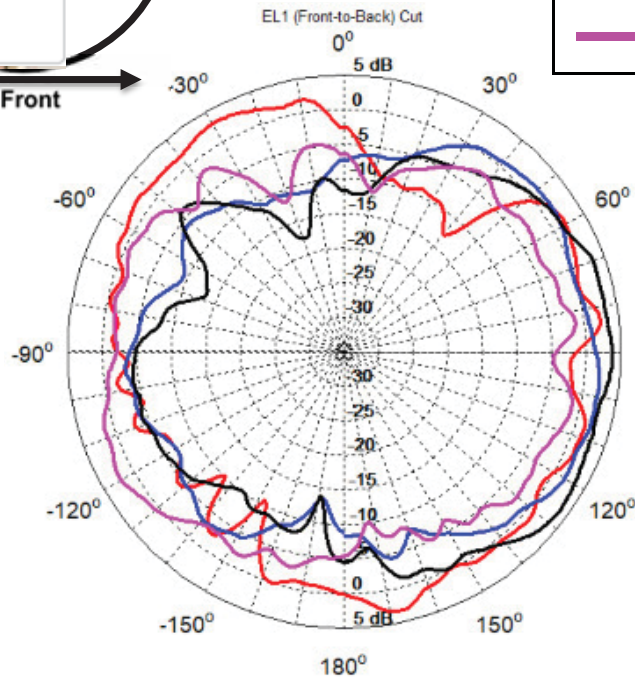
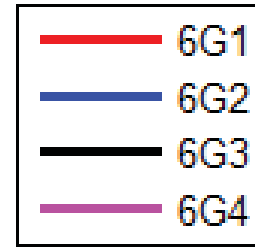
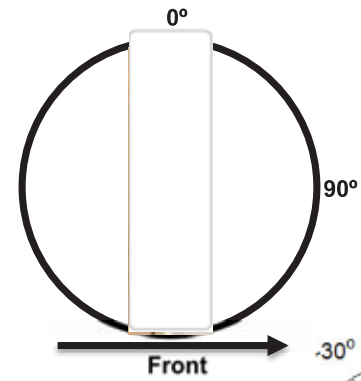


6500 MHz

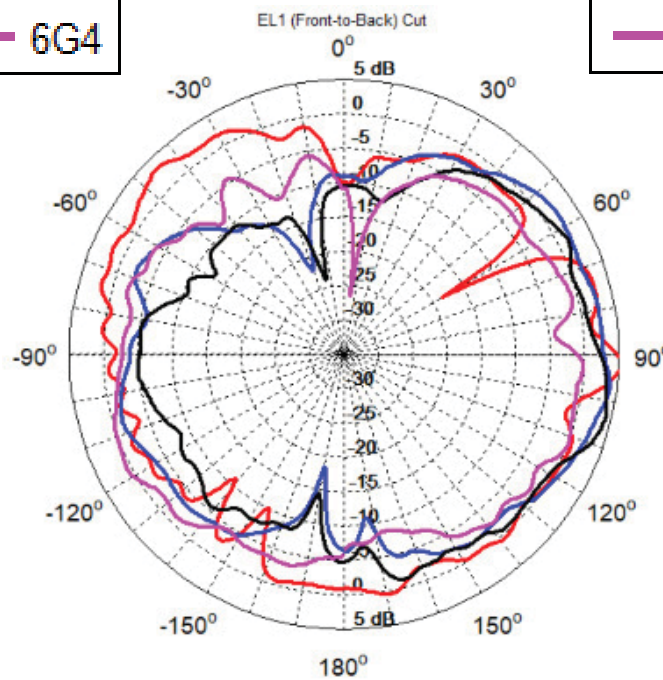


7125 MHz

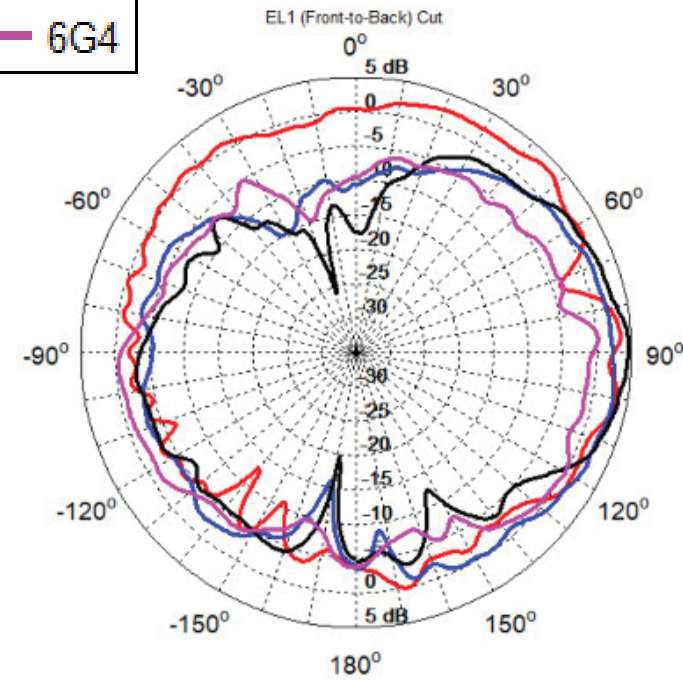
Elevation (Front to Back) Cut - Power Sum System Coverage – 6GHz Antennas



5925 MHz

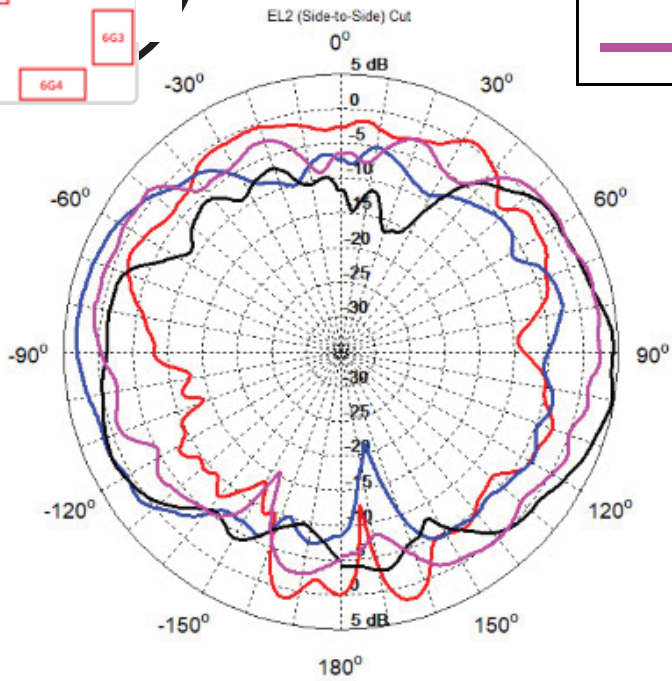
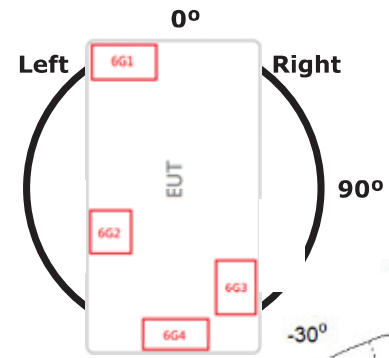


6500 MHz

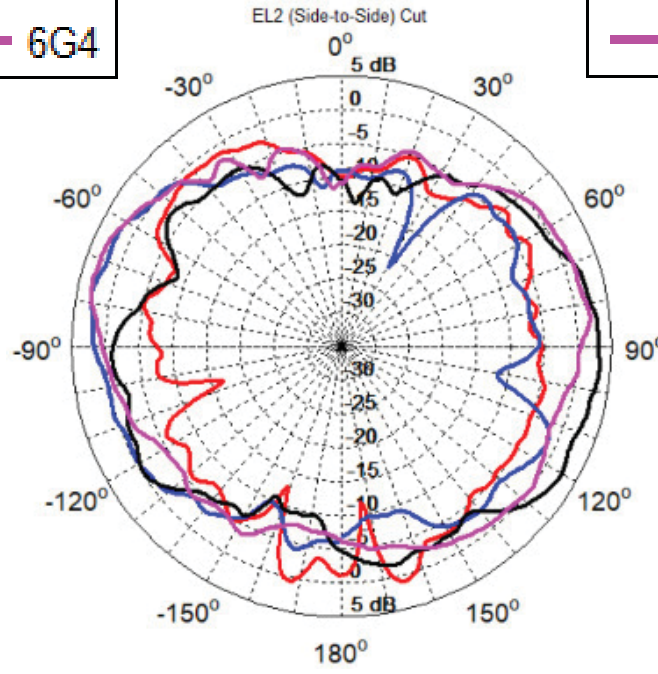
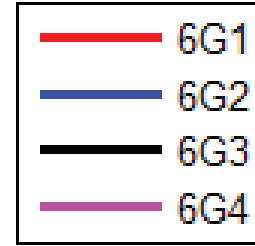


7125 MHz

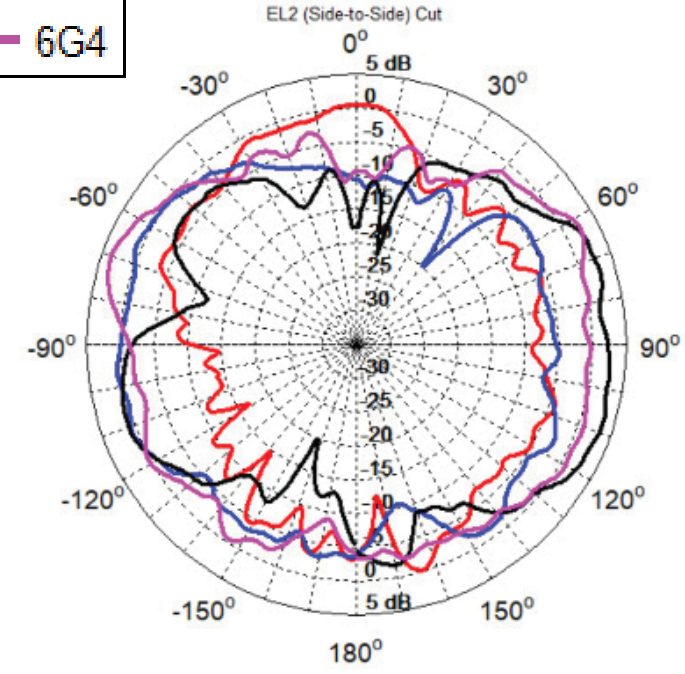
Elevation (Side to Side) Cut - Power Sum System Coverage – 6GHz Antennas



5925 MHz



6500 MHz



7125 MHz

Our Contact

WWW.GALTRONICS.COM

Social Media



Contact

- ✉ info@galtronics.com
- ☎ + 1-480-496-5100
- 📍 8930 S. Beck Avenue, Suite # 103
Tempe, Arizona 85284-2891, USA

USA Design Center

Galtronics USA Inc.
8930 South Beck Avenue
Suite #103
Tempe, AZ 85284 USA
Tel: +1-480-496-5100

Ottawa, Canada Design Center

Galtronics Canada Inc.
200 Terence Mathews Crescent,
Unit A
Kanata, ON K2M 2C6 Canada

Suzhou, China Design Center

Galtronics Electronics (Wuxi) Co.
A05 Jinfeng Tech. Venture Park
Jinnan Rd., Jinfeng Town, Zhangjiagang
City, Jiangsu, China

China Factory

Galtronics Electronics (Wuxi) Co.
No. 1, Xishi Road,
Wuxi New District
Jiangsu Province 214028, China
Tel: +86-510-8866-5500

Corporate Headquarters

Baylin Technologies Inc.,
60 Columbia Way
Suite 205
Markham, ON L3R 0C9 Canada

Korea Design Center

Galtronics Korea Co.
#B214, Innoplex Bldg.,306, Sinwon-ro,
Yeongtong-gu, Suwon-si, Gyeonggi-do,
16675 Korea
Tel: + 82-32-227-0771

Vietnam Factory

Galtronics Vietnam
Lot G1 , G2, Que Vo Industrial
Park, Phuong Lieu commune,
Que Vo district, Bac Ninh
province, Vietnam