PulseLARSEN Antennas

TECHNICAL DATA SHEET

Description: 2.4/5GHz Dualband WiFi SMT Antenna

Series: Embedded Antenna

PART NUMBER: W3715

Features:

- Frequency: 2.4-2.5/4.9-6GHz
- Gain: 3.7/5.5dBi
- Size: 11 x 7 x 16 mm
- SMT compatible
- Packing: Tape&Reel
- RoHS compliant

Applications:

- WiFi, ISM 2.4/5GHz
- Bluetooth, Zigbee, BLE
- DSRC 5.925GHz
- IoT and M2M devices
- Portable Electronics
- Security, Transportation

All dimensions are in mm / inches

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RoHS COMPLIANT

For more information:

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Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

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ELECTRICAL SPECIFICATIONS

Frequency	2.4-2.5GHz, 4.9-6GHz
Nominal Impedance	50Ω
VSWR	2:1
Peak Gain (2.4-2.5GHz)	3.7dBi +/- 1 dB
Peak Gain (4.9-6GHz)	5.5dBi+/- 1 dB
Efficiency	74%
Power withstanding	5W
Radiation Pattern	Omni

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MECHANICAL SPECIFICATIONS

Material	SUS304	
Thickness	0.5	mm
Finish	Ni plating 1-3	um
Weight	0.56	g
Size(L X W X H)	11(0.43)X 7(0.28) X 16(0.63)	mm(inch)
Fixing system	SMT	

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40/+85	° C

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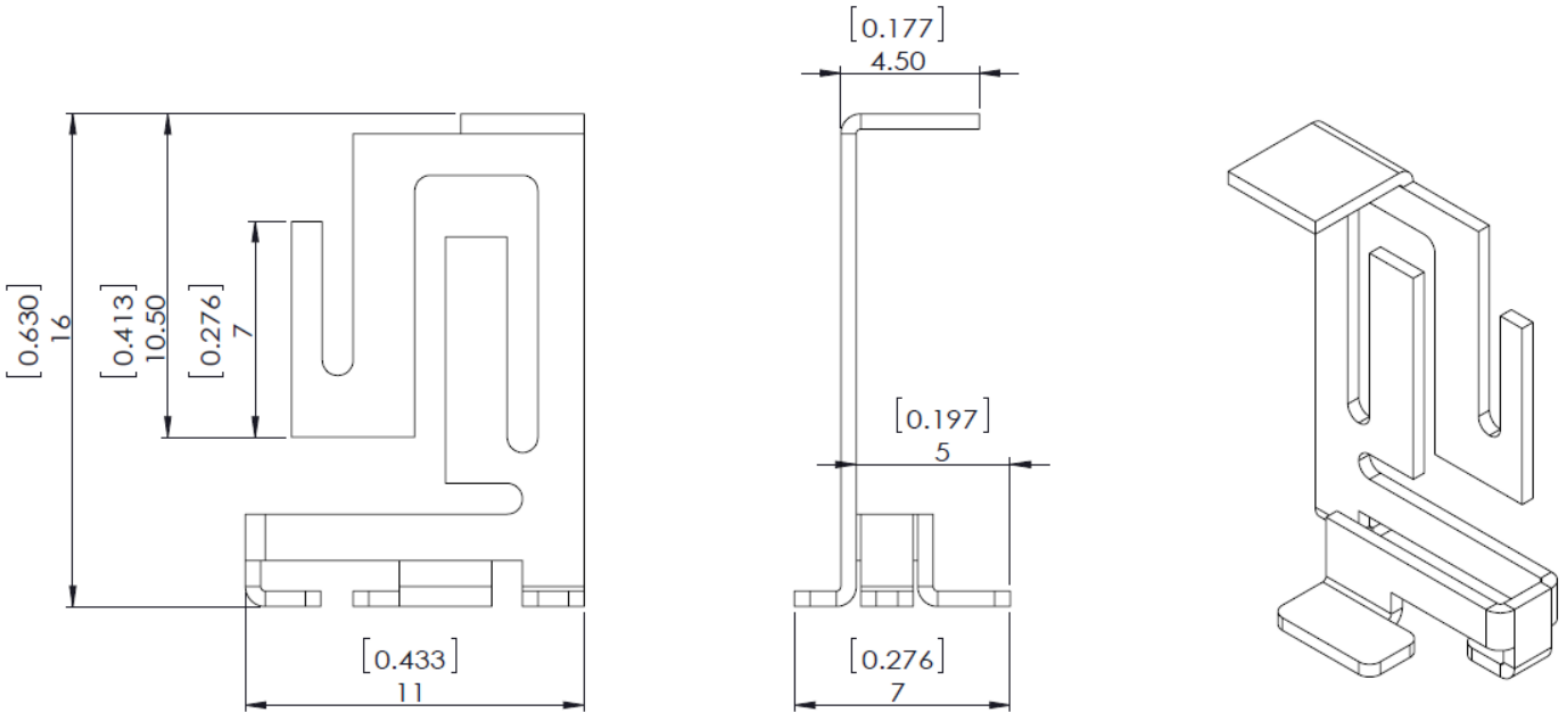
MECHANICAL DRAWING



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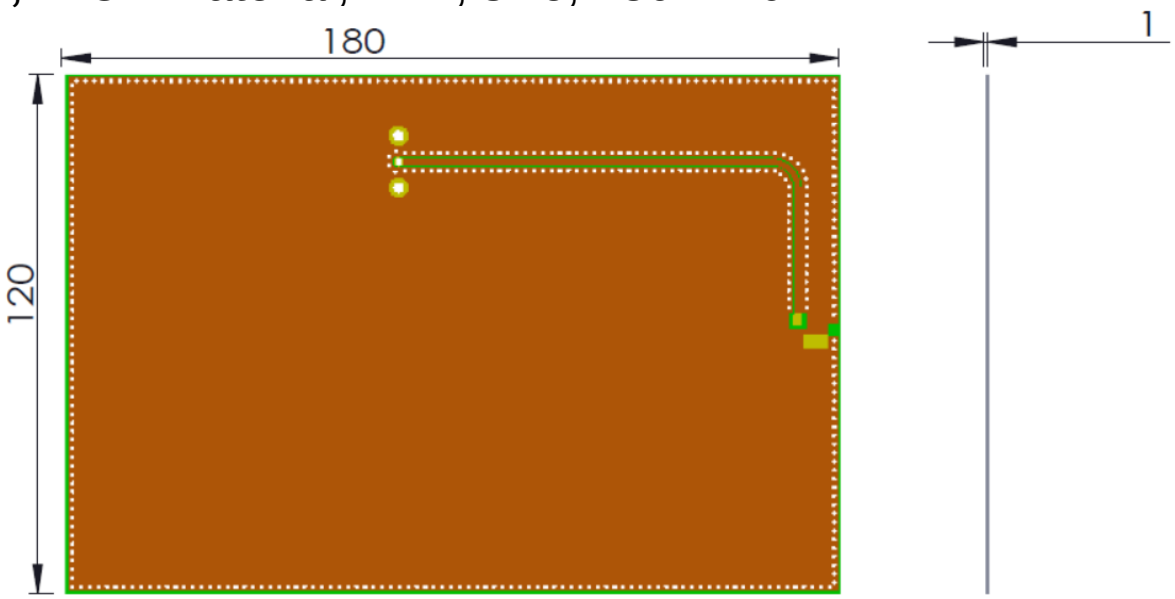
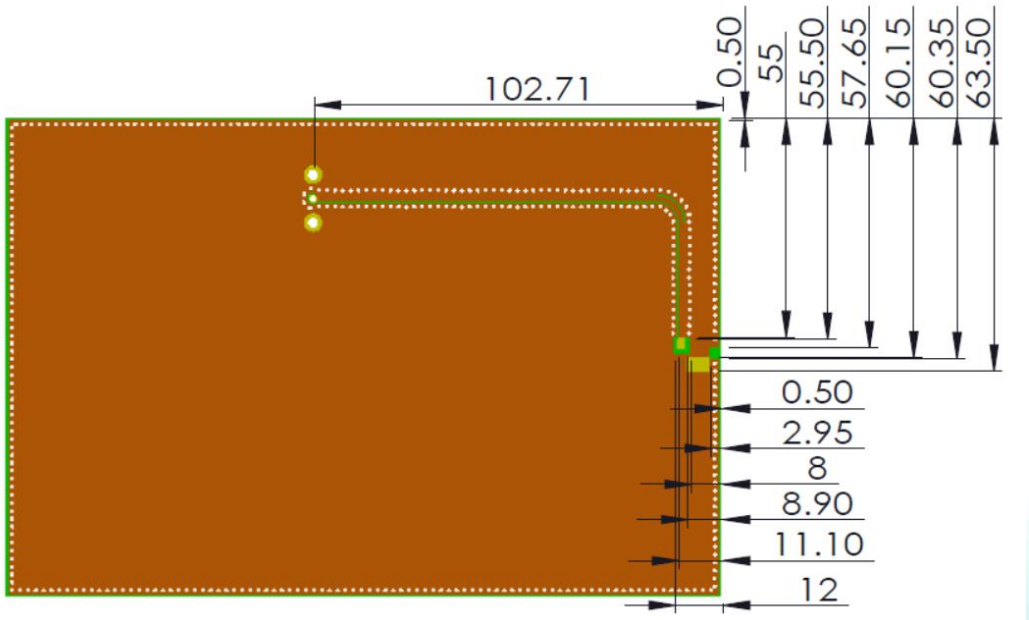
PCB LAYOUT:

1，PCB material, FR4, size, 180X120X1mm



2， Clearance area (Top)



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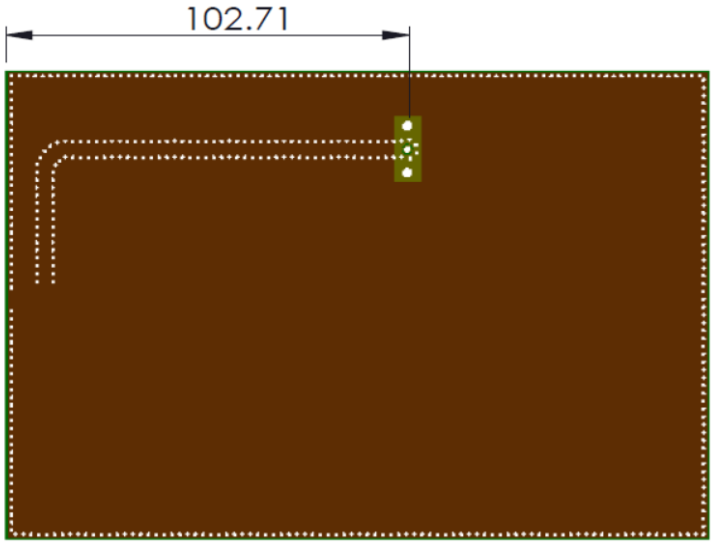
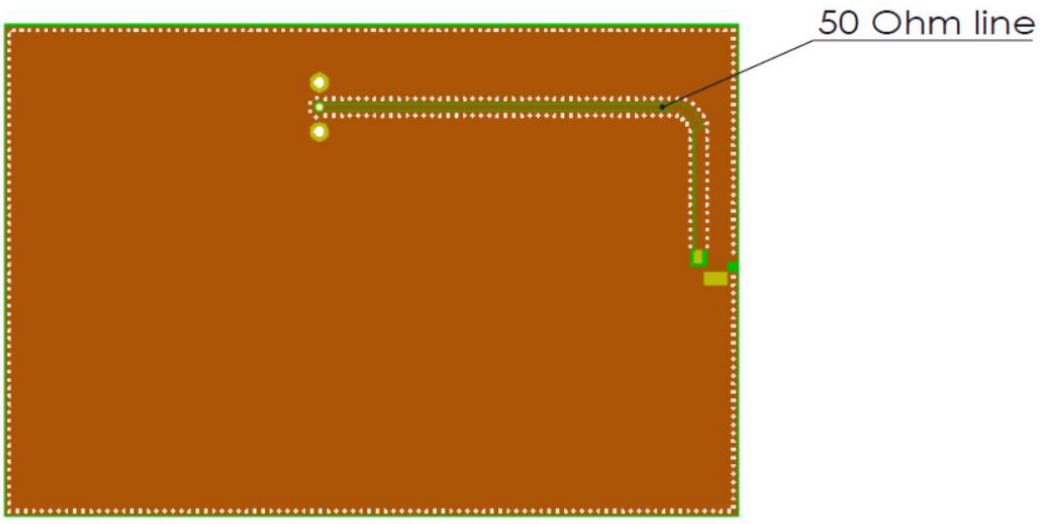
OTHER SPECIFICATIONS

3, Clearance area (Bottom)



4, PCB Features



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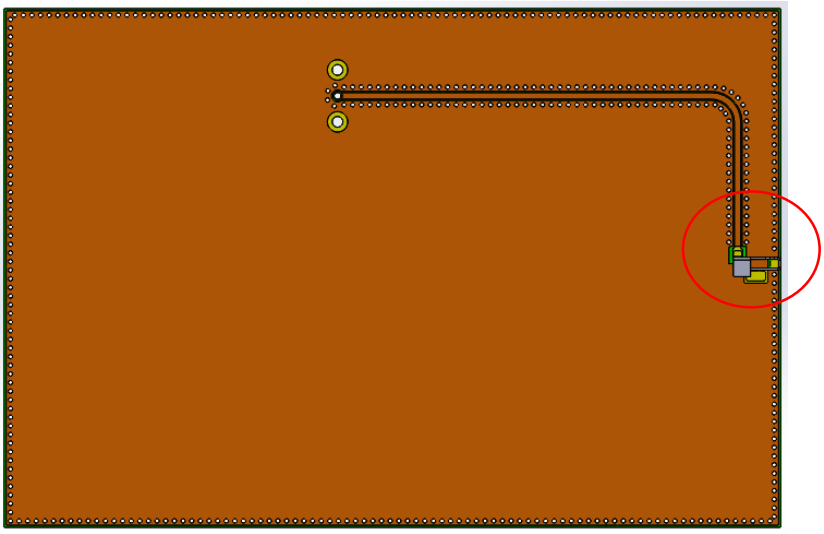
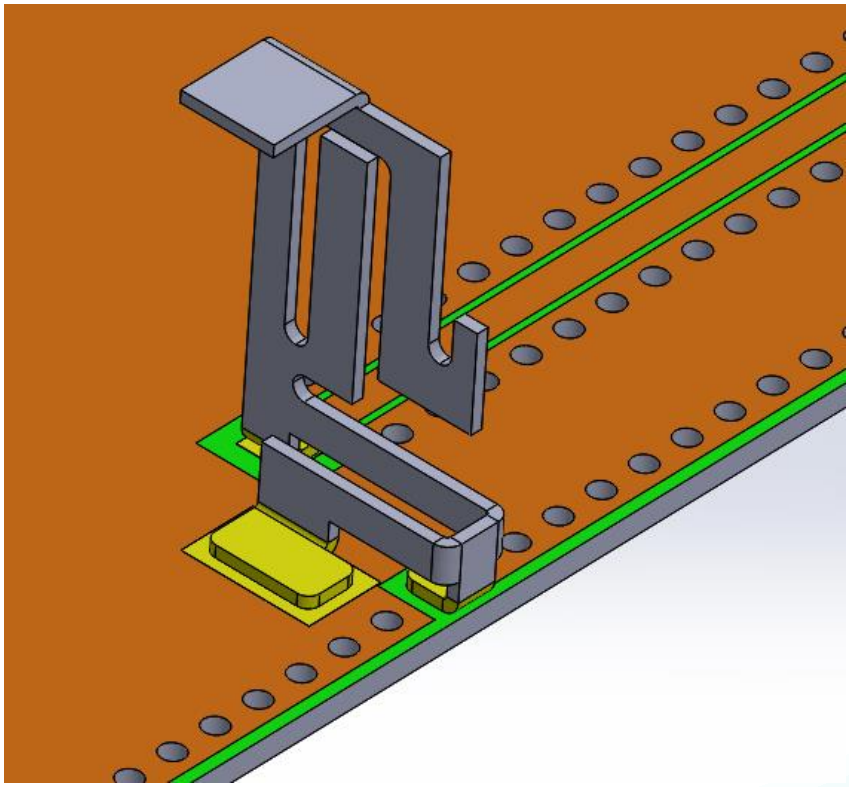
OTHER SPECIFICATIONS

3, Antenna on test PCB





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OTHER SPECIFICATIONS

Recommendation for reflow soldering process

Printing stencil thickness 0,15 - 0,25 mm is recommended for the solder paste. The maximum soldering temperature should not exceed 260°C. The temperature profile recommendations for reflow soldering process is presented in the Figures 1 and 2. The reflow profile presented in figure 1 describes minimum reflow temperatures. The reflow profile presented in figure 2 describes maximum reflow temperatures. located at the center of the coverage area.

	Method of heat transfer	Controlled hot air convection
1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 30 sec
5	Peak temperature in reflow	230 °C for 10 seconds
6	Temperature gradient in cooling	Max -5 °C/s

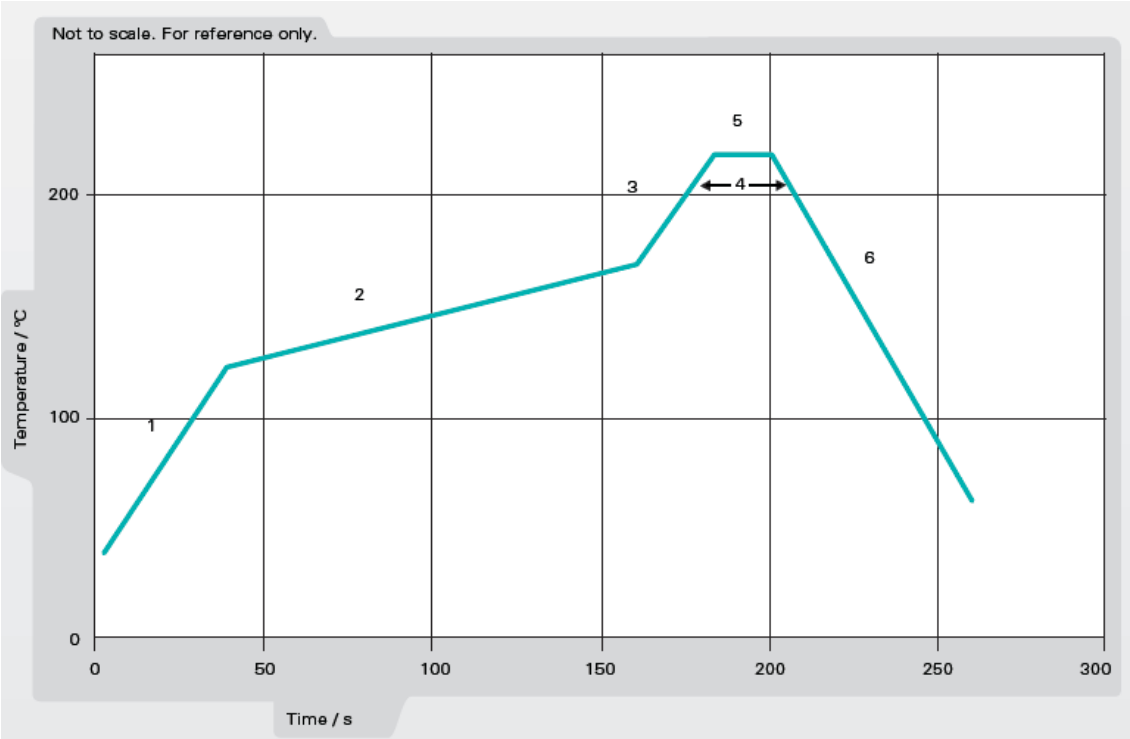

Figure 1. Minimum temperature profile recommendation for reflow soldering process

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1	Average temperature gradient in preheating	2.5 °C/s
2	Soak time	2-3 minutes
3	Max temperature gradient in reflow	3 °C/s
4	Time above 217 °C	Max 60 sec
5	Time above 230 °C	Max 50 sec
6	Time above 250 °C	Max 10 sec
7	Peak temperature in reflow	260 °C for 5 seconds
8	Temperature gradient in cooling	Max -5 °C/s

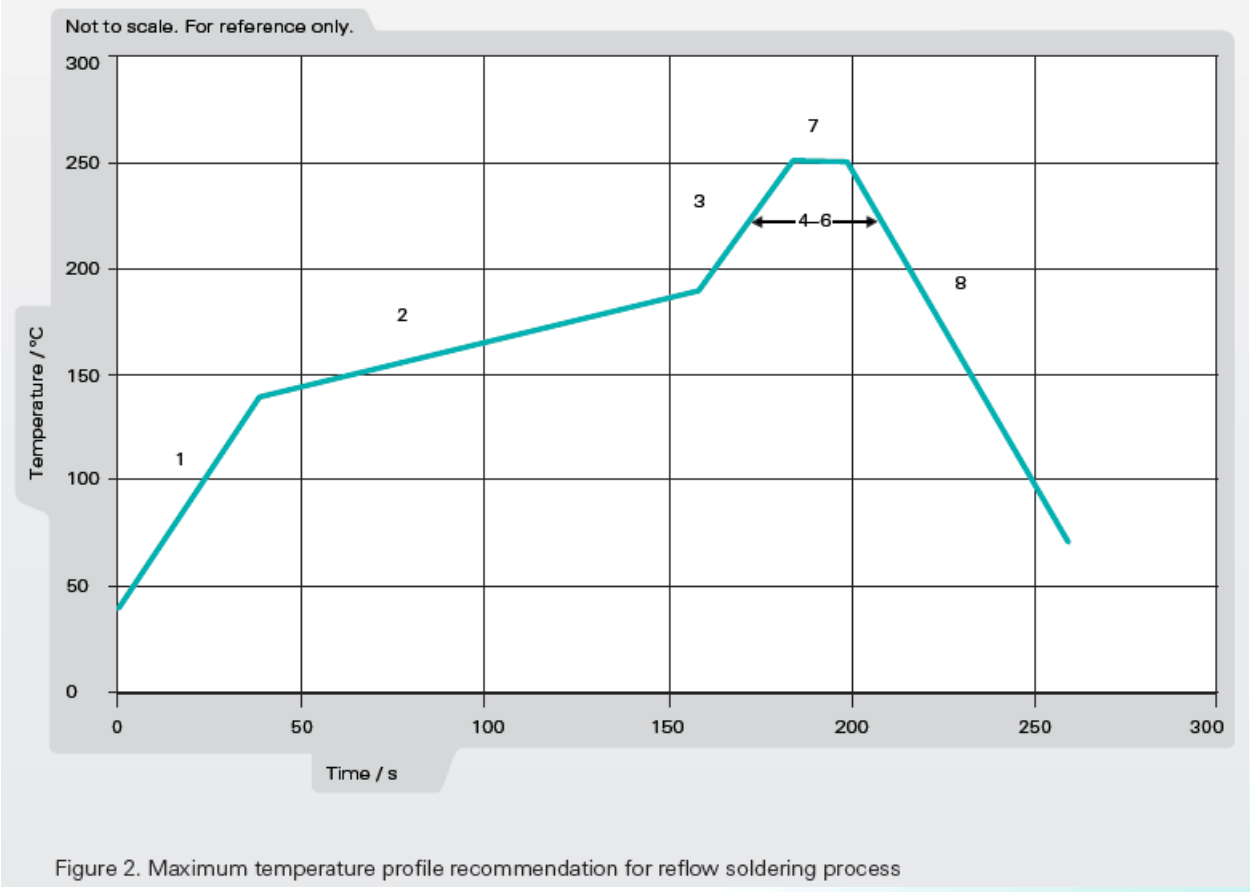

Figure 2. Maximum temperature profile recommendation for reflow soldering process

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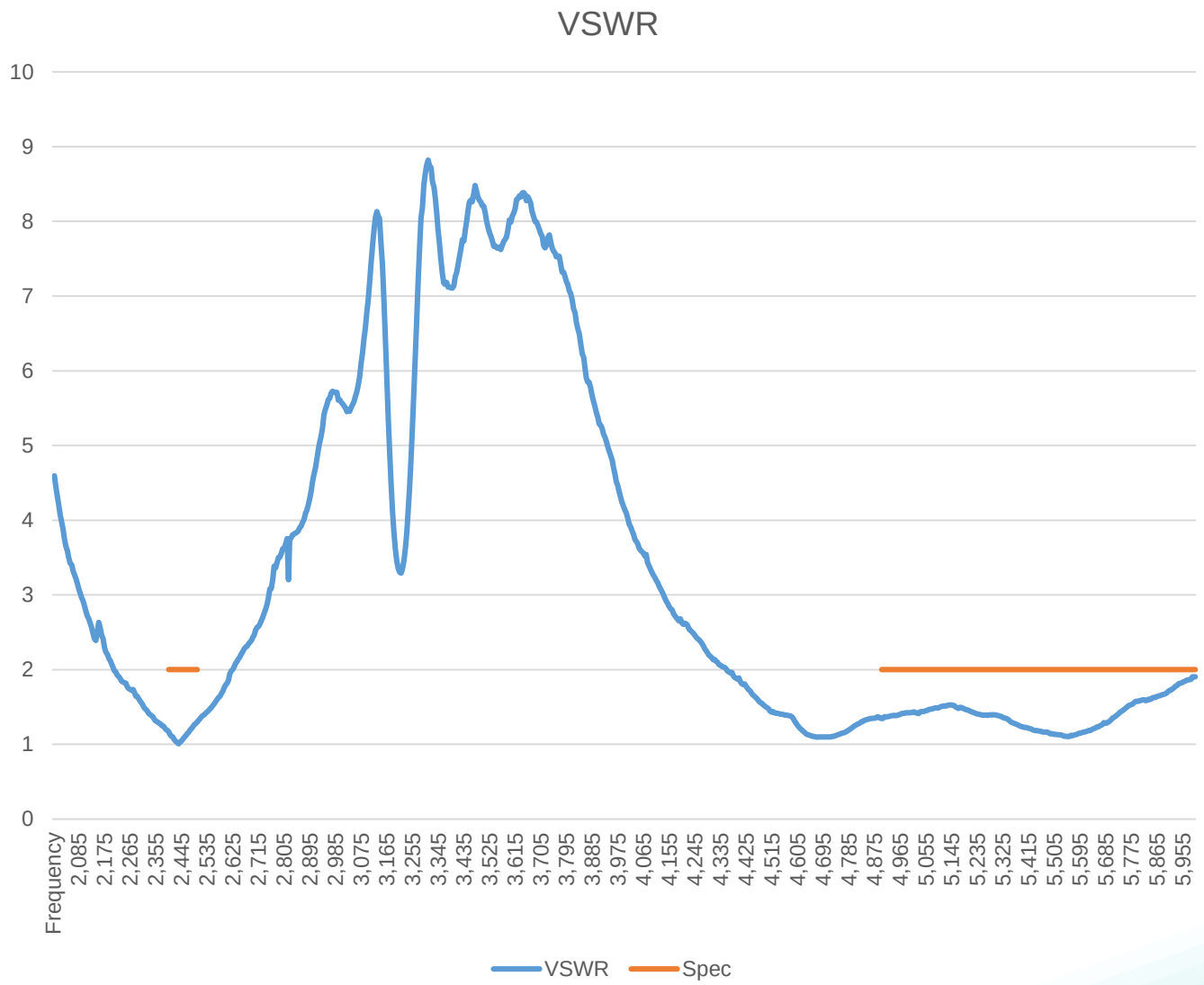
CHARTS

VSWR



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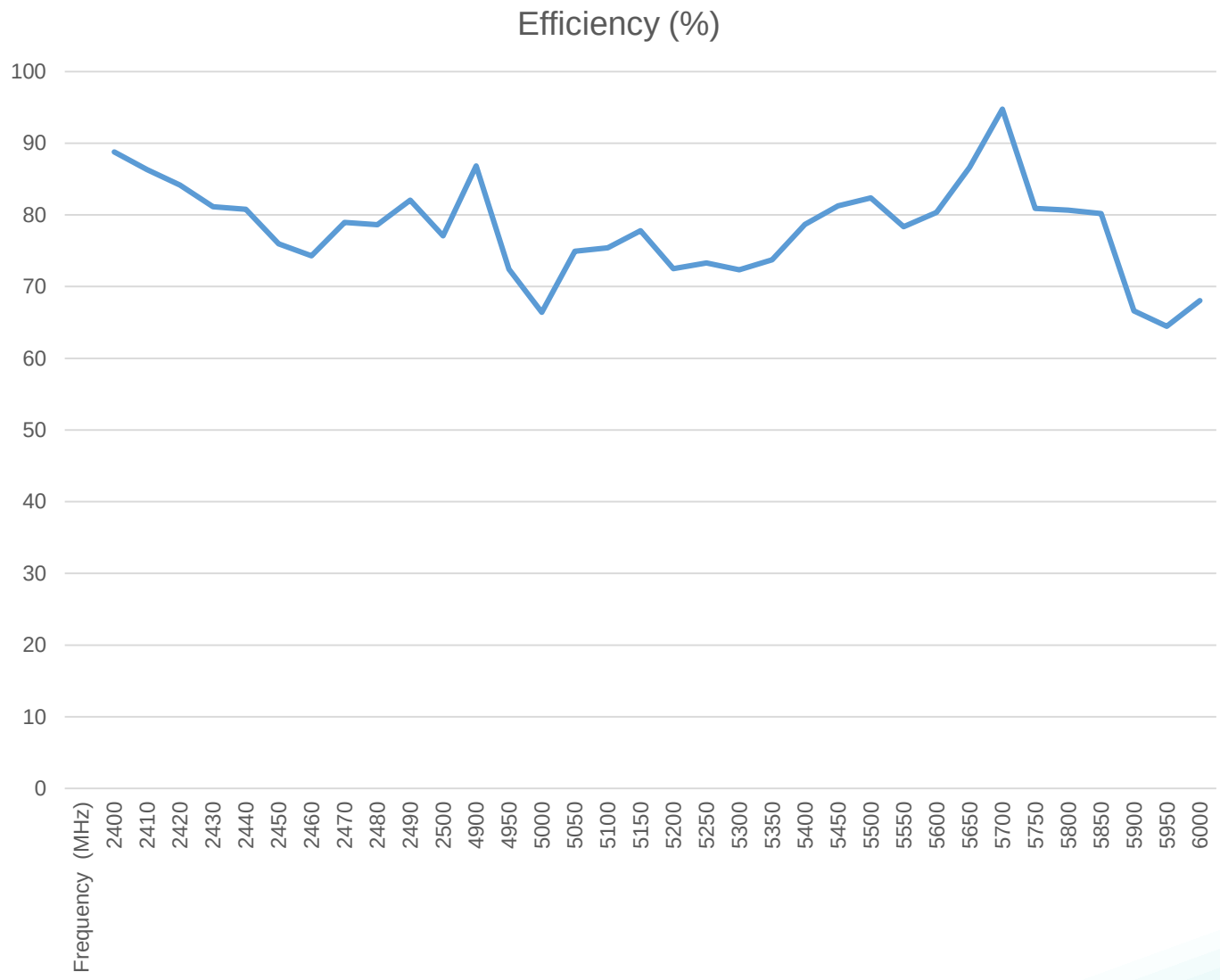
CHARTS

Efficiency(%)



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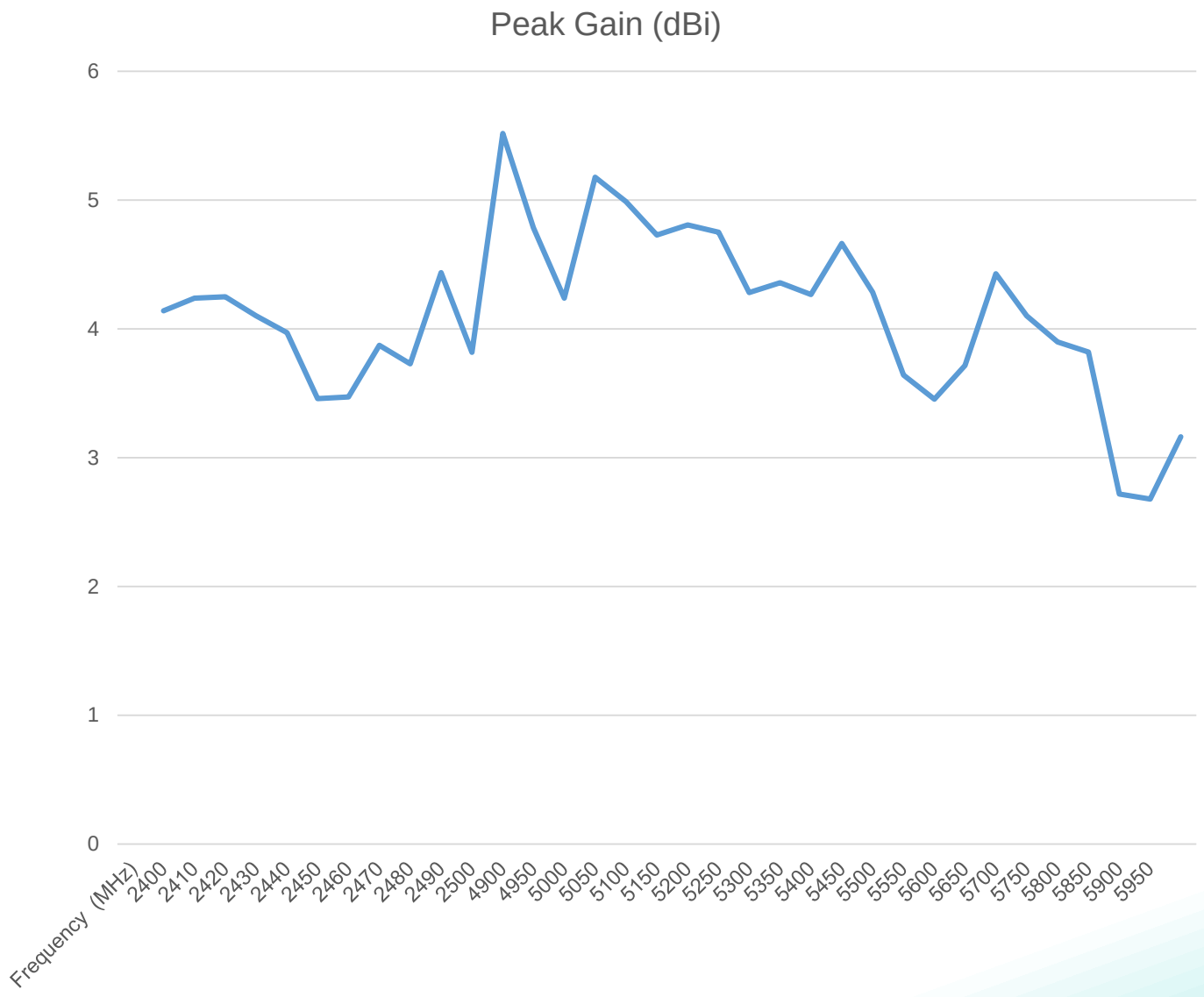
CHARTS

Peak Gain (dBi)



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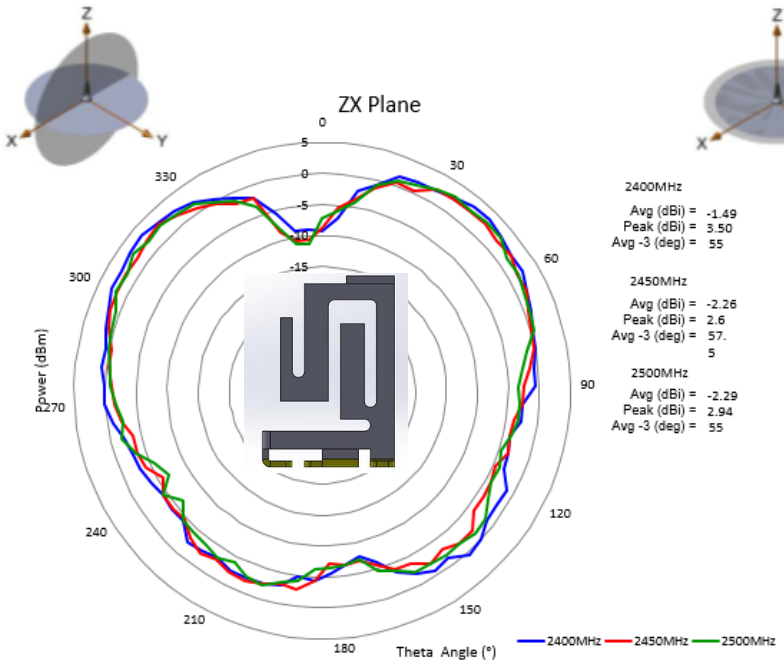
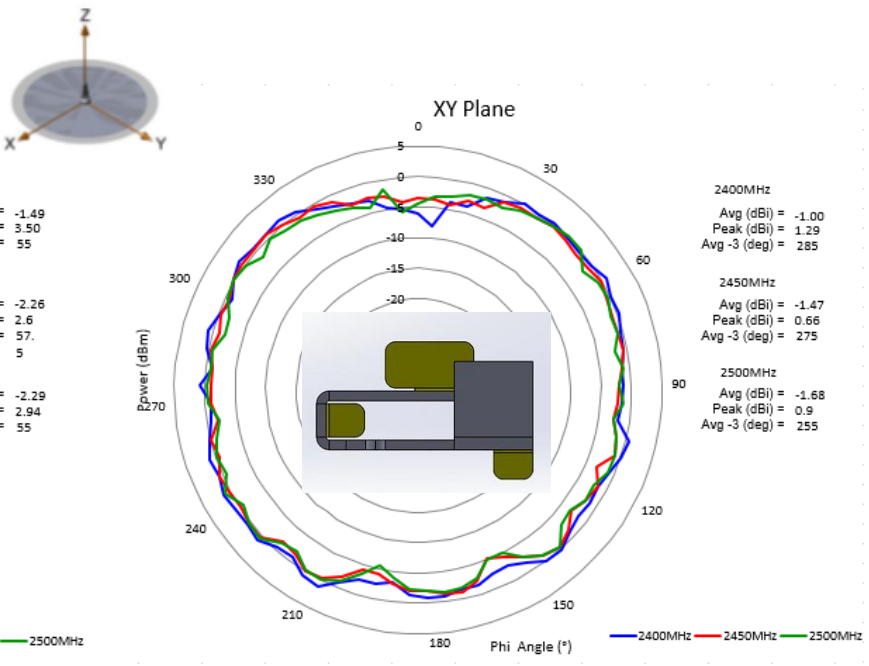
CHARTS

Free Space Radiation Pattern

Elevation Plane



Horizontal Plane



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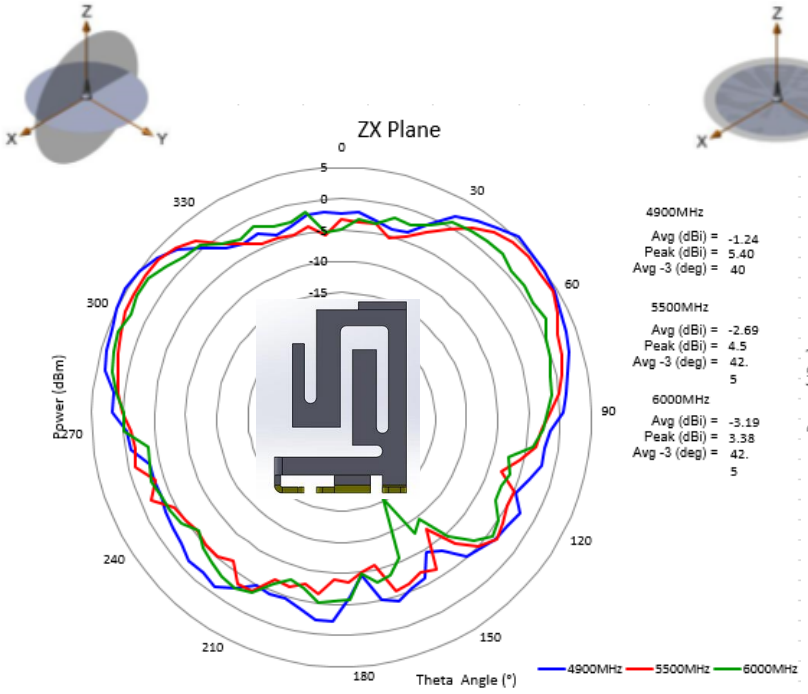
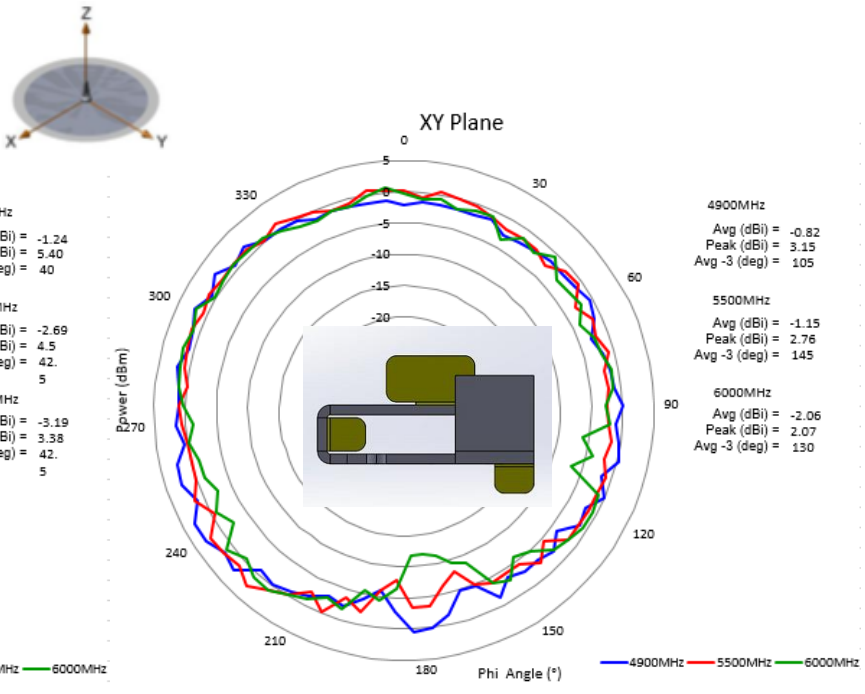
CHARTS

Free Space Radiation Pattern

Elevation Plane



Horizontal Plane



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PACKAGING

Tape and Reel packing:
200 PCS/ Tape and Reel
400PCS/ Carton box

Tape Width : 32mm
Tape Material : Polystyrene

RoHS COMPLIANT

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

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