

Description: ISM 169/433/868/915/2450MHz
Helical Antenna

Series: Helix Coil

PART NUMBER: W3100X



W3100



W3100A



W3100B



W3100C



W3100D

Features:

- Helix coil with shrink tube
- Antenna type Monopole
- Diameter 9.8 mm
- Coil cut to operating freq:
 - 169MHz 80mm, P/N W3100
 - 433MHz 30mm, P/N W3100A
 - 868MHz 11mm, P/N W3100B
 - 915MHz 10mm, P/N W3100C
 - 2450MHz 2.5mm, P/N W3100D

Applications:

- ISM band radios
- IoT
- Smart Meters
- Easy to cut for optimal length in variety of applications
- Fine tuning and impedance matching with PCB SMT components

All dimensions are in mm / inches

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ELECTRICAL SPECIFICATIONS

Antenna Type	Helix monopole coil
Frequency	169, 433, 868, 915, 2450MHz
Nominal Impedance	50 Ω
VSWR	2:1
Radiation Pattern	Omn
Gain	-4dBi @ 169MHz -2.9dBi @ 433MHz 0dBi @ 868MHz -0.5dBi @ 915MHz 3.5dBi @ 2450MHz
Efficiency	20% @ 169MHz 25% @ 433MHz 35% @ 868MHz 35% @ 915MHz 80% @ 2450MHz
Polarization	Vertical
Power Withstanding	2W

MECHANICAL SPECIFICATIONS

Coil Length	See table
Antenna Color	Black radome
Mounting method	Mechanical lock on PCB, soldering
Weight	10.2g/2.0g/0.5g/0.45g/0.2g

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 - +85 ° C
Storage Temperature	-40 - +85 ° C
RoHS Compliant	Yes

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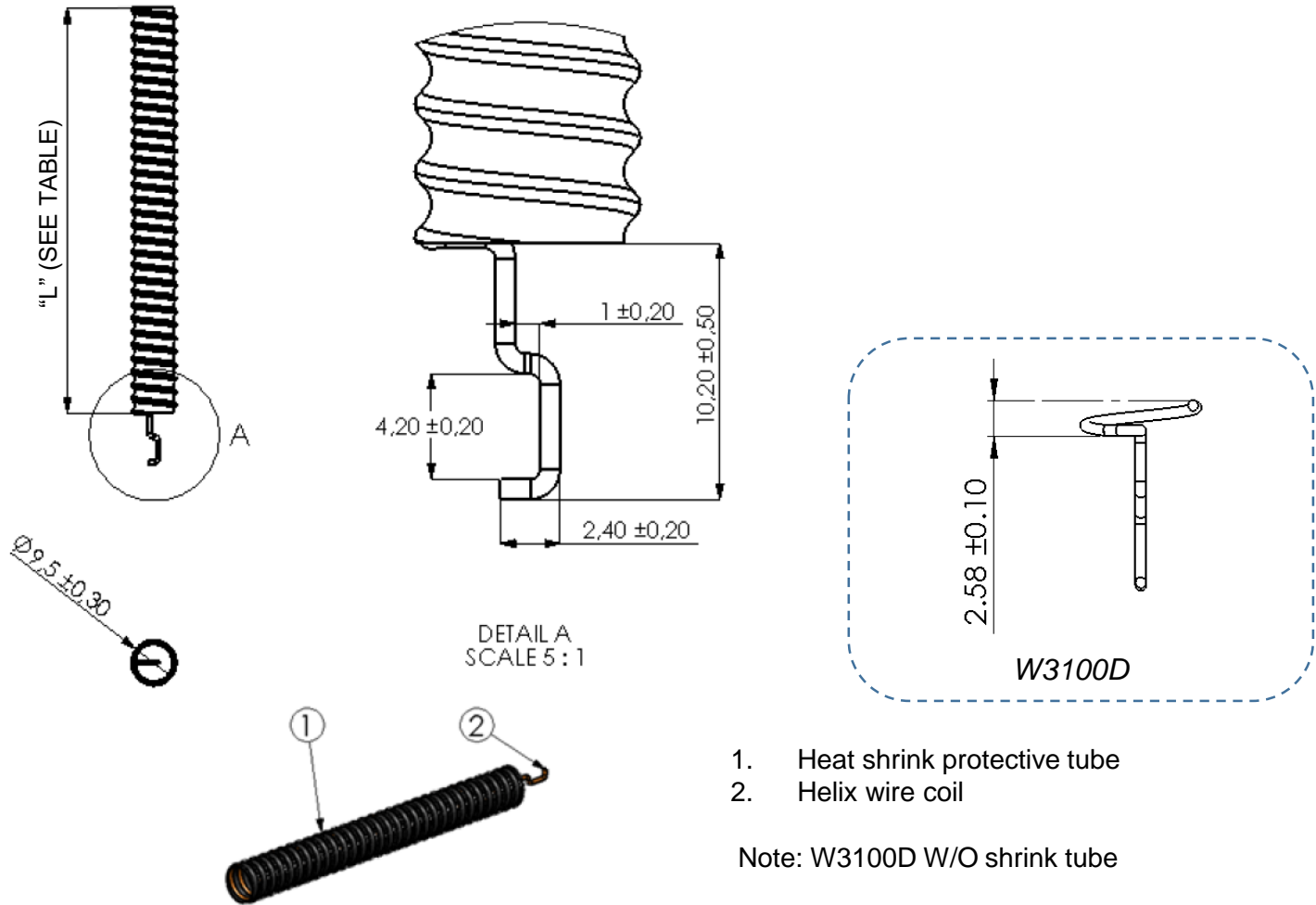
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MECHANICAL DRAWING

W3100/W3100A/W3100B/W3100C



PN	"L"	Frequency
W3100	80 ± 2	169MHz
W3100A	30 ± 0.5	433MHZ
W3100B	11 ± 0.5	868MHz
W3100C	10 ± 0.5	915MHz
W3100D	2.5 ± 0.2	2450MHz

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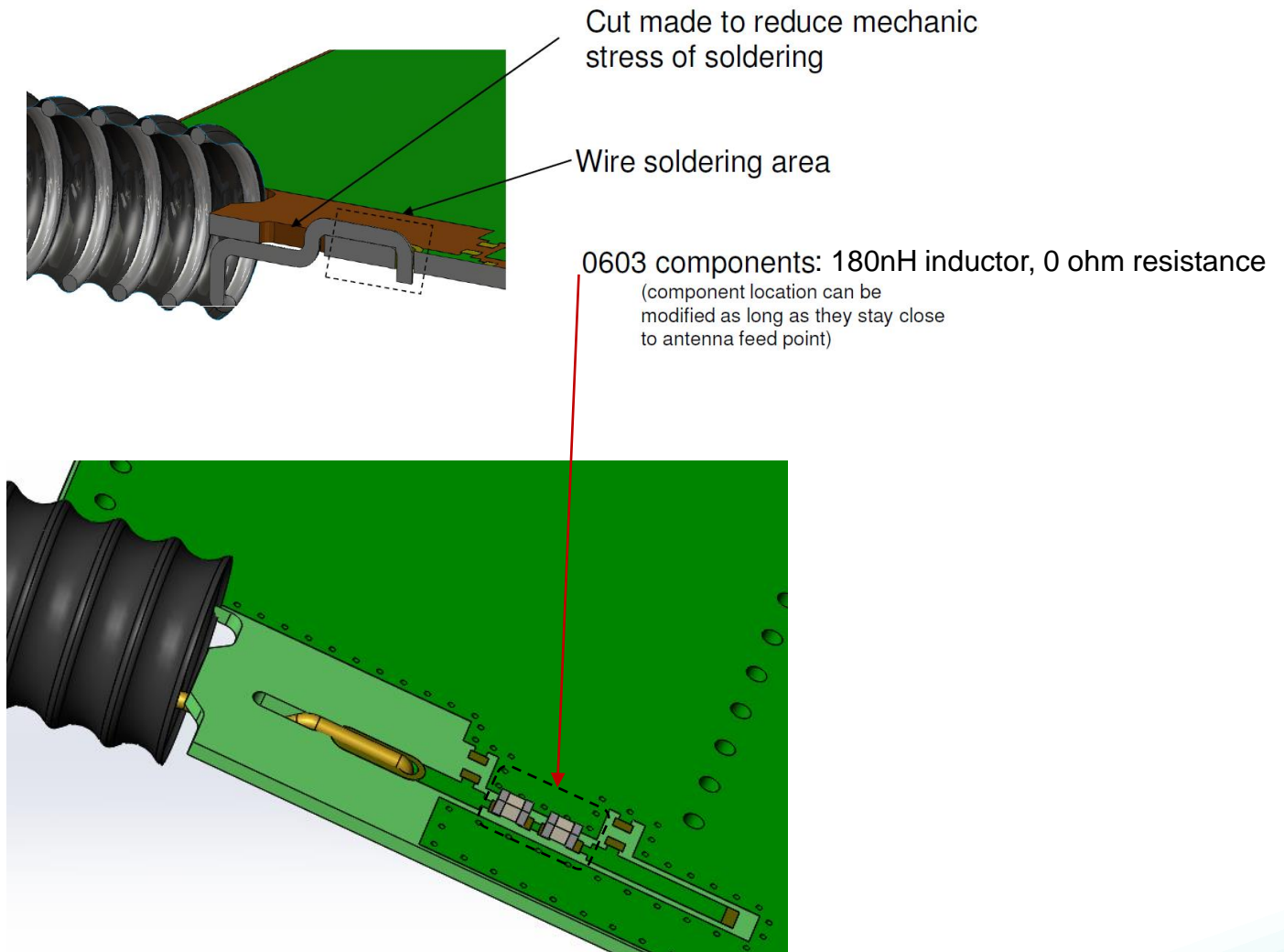
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MECHANICAL DRAWING AND TERMINAL CONFIGURATION

W3100



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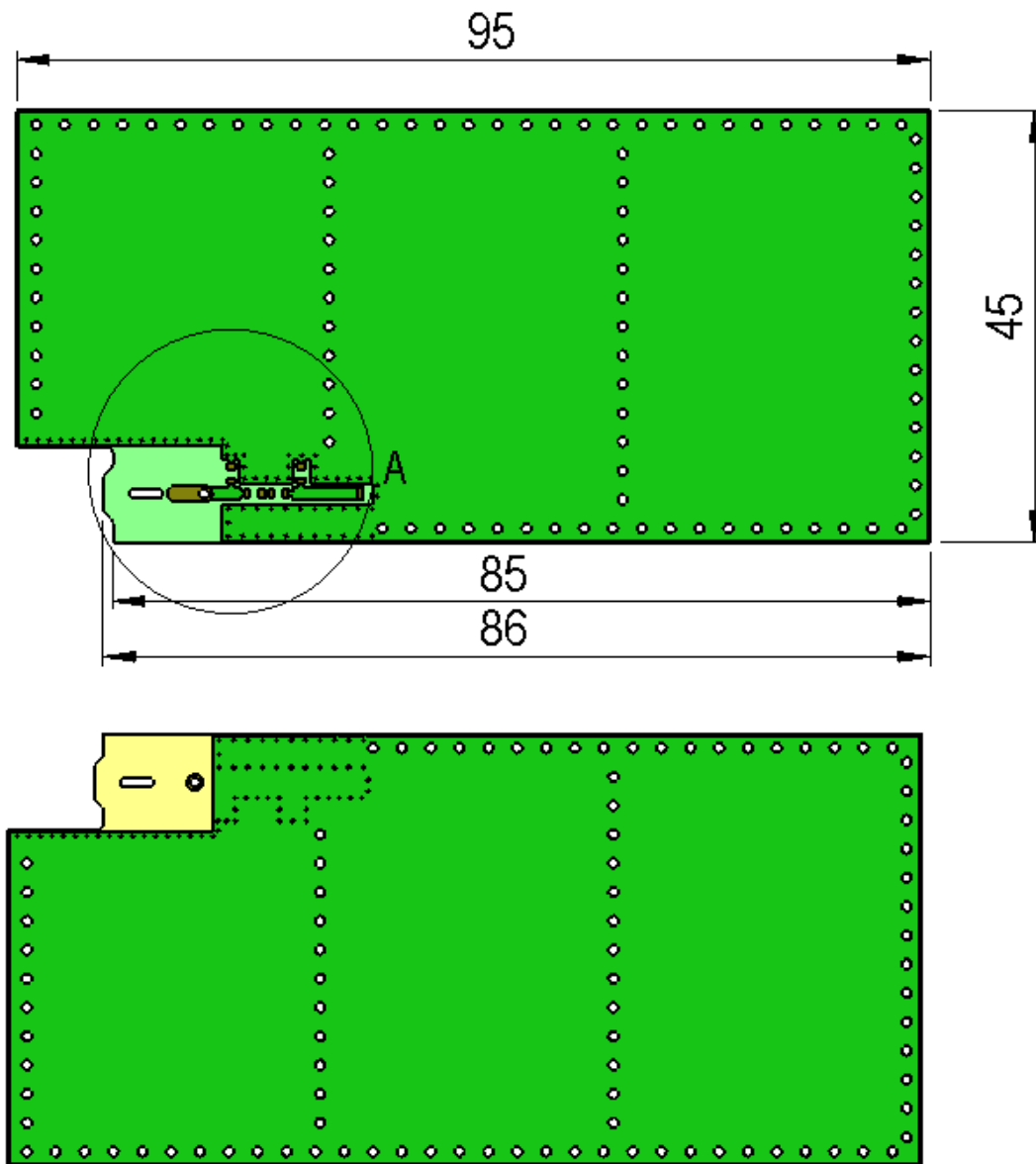
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MECHANICAL DRAWING AND TERMINAL CONFIGURATION

W3100 TEST BOARD



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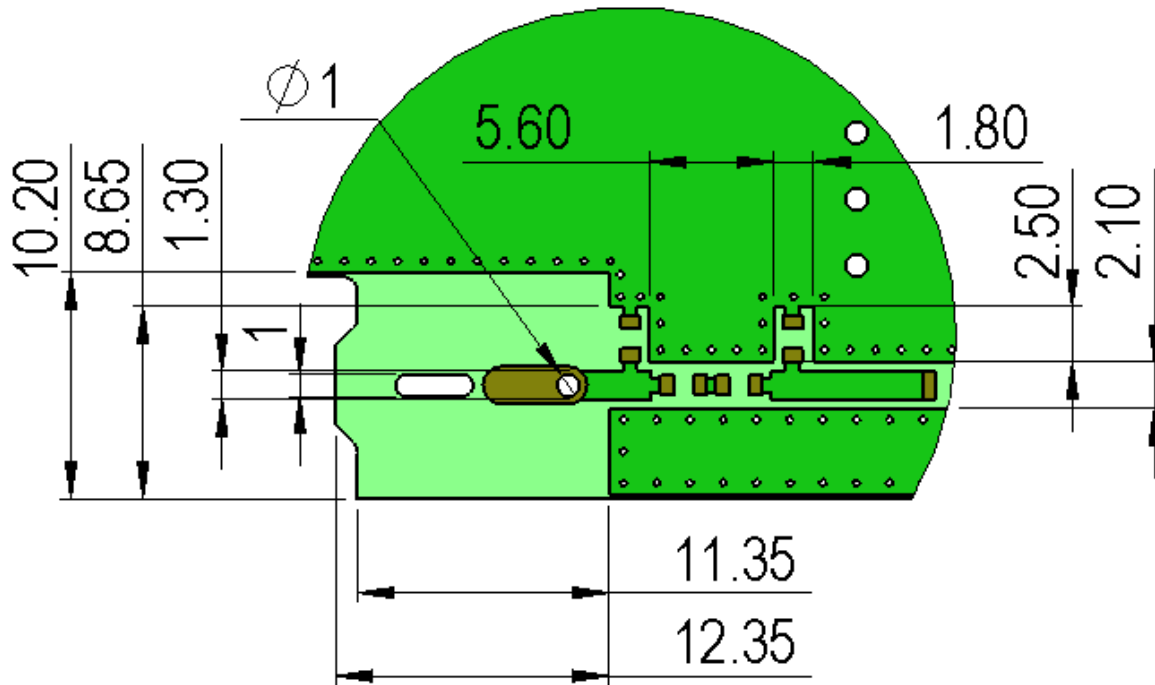
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DETAIL A

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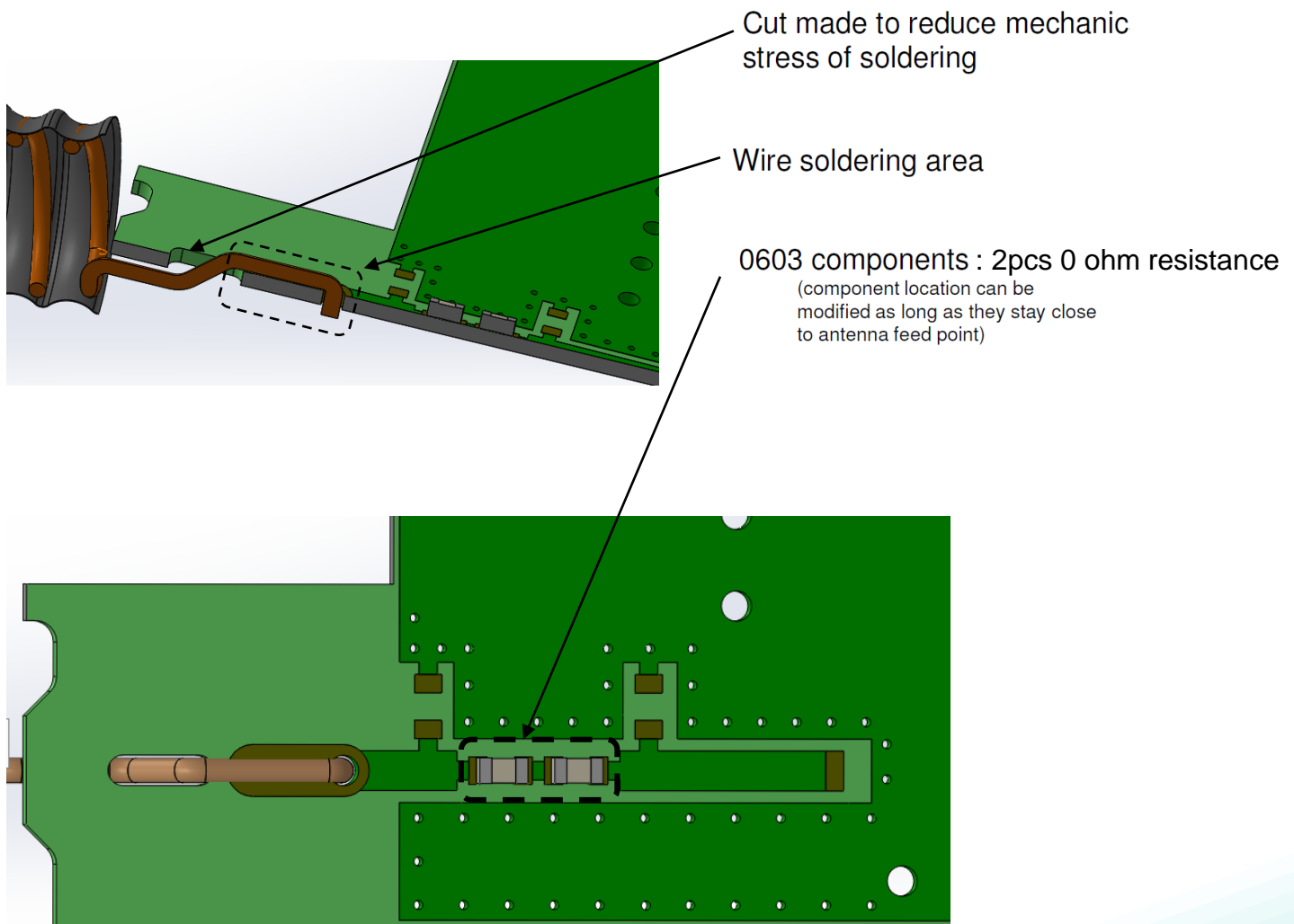
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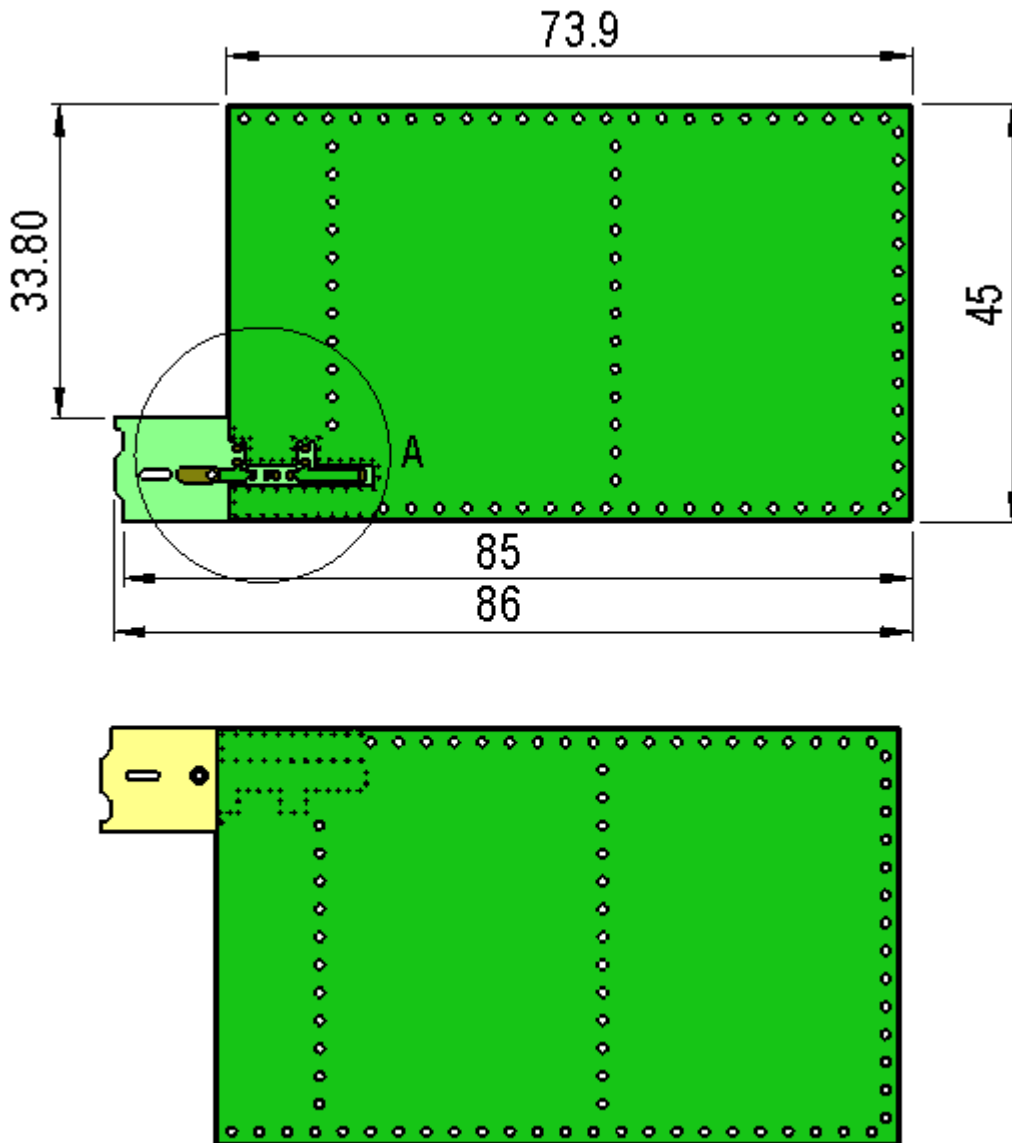
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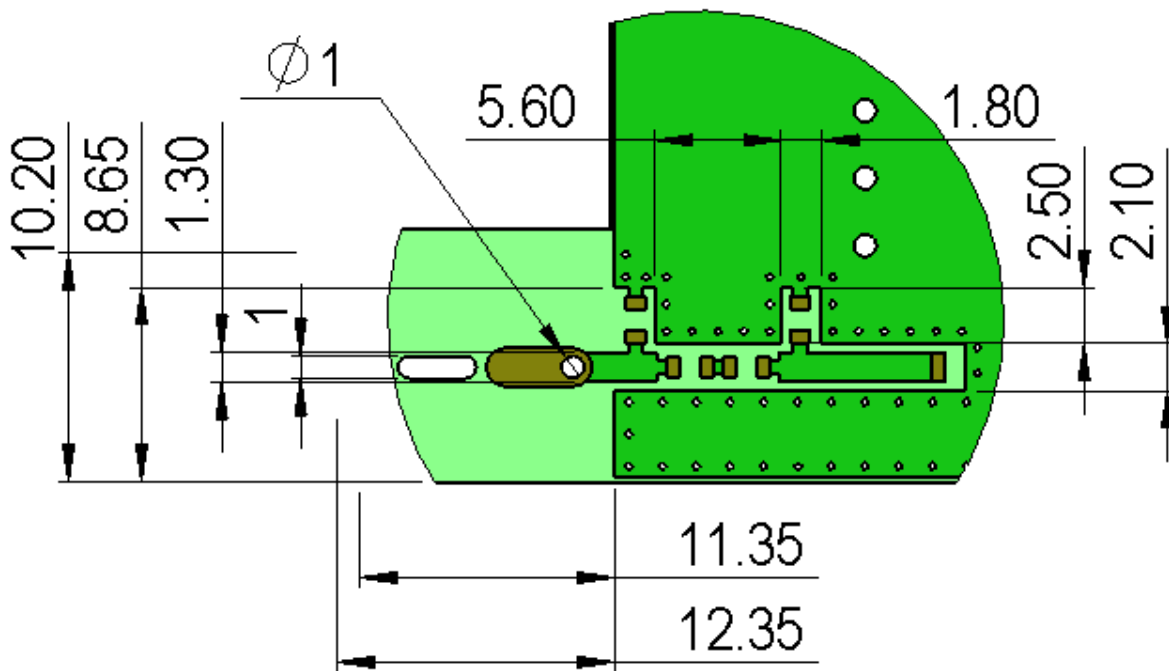
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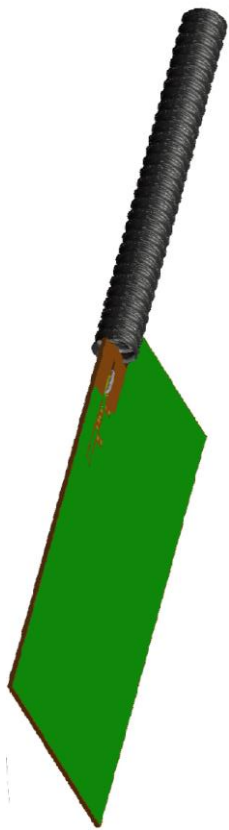
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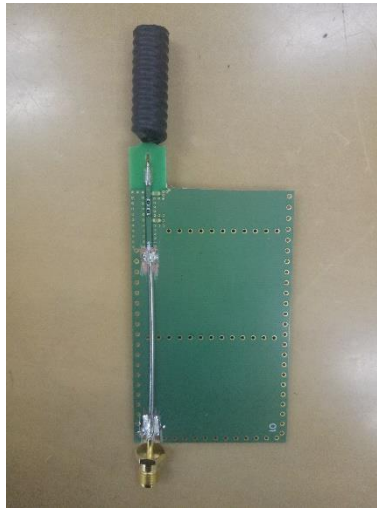
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TEST SETUP



169MHz



433MHz



868MHz



915MHz



2400MHz

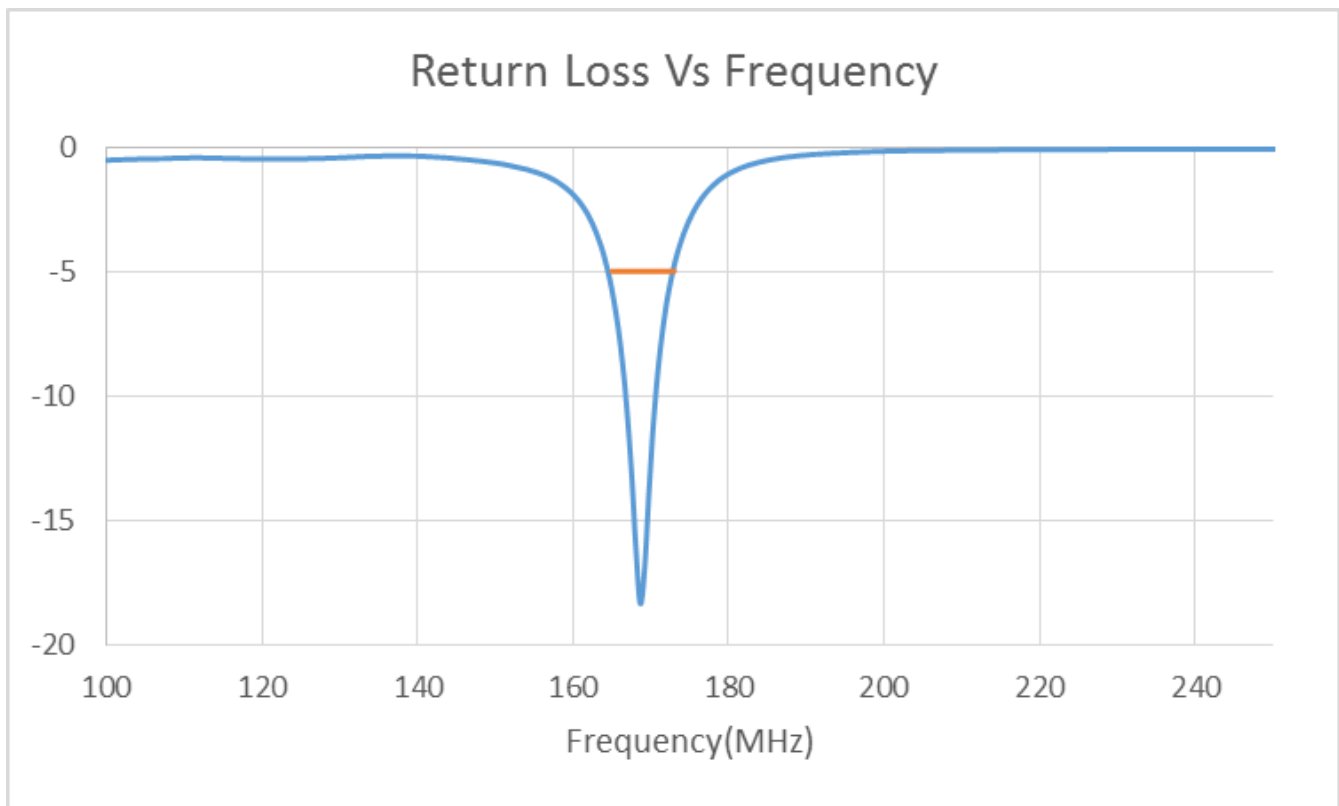
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CHARTS

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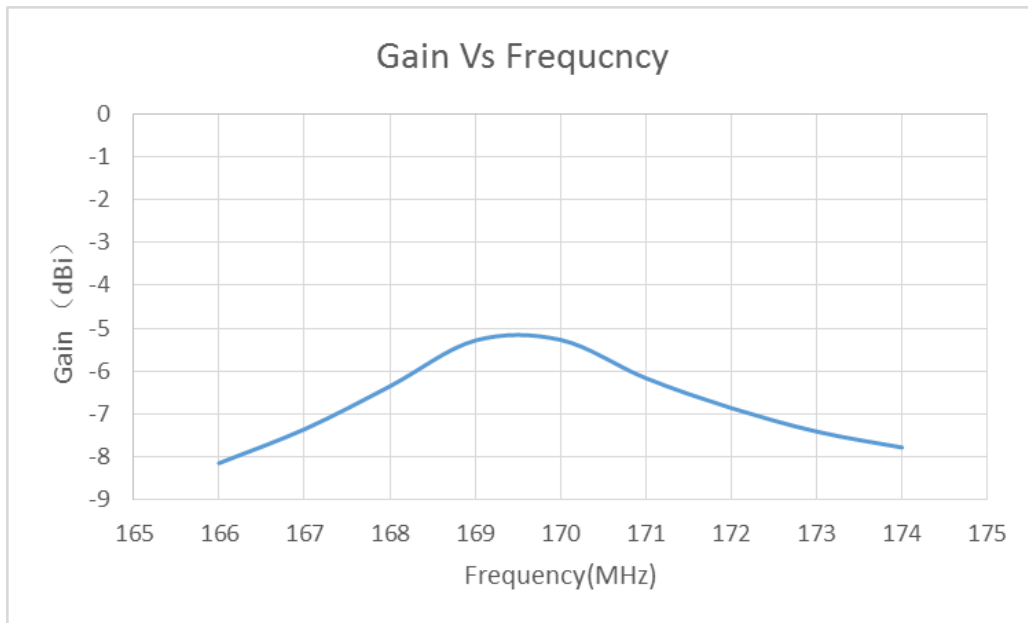
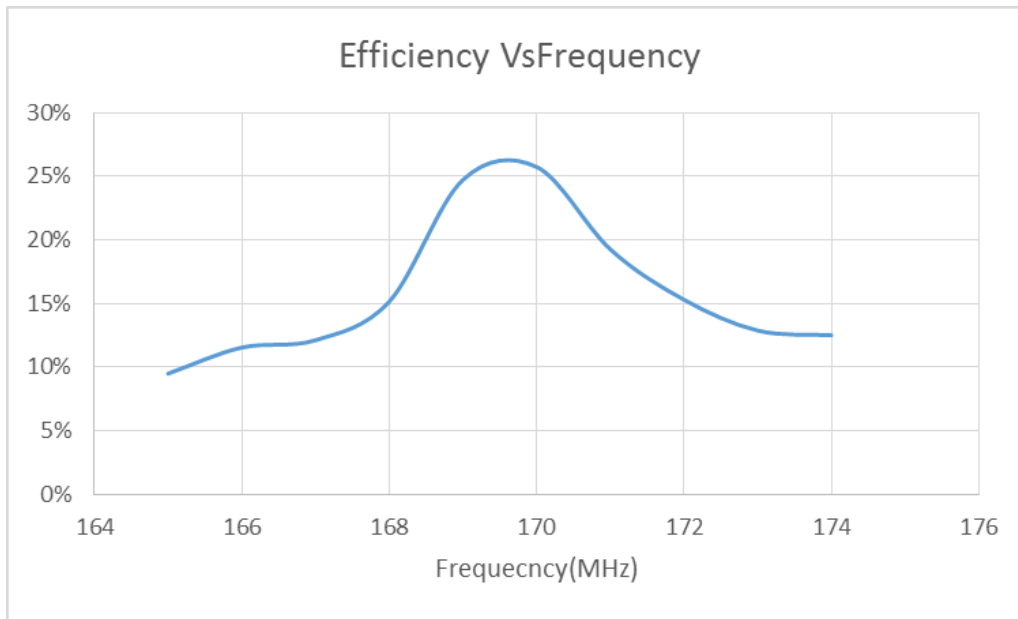
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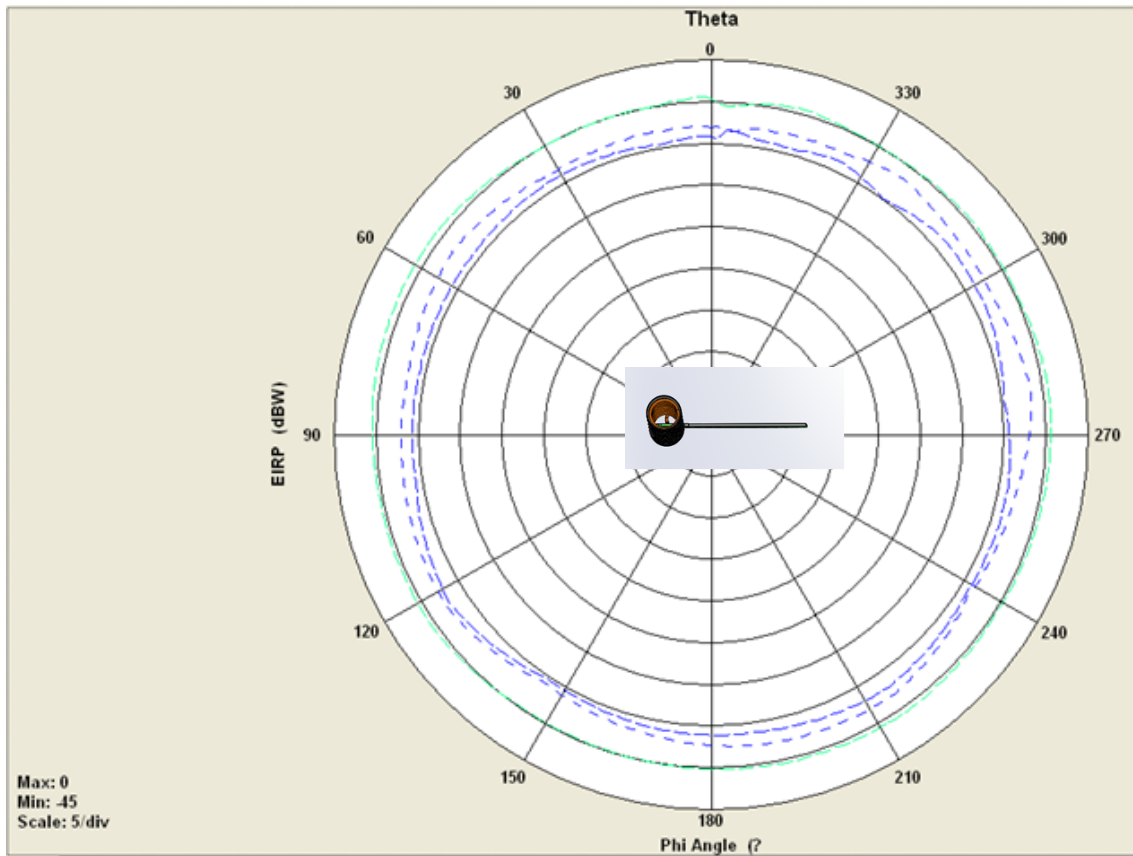
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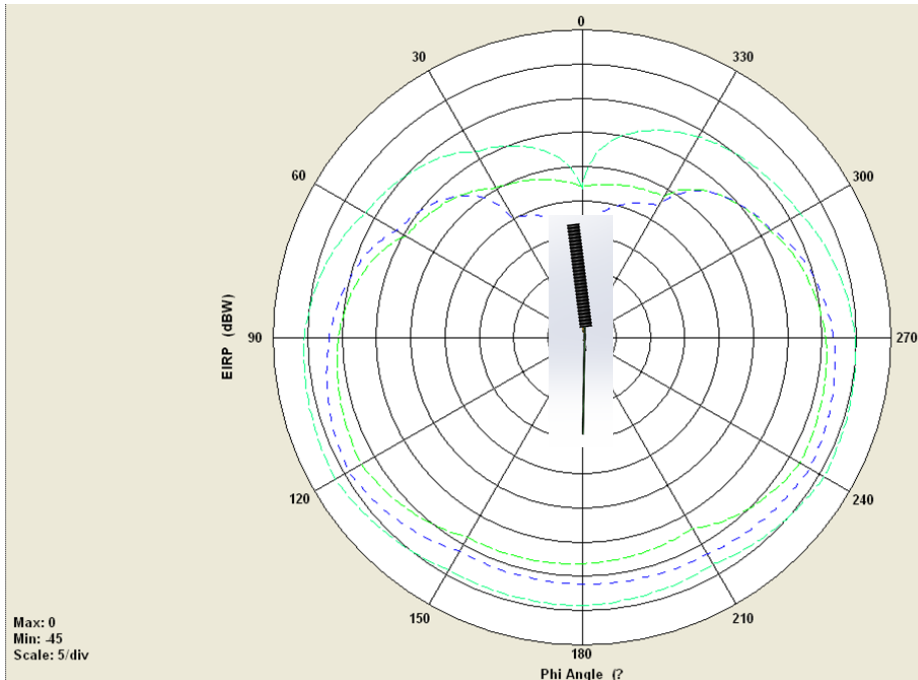
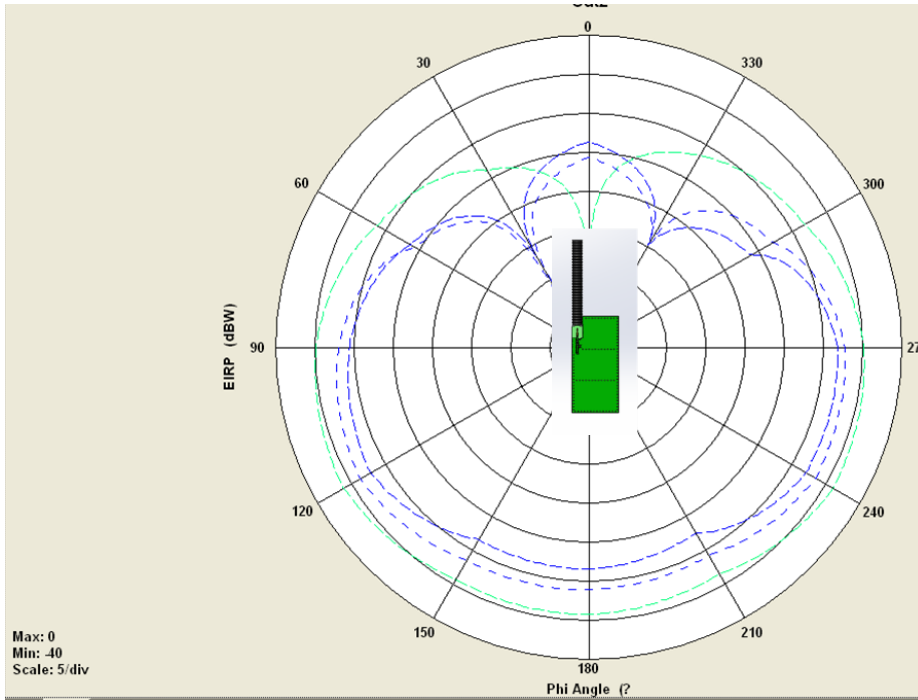
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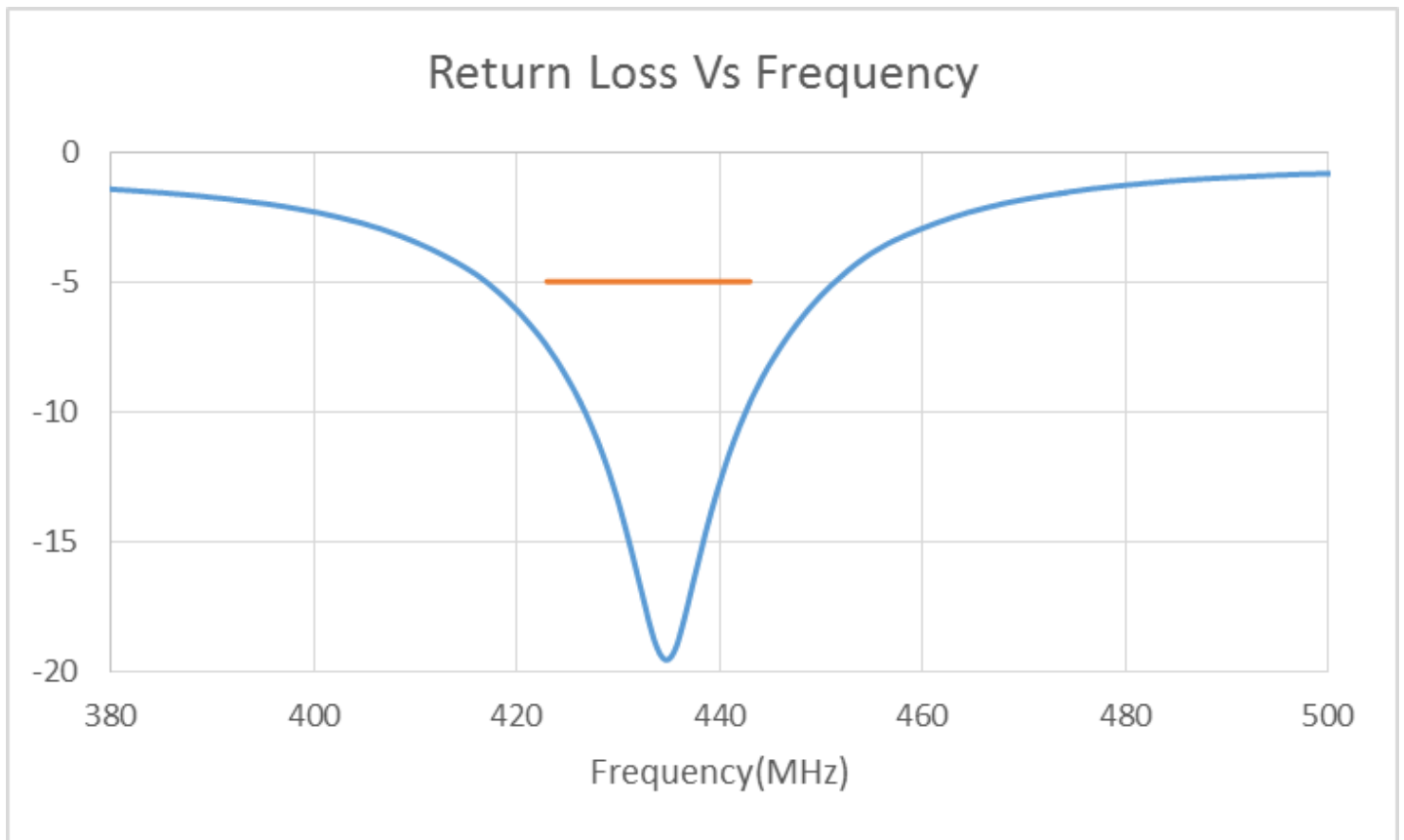
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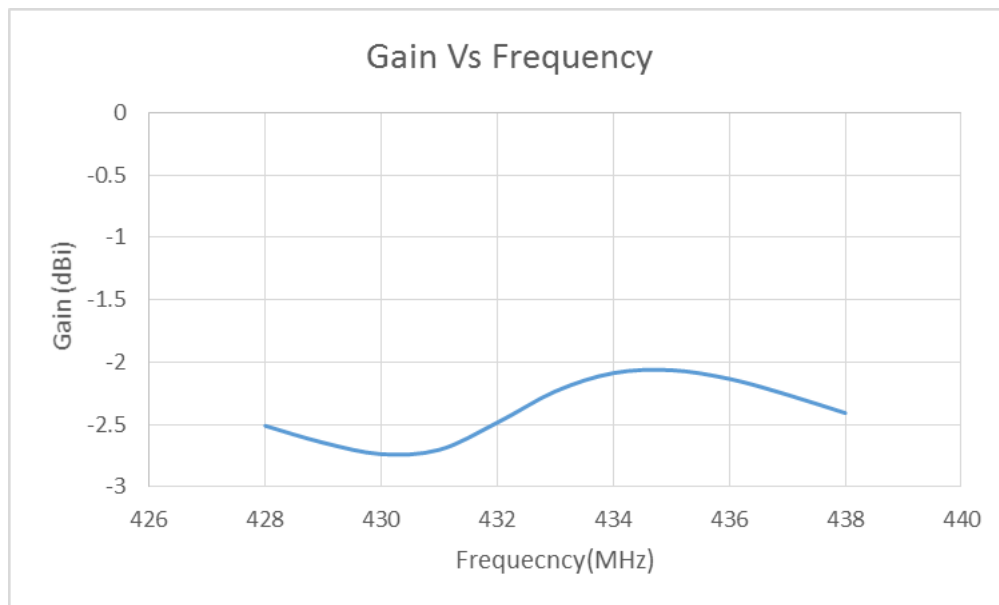
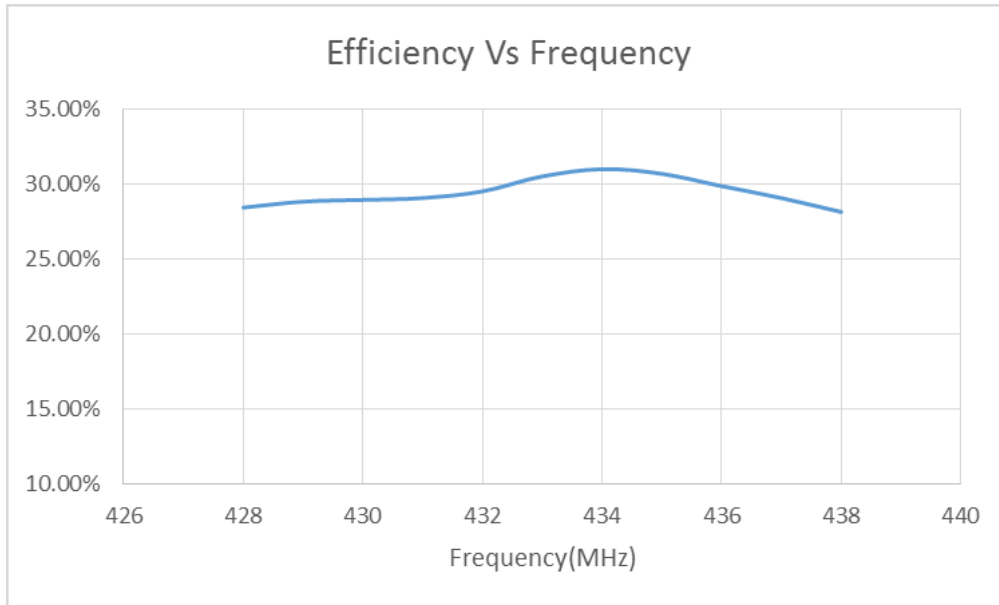
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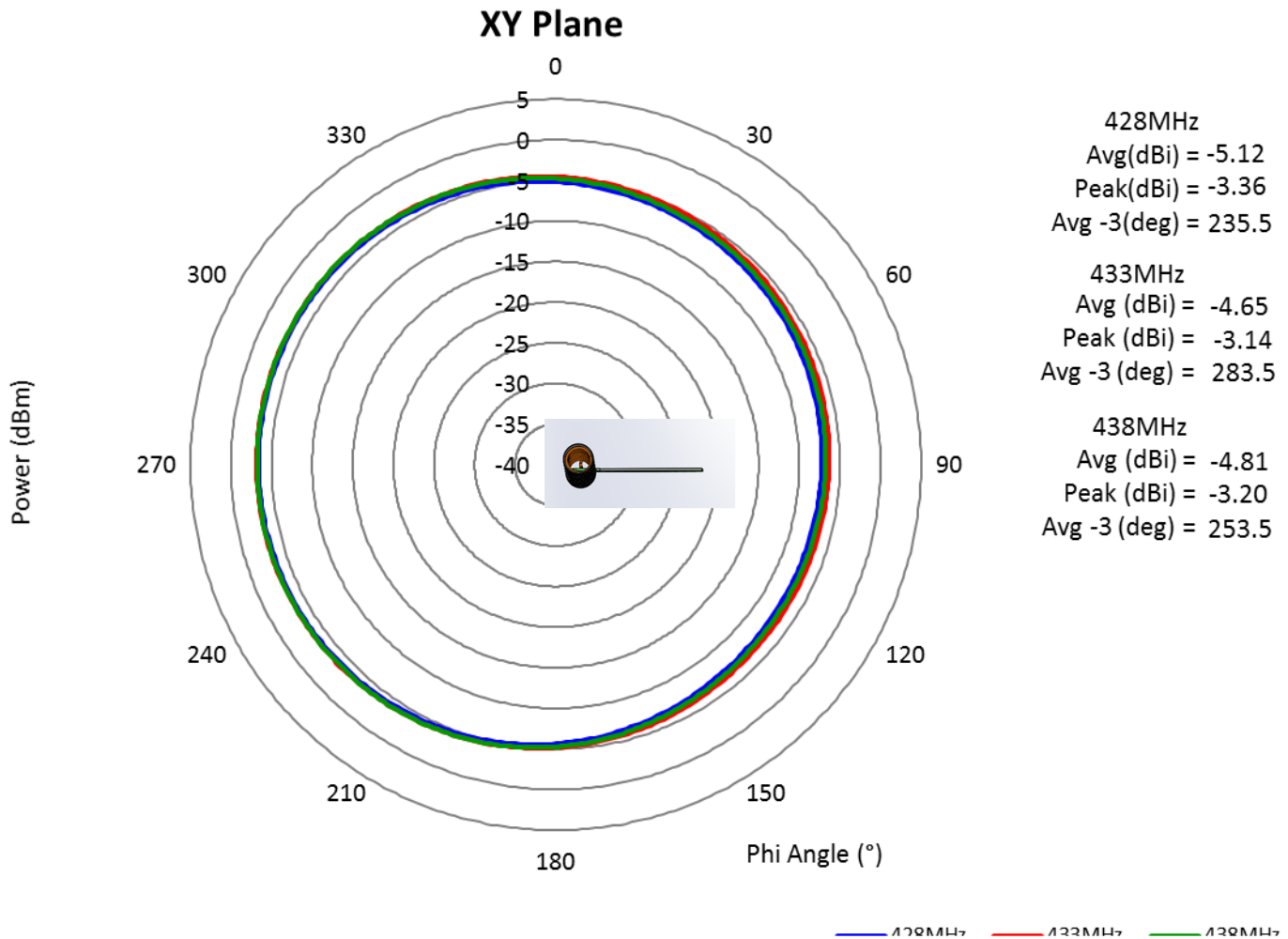
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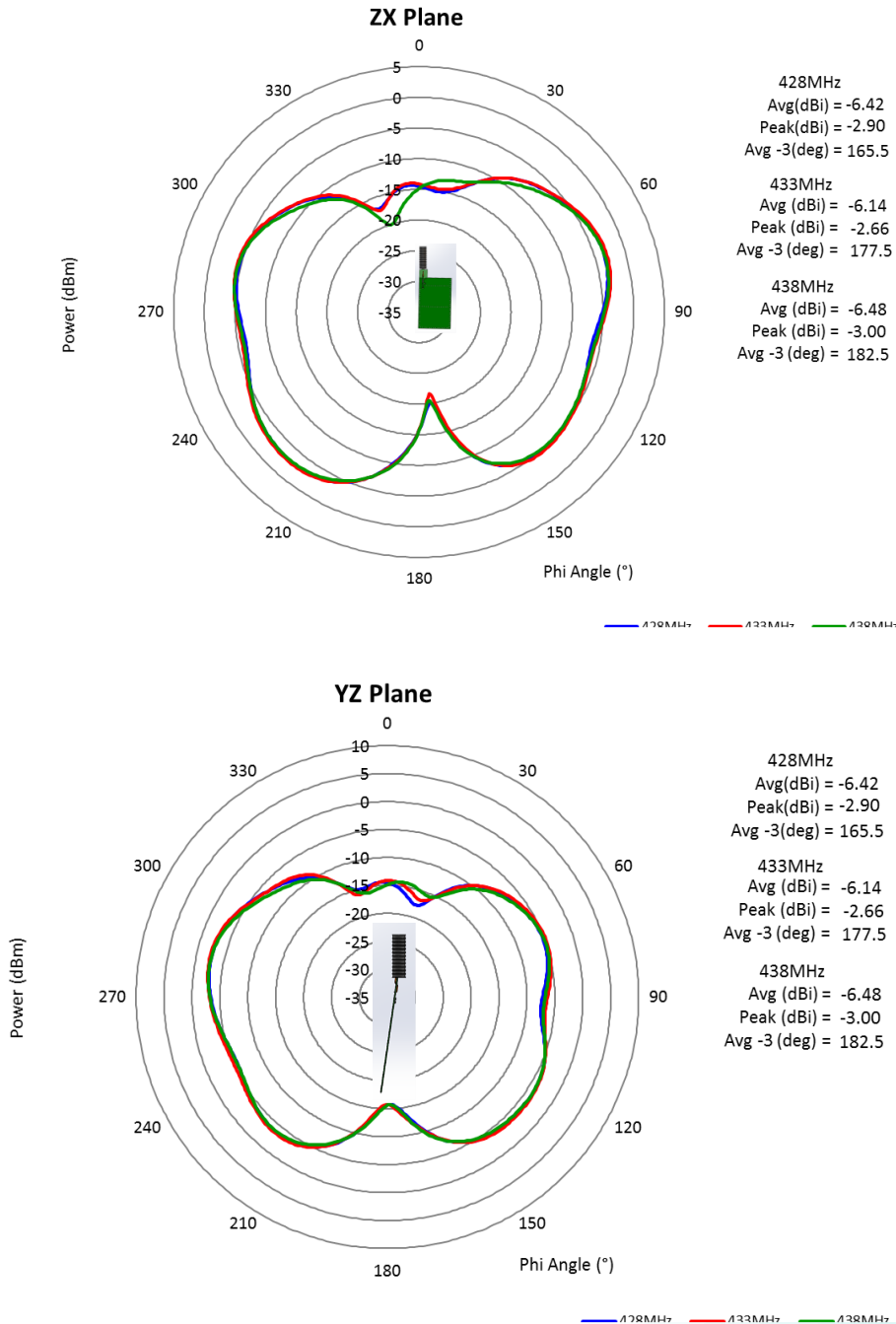
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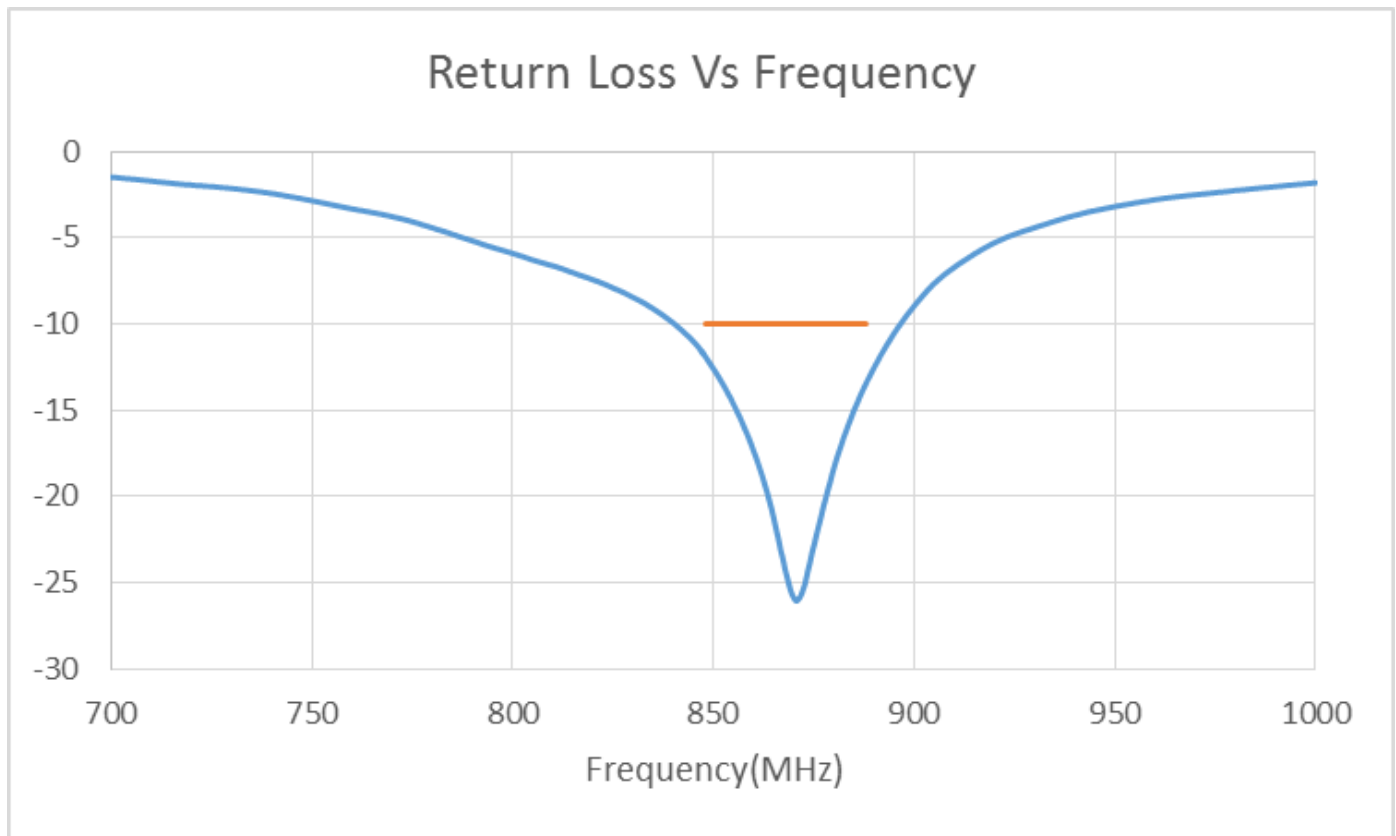
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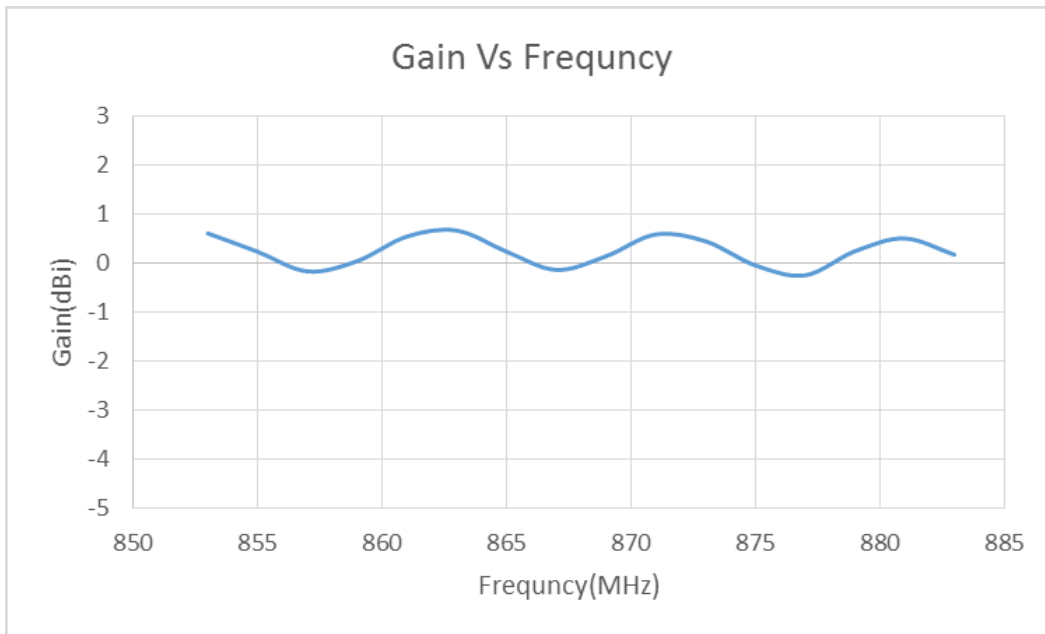
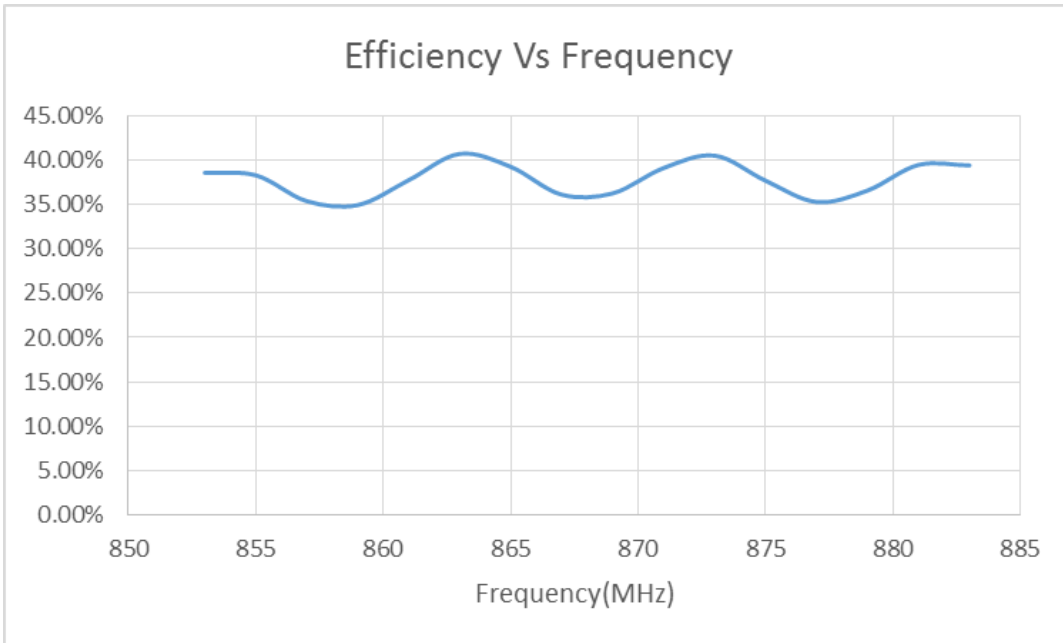
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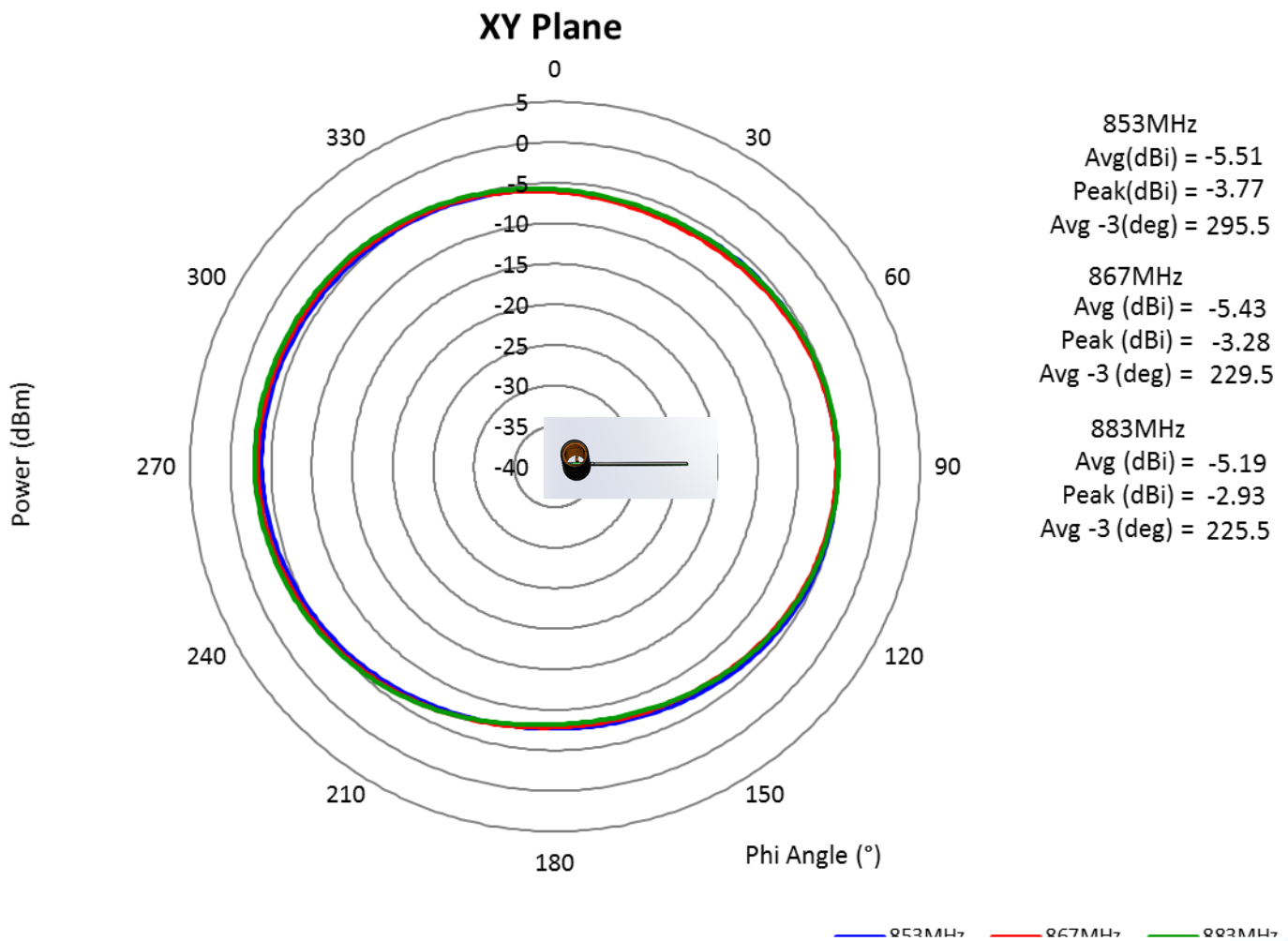
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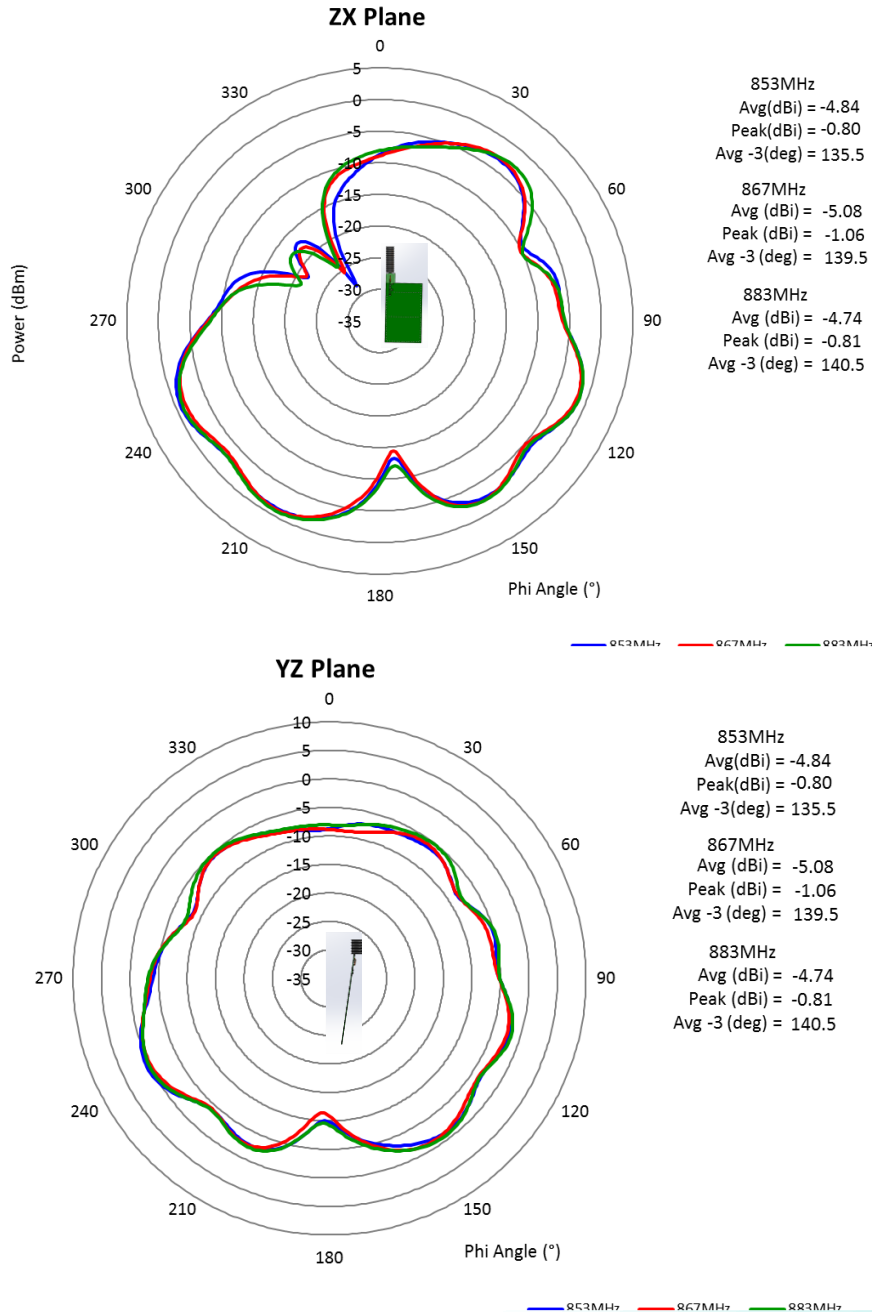
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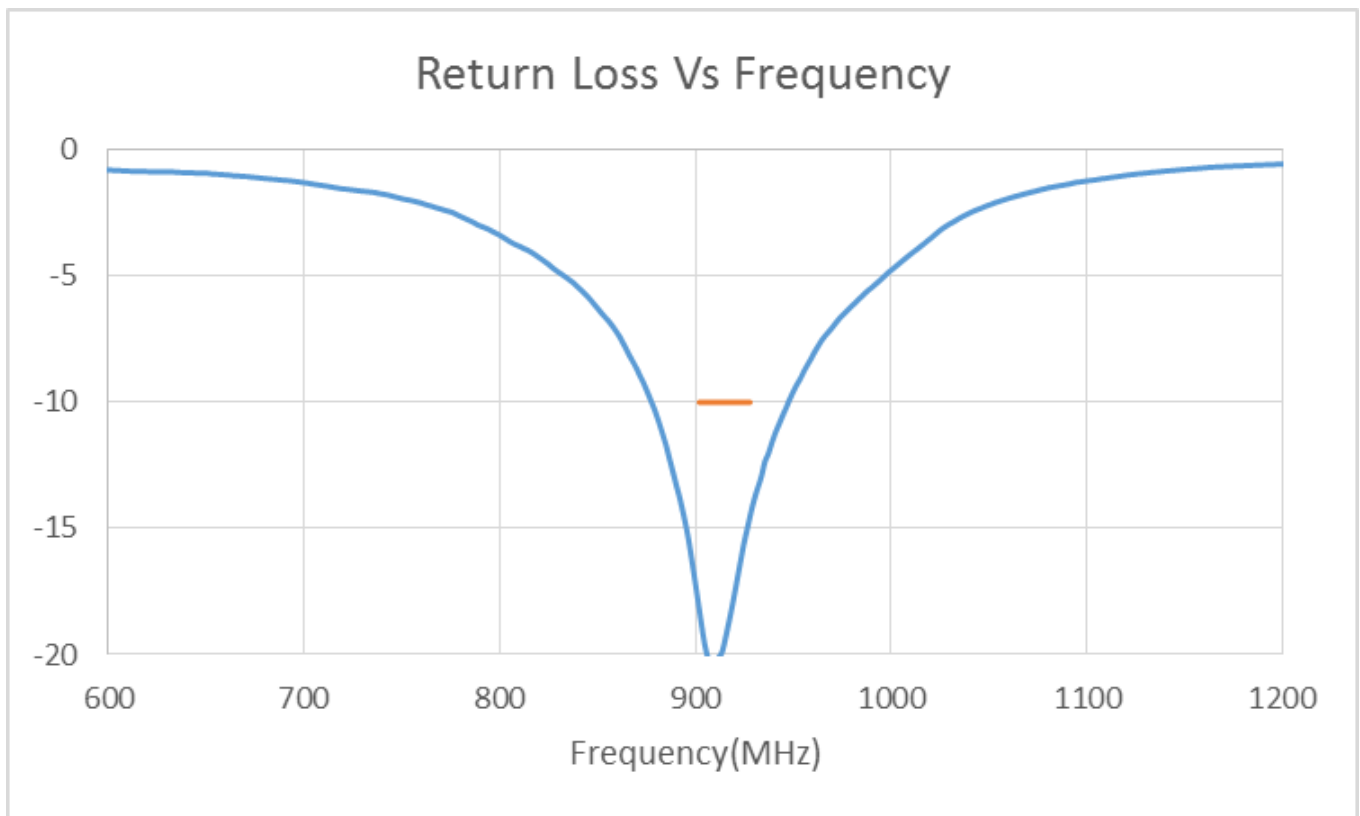
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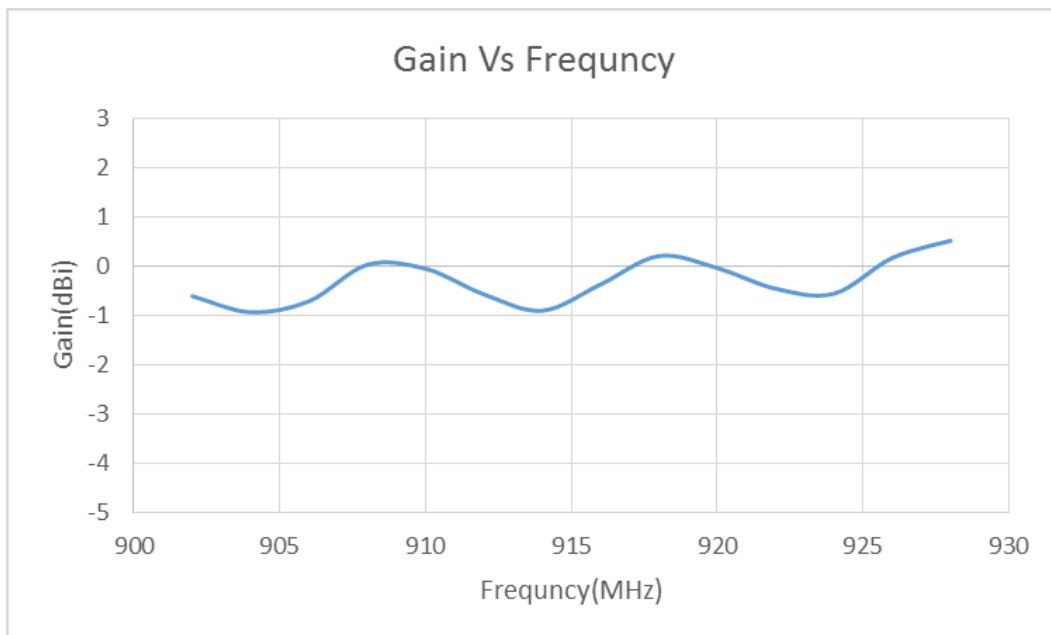
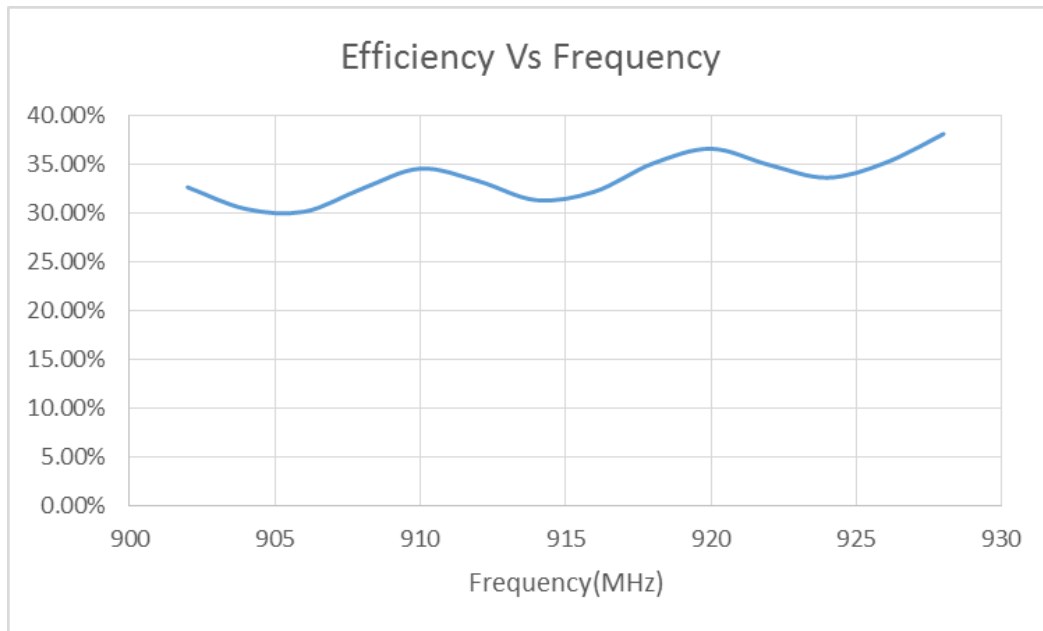
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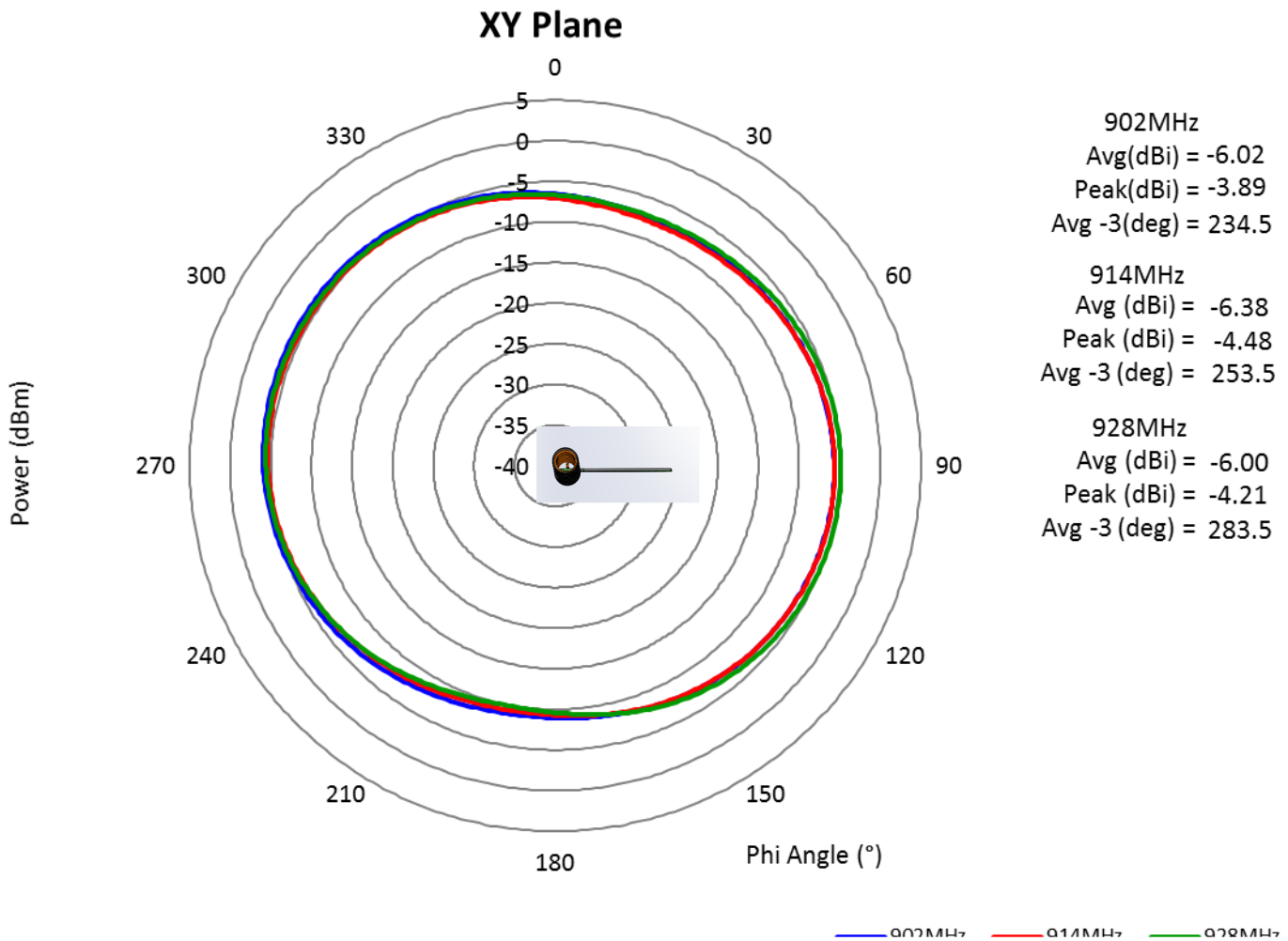
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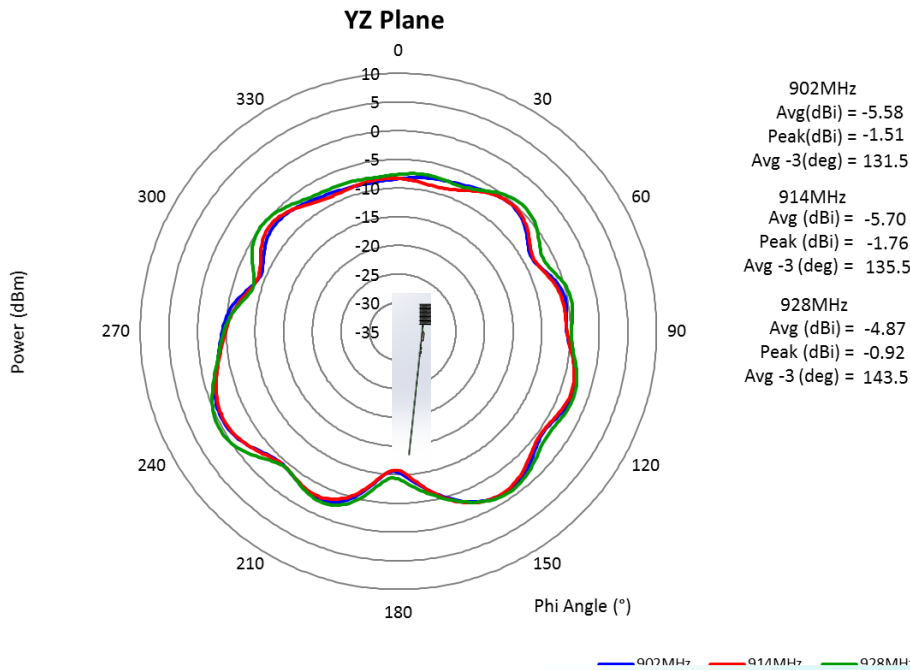
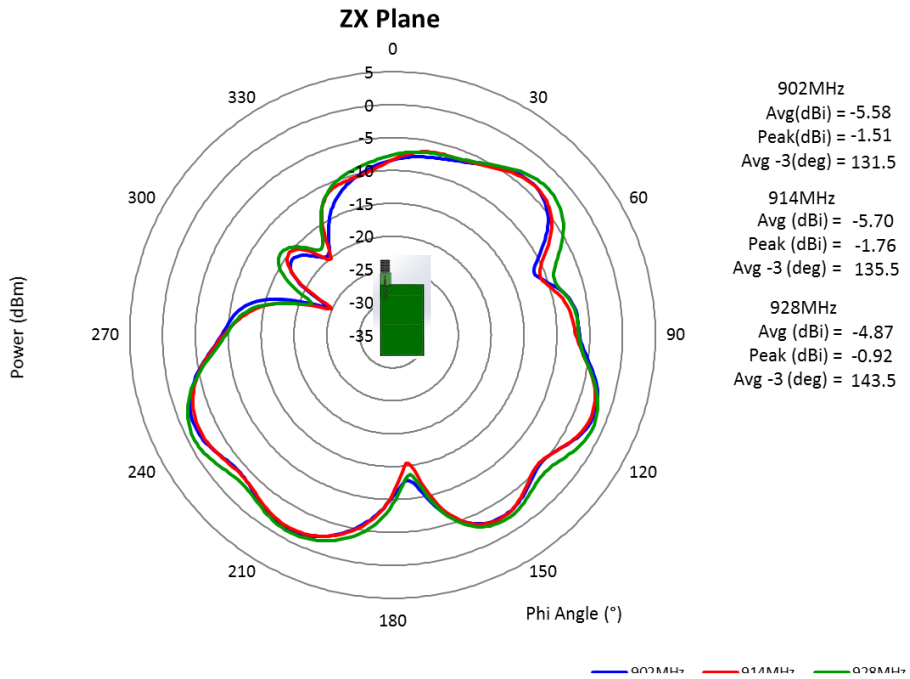
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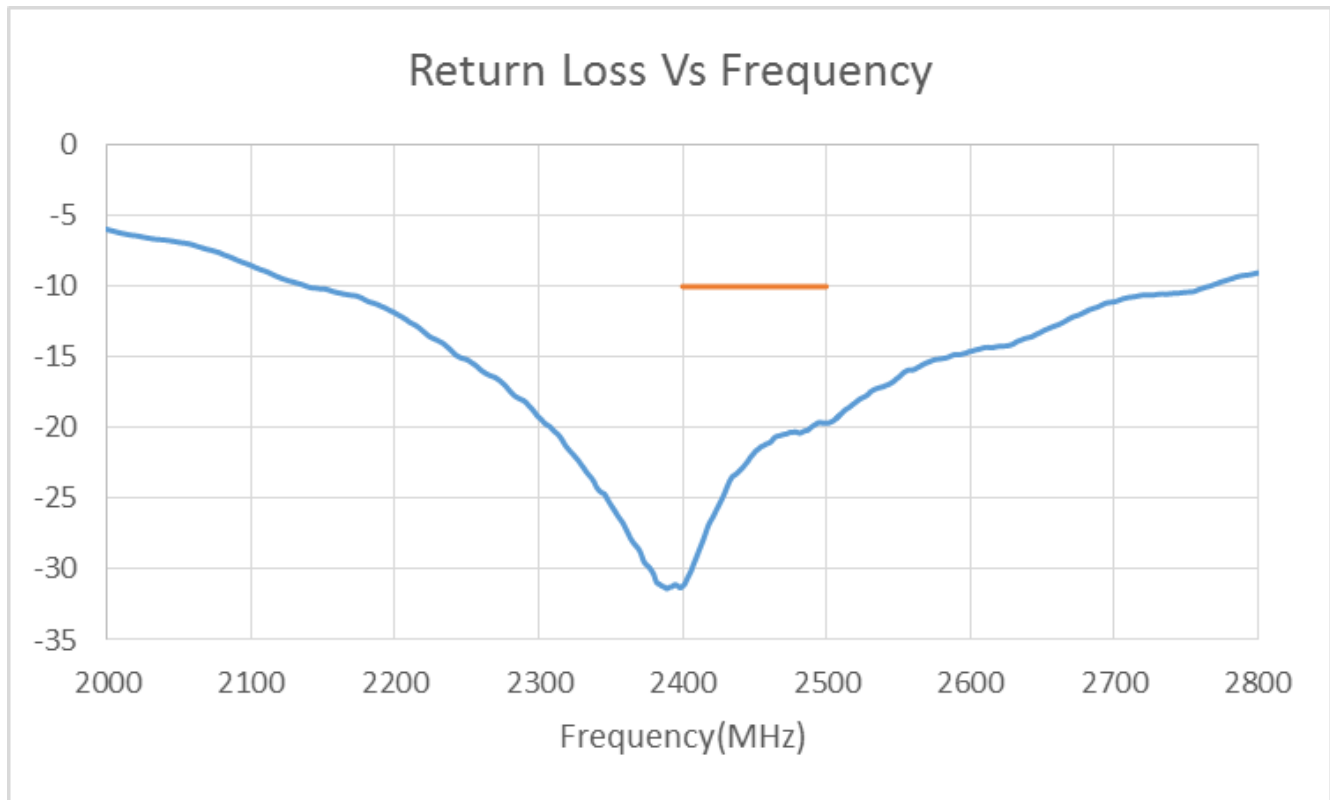
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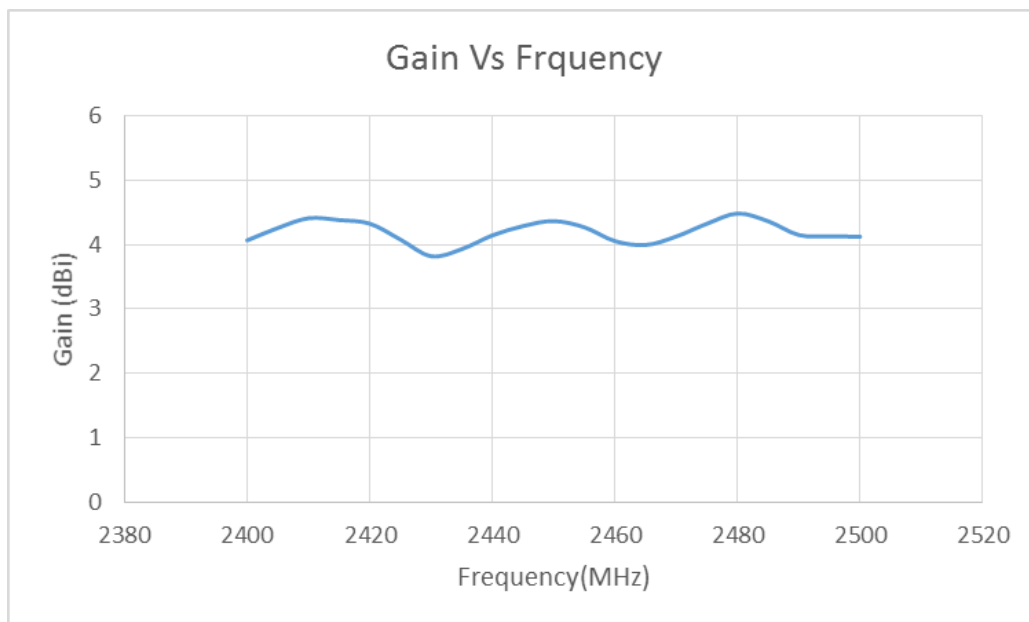
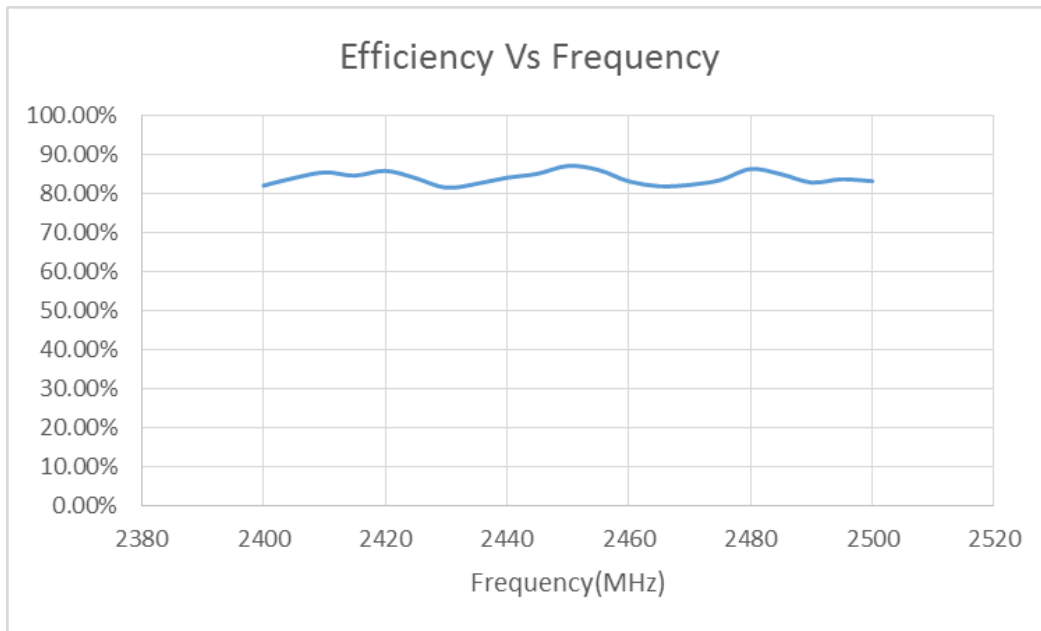
Description: ISM 169/433/868/915/2450MHz
Helical Antenna

Series: Helix Coil

PART NUMBER: W3100X

CHARTS

W3100D



Issue: 1851

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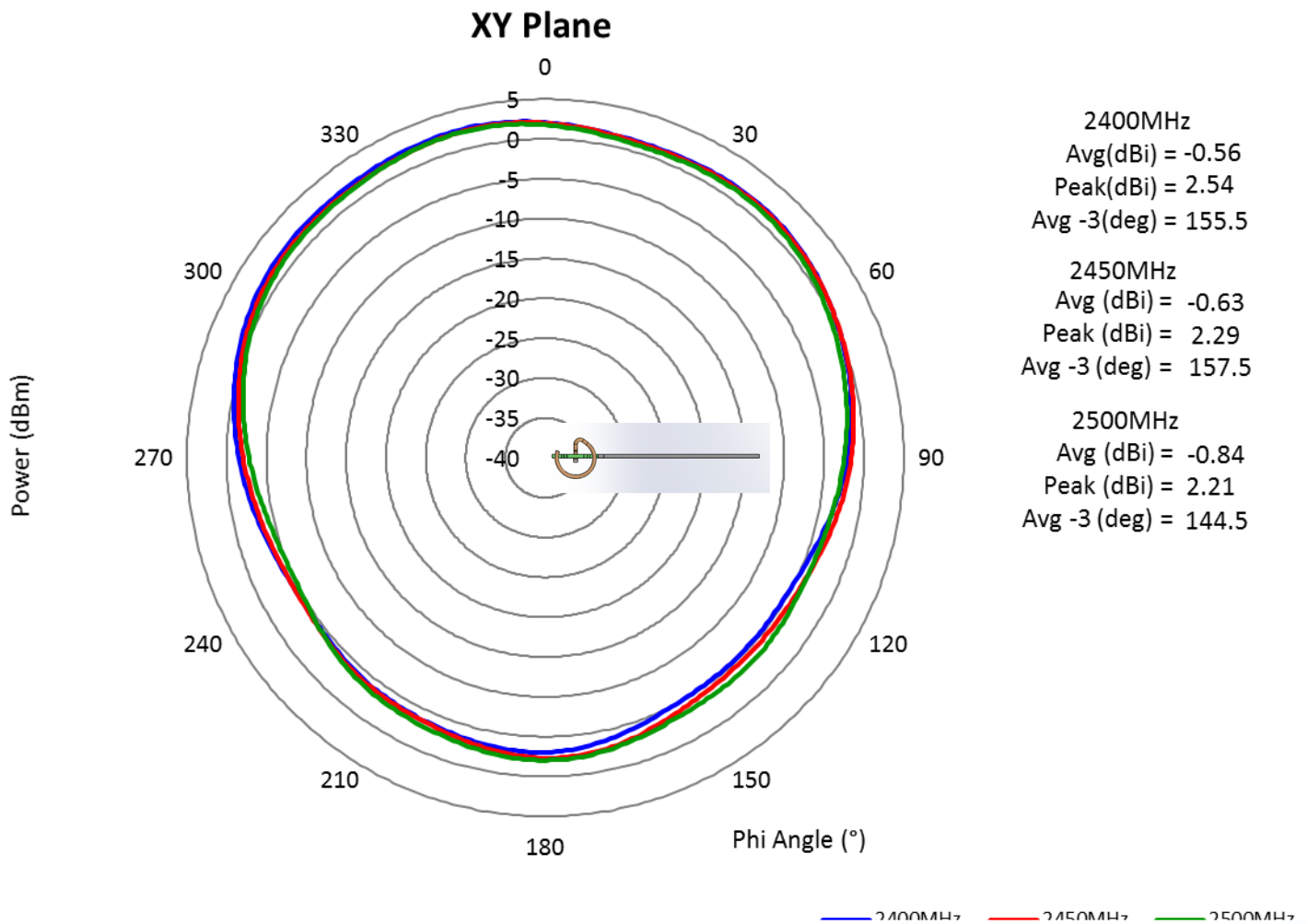
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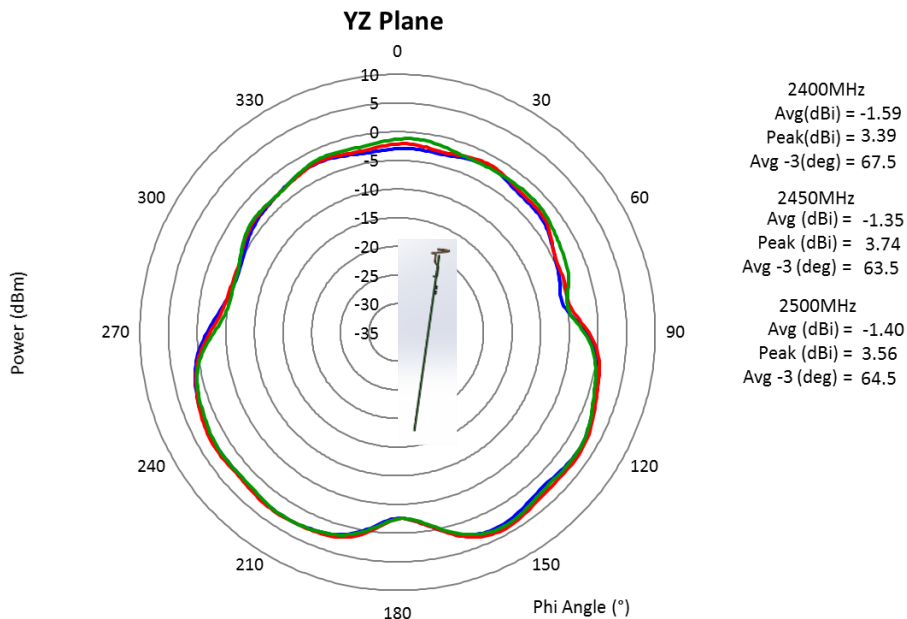
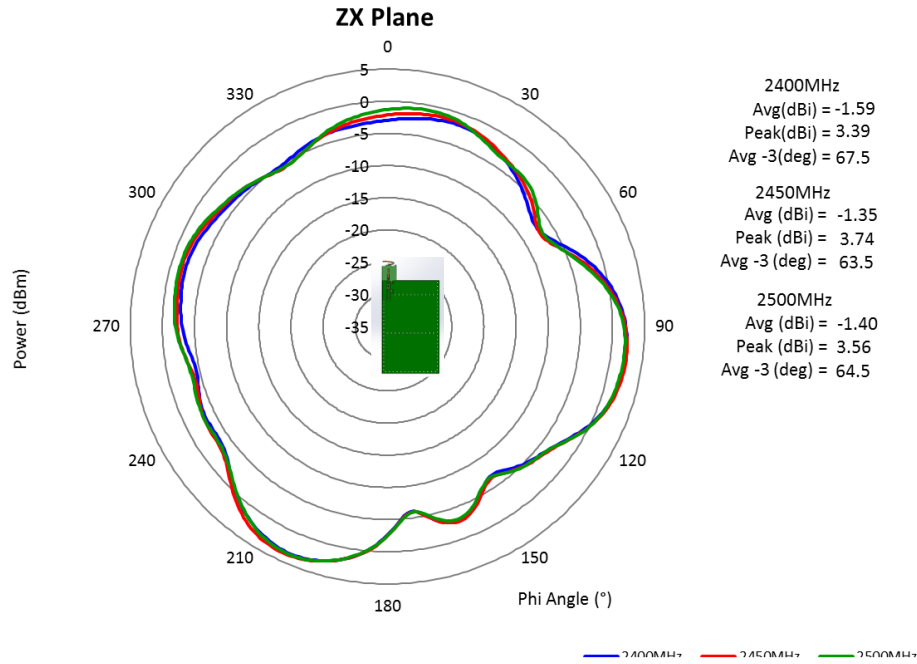
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