PulseLARSEN Antennas

TECHNICAL DATA SHEET

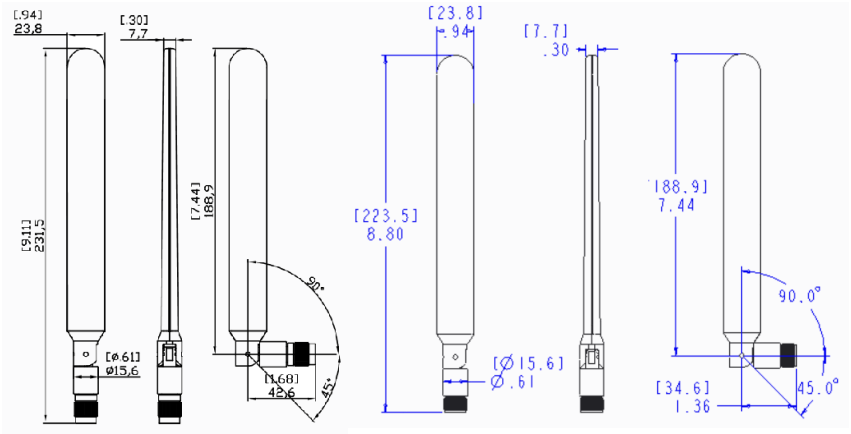
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

Features:

- Multi Band Swivel Mount Dipole
- Transparent antenna
- ICEBLADEWT: TNC Male Connector
- ICEBLADEWS: SMA Male Connector



Applications:

- 2.4GHz/6GHz radios
- WiFi Routers, Access points
- Zigbee, BLE, BT
- Metering, Security, IoT, M2M Applications
- DSRC

All dimensions are in mm / inches

Issue: 1816

RoHS COMPLIANT

For more information:

Pulse Worldwide Headquarters
12220 World Trade Drive
San Diego, CA 92128
USA
Tel:1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

Europe Headquarters
Pulse GmbH & Do, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

This document covers all product variants of the following product family:

ICEBLADEWT： TNC Connector

ICEBLADEWS： SMA Connector

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

ELECTRICAL SPECIFICATIONS

P/N	Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)	VSWR	Power Standing
ICEBLADEWT	2400-2500	4.2+/-1dB	55	2.3:1	5W
	4900-6000	5.3+/-1dB	80	2.3:1	
ICEBLADEWS	2400-2500	4.2+/-1dB	55	2:1	5W
	4900-6000	5.3+/-1dB	80	2:1	

Typical performance measured in free space

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

MECHANICAL SPECIFICATIONS

Plastic radome	PC945A
Color	Clarity
Flammability(Radome)	UL94 V-0
Weight	45.4g
Positions	0°, 45° & 90°
Overall length	8.8 INCHES
Fixing system	° ± 2 °
Azimuth adjustment	° ± 4°
Elevation adjustment	° ± 4°

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-30/+70° C
Temperature	
Stationary	-40/+85° C
Cyclic	Rate 5°C/min, 16 hours
Humidity	
Stationary	95%@ 25° C
Cyclic	12 hours
Salt mist	96 hours

PulseLARSEN Antennas

TECHNICAL DATA SHEET

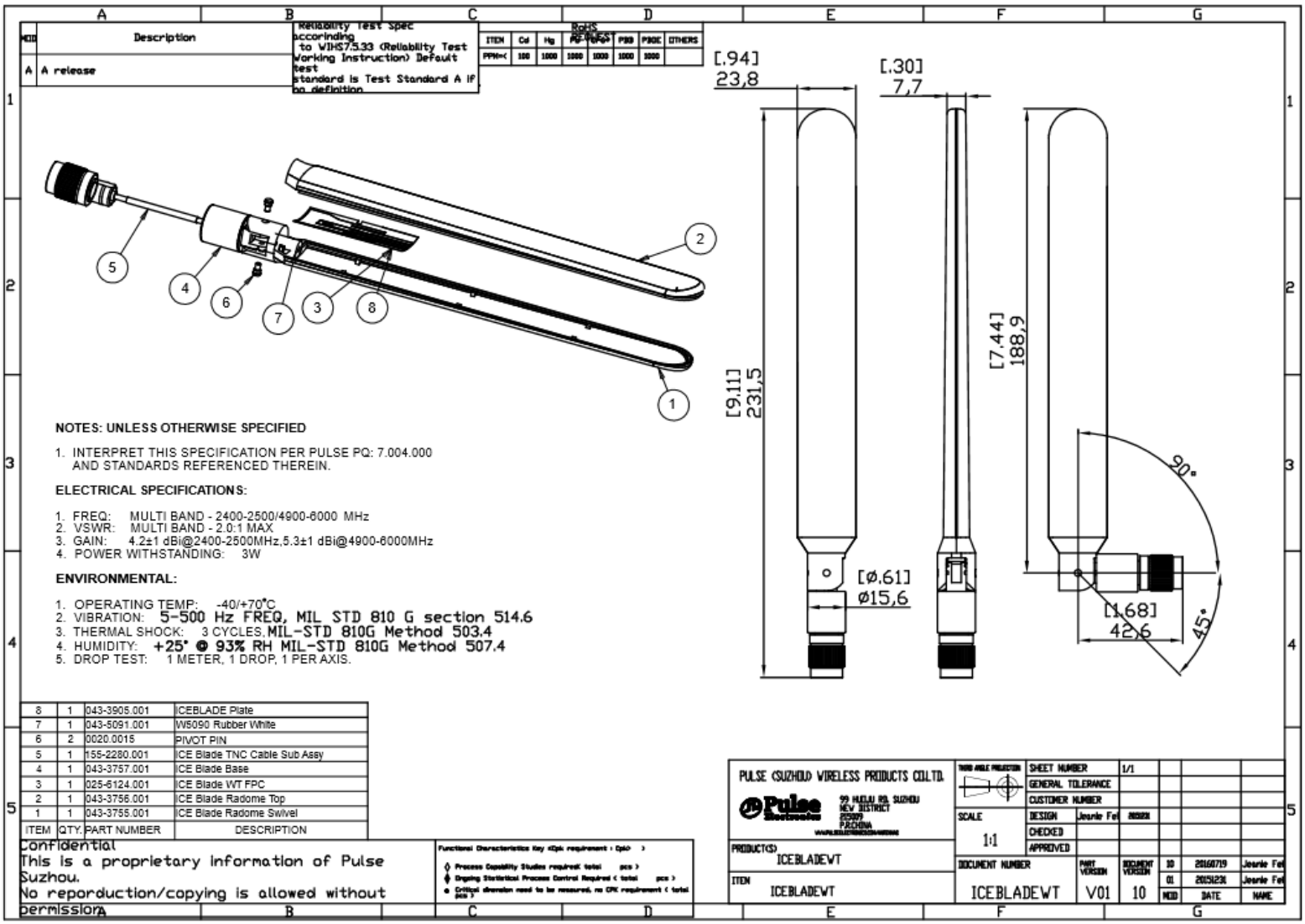
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

MECHANICAL DRAWING

ICEBLADEWT： TNC Connector



NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET THIS SPECIFICATION PER PULSE PQ: 7.004.000 AND STANDARDS REFERENCED THEREIN.

ELECTRICAL SPECIFICATIONS:

1. FREQ: MULTI BAND - 2400-2500/4900-6000 MHz
2. VSWR: MULTI BAND - 2.0:1 MAX
3. GAIN: 4.2±1 dBi@2400-2500MHz,5.3±1 dBi@4900-6000MHz
4. POWER WITHSTANDING: 3W

ENVIRONMENTAL:

1. OPERATING TEMP: -40/+70°C
2. VIBRATION: 5-500 Hz FREQ, MIL STD 810 G section 514.6
3. THERMAL SHOCK: 3 CYCLES, MIL-STD 810G Method 503.4
4. HUMIDITY: +25° @ 93% RH MIL-STD 810G Method 507.4
5. DROP TEST: 1 METER, 1 DROP, 1 PER AXIS.

ITEM	QTY.	PART NUMBER	DESCRIPTION
8	1	043-3905.001	ICEBLADE Plate
7	1	043-5091.001	W5090 Rubber White
6	2	0020.0015	PIVOT PIN
5	1	155-2280.001	ICE Blade TNC Cable Sub Assy
4	1	043-3757.001	ICE Blade Base
3	1	025-6124.001	ICE Blade WT FPC
2	1	043-3756.001	ICE Blade Radome Top
1	1	043-3755.001	ICE Blade Radome Swivel

PULSE (SUZHOU) WIRELESS PRODUCTS CO.,LTD.

PRODUCT(S): ICEBLADEWT

ITEM: ICEBLADEWT

DOCUMENT NUMBER: ICEBLADEWT | PART VERSION: V01 | DOCUMENT VERSION: 10

SCALE: 1:1 | SHEET NUMBER: 1/1 | GENERAL TOLERANCE | CUSTOMER NUMBER | DESIGN: Jeanie Fei | CHECKED | APPROVED

RoHS COMPLIANT

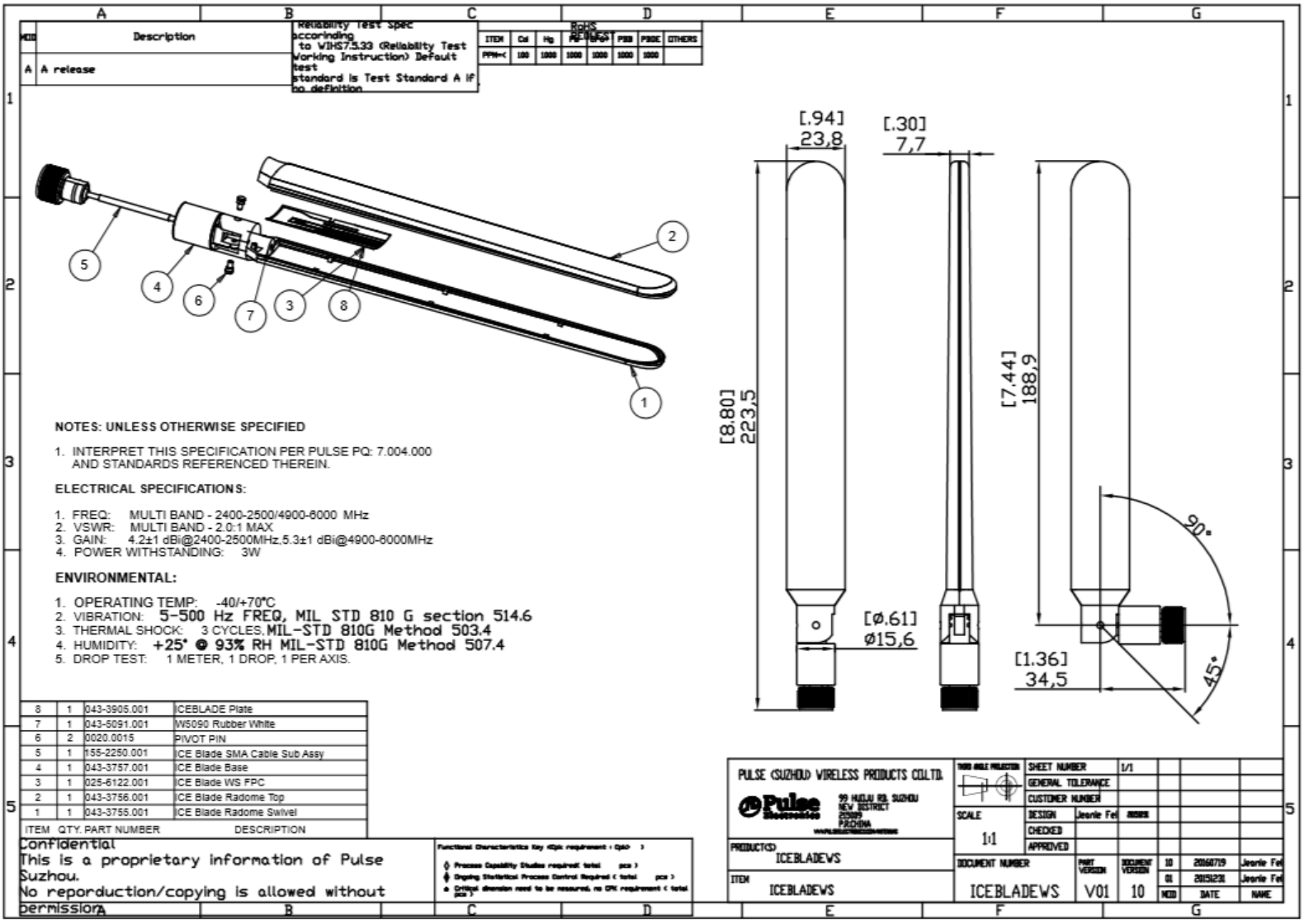
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

MECHANICAL DRAWING

ICEBLADEWS： SMA Connector



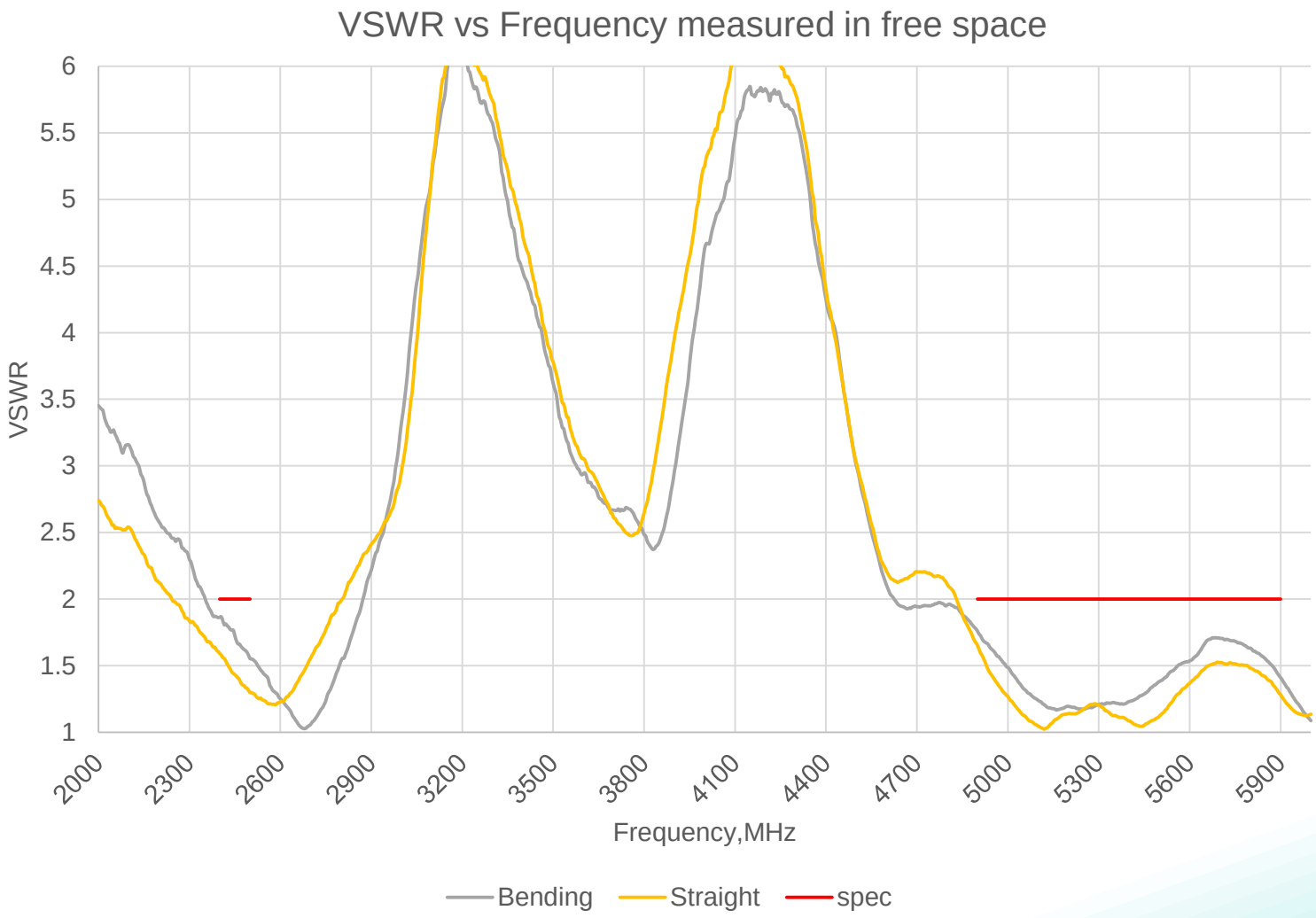
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

OTHER SPECIFICATIONS

VSWR



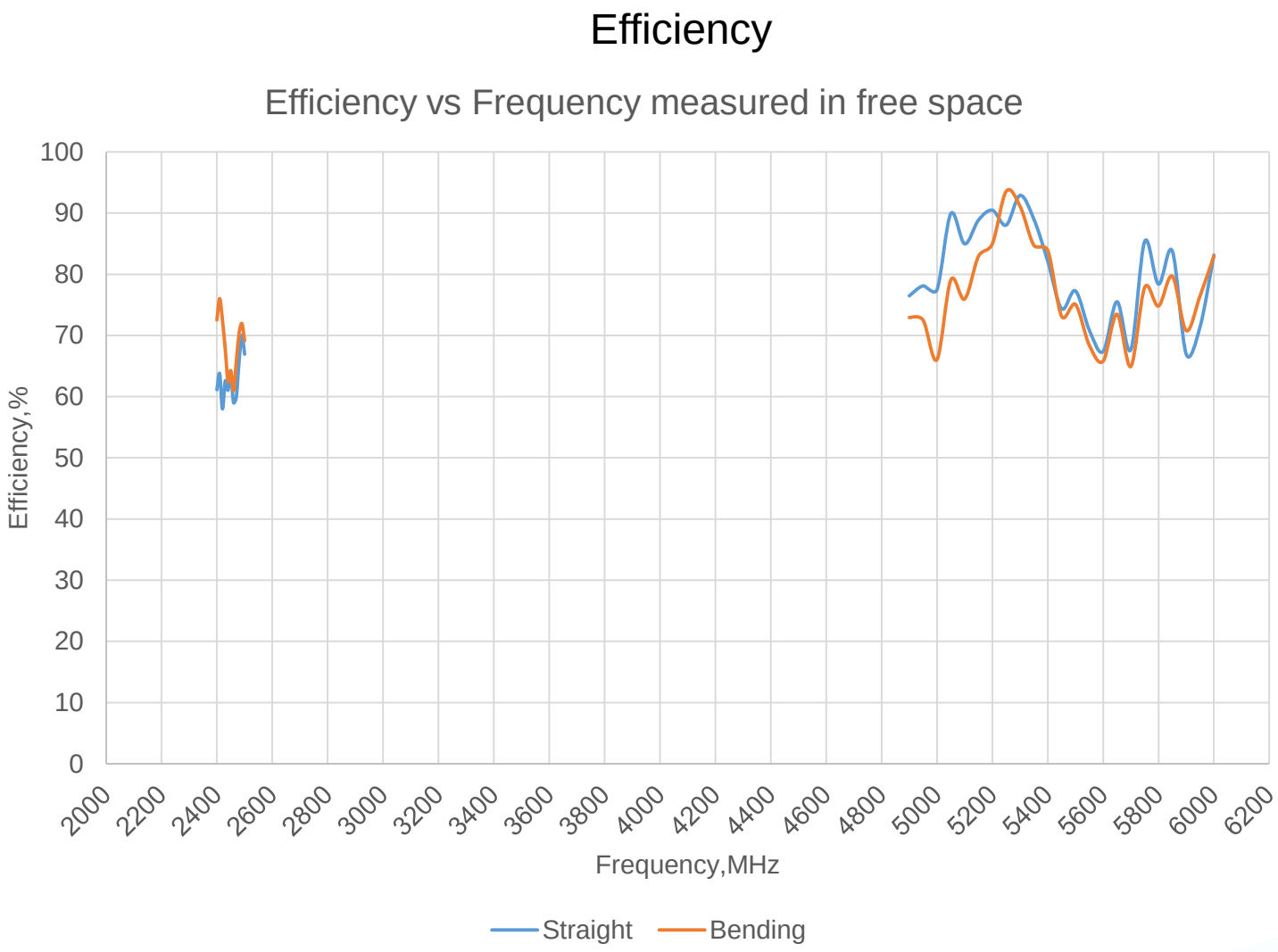
Note: Performance of ICEBLADEWS tested in free space

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS



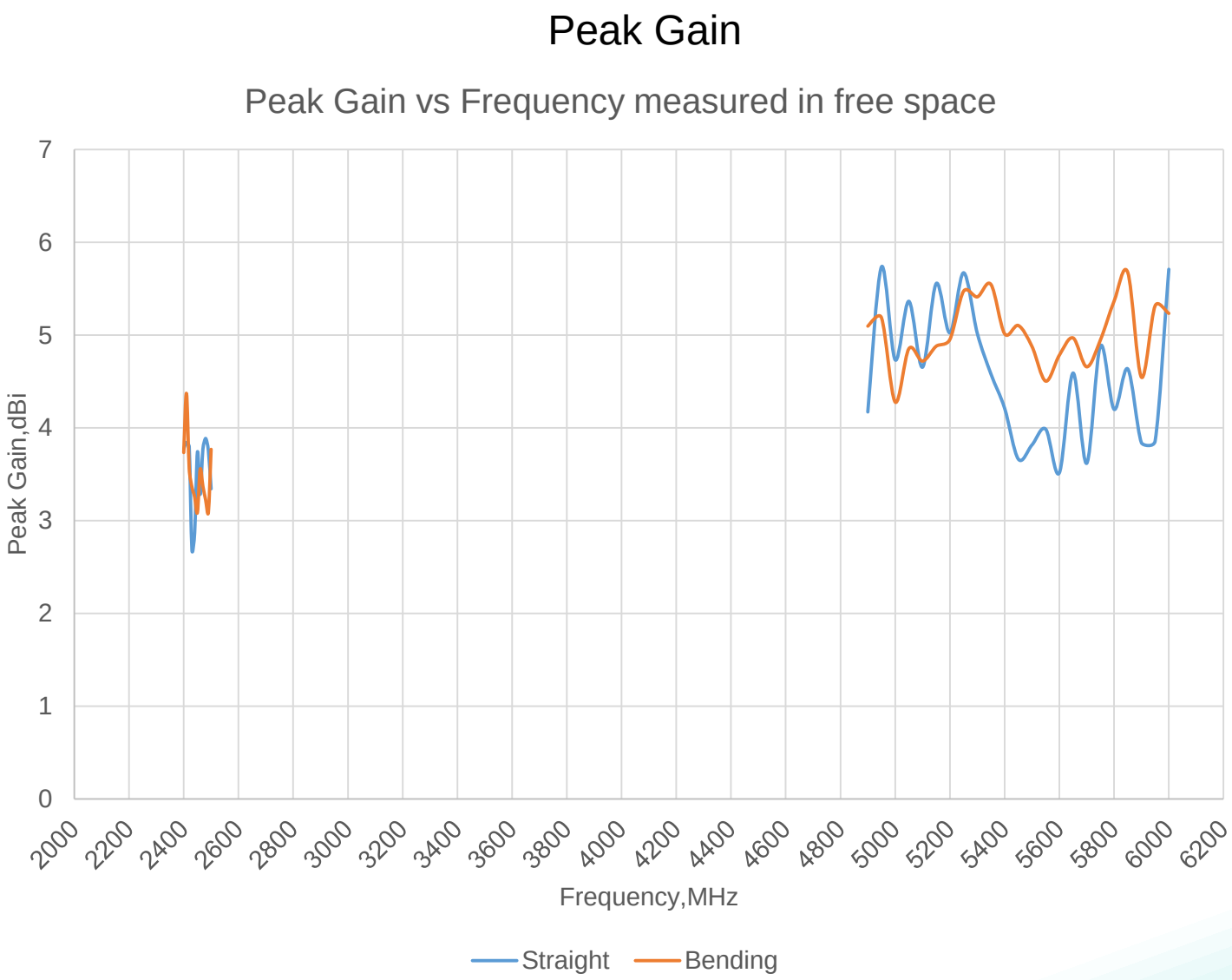
Note: Performance of ICEBLADEWS tested in free space

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS



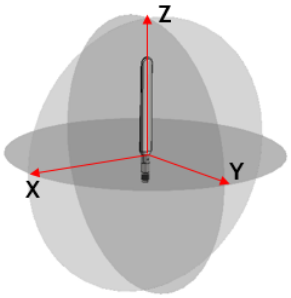
Note: Performance of ICEBLADEWS tested in free space

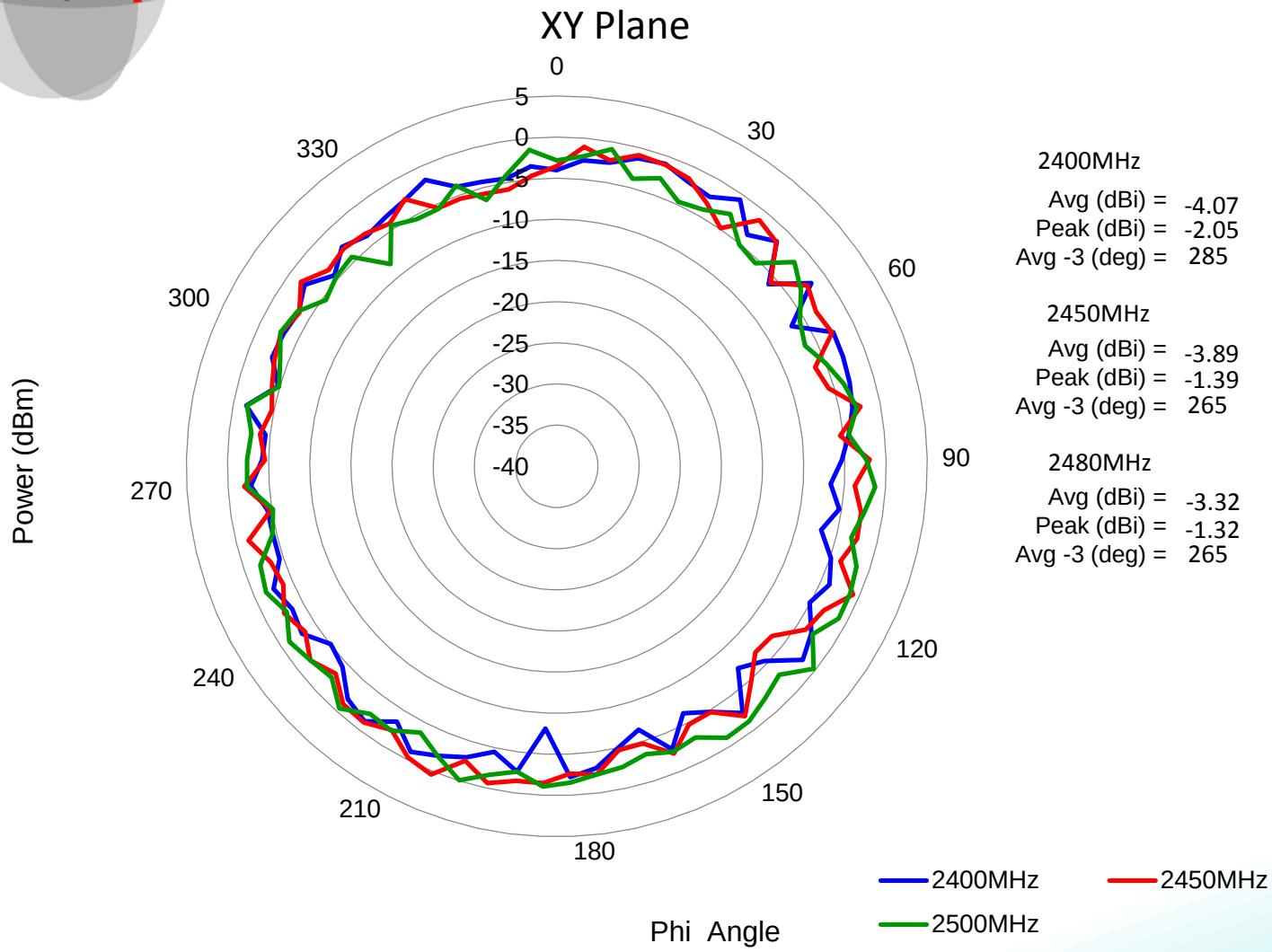
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





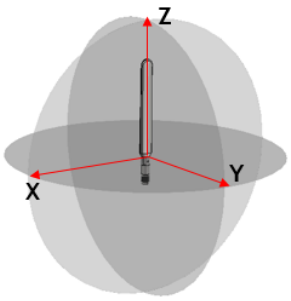
Note: Performance of ICEBLADEWS tested in free space

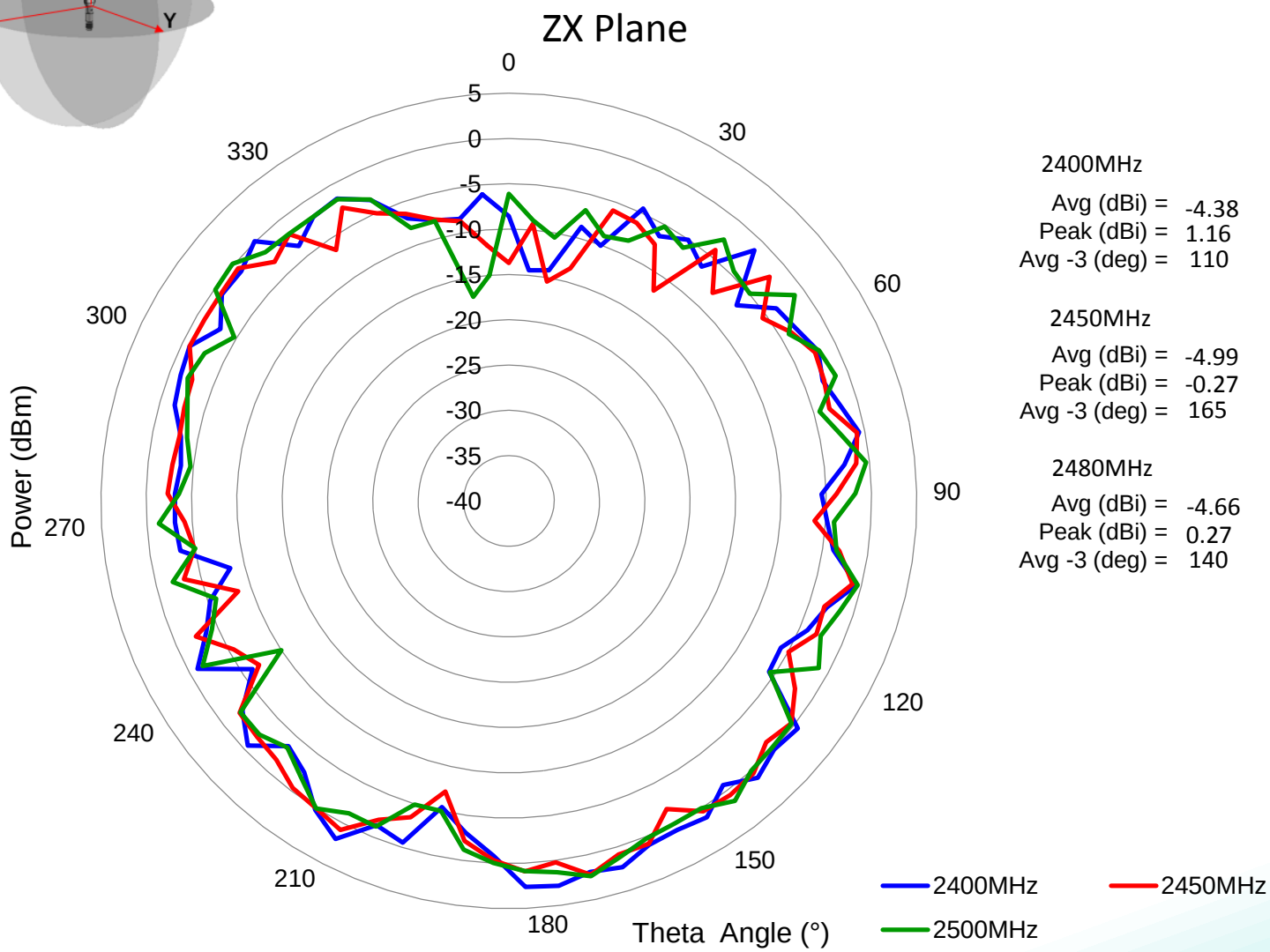
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





2400MHz
Avg (dBi) = -4.38
Peak (dBi) = 1.16
Avg -3 (deg) = 110

2450MHz
Avg (dBi) = -4.99
Peak (dBi) = -0.27
Avg -3 (deg) = 165

2480MHz
Avg (dBi) = -4.66
Peak (dBi) = 0.27
Avg -3 (deg) = 140

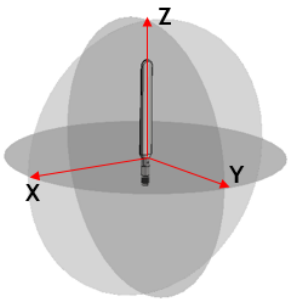
Note: Performance of ICEBLADEWS tested in free space

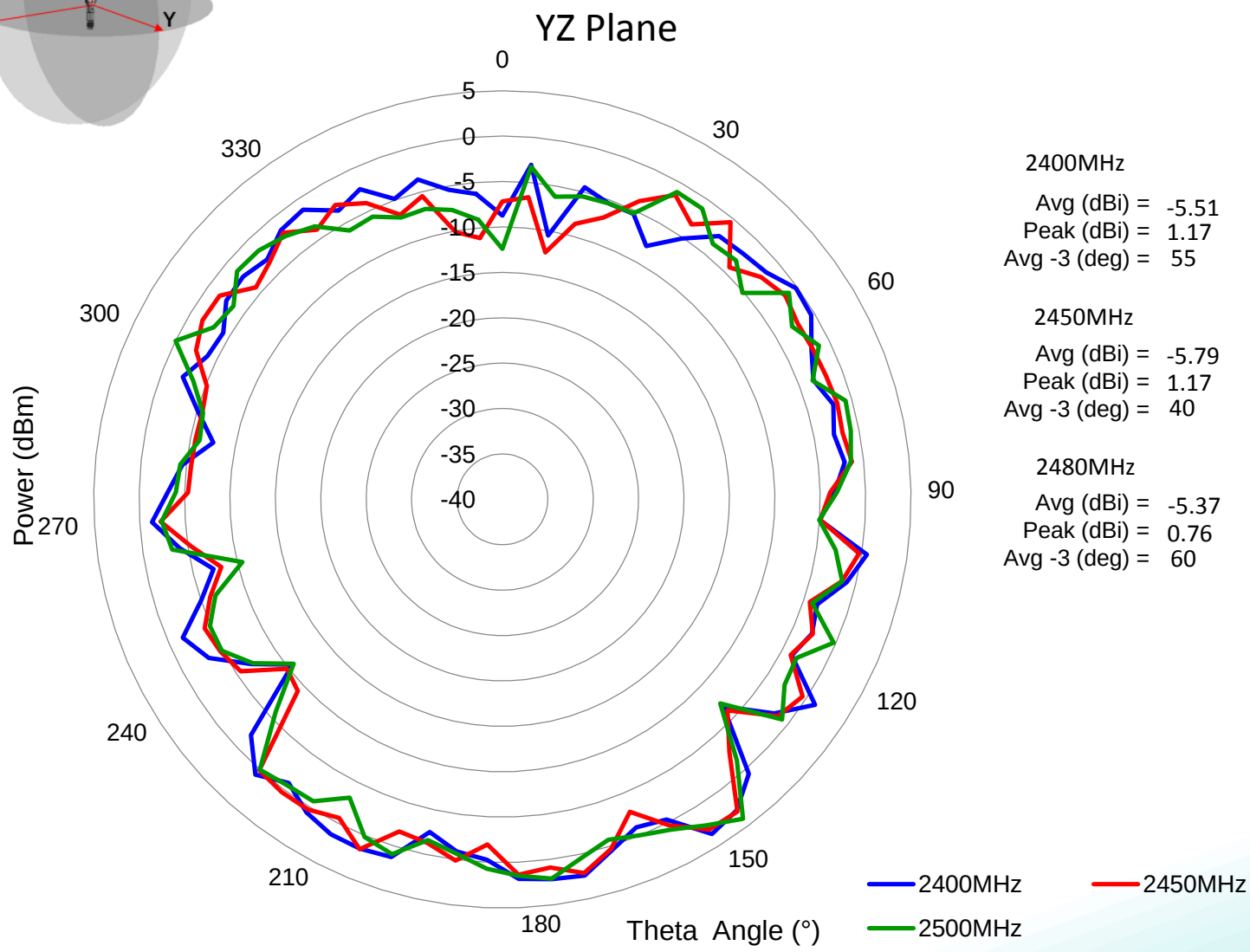
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





2400MHz

Avg (dBi) =	-5.51
Peak (dBi) =	1.17
Avg -3 (deg) =	55

2450MHz

Avg (dBi) =	-5.79
Peak (dBi) =	1.17
Avg -3 (deg) =	40

2480MHz

Avg (dBi) =	-5.37
Peak (dBi) =	0.76
Avg -3 (deg) =	60

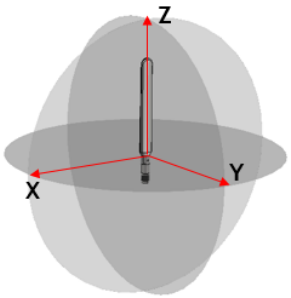
Note: Performance of ICEBLADEWS tested in free space

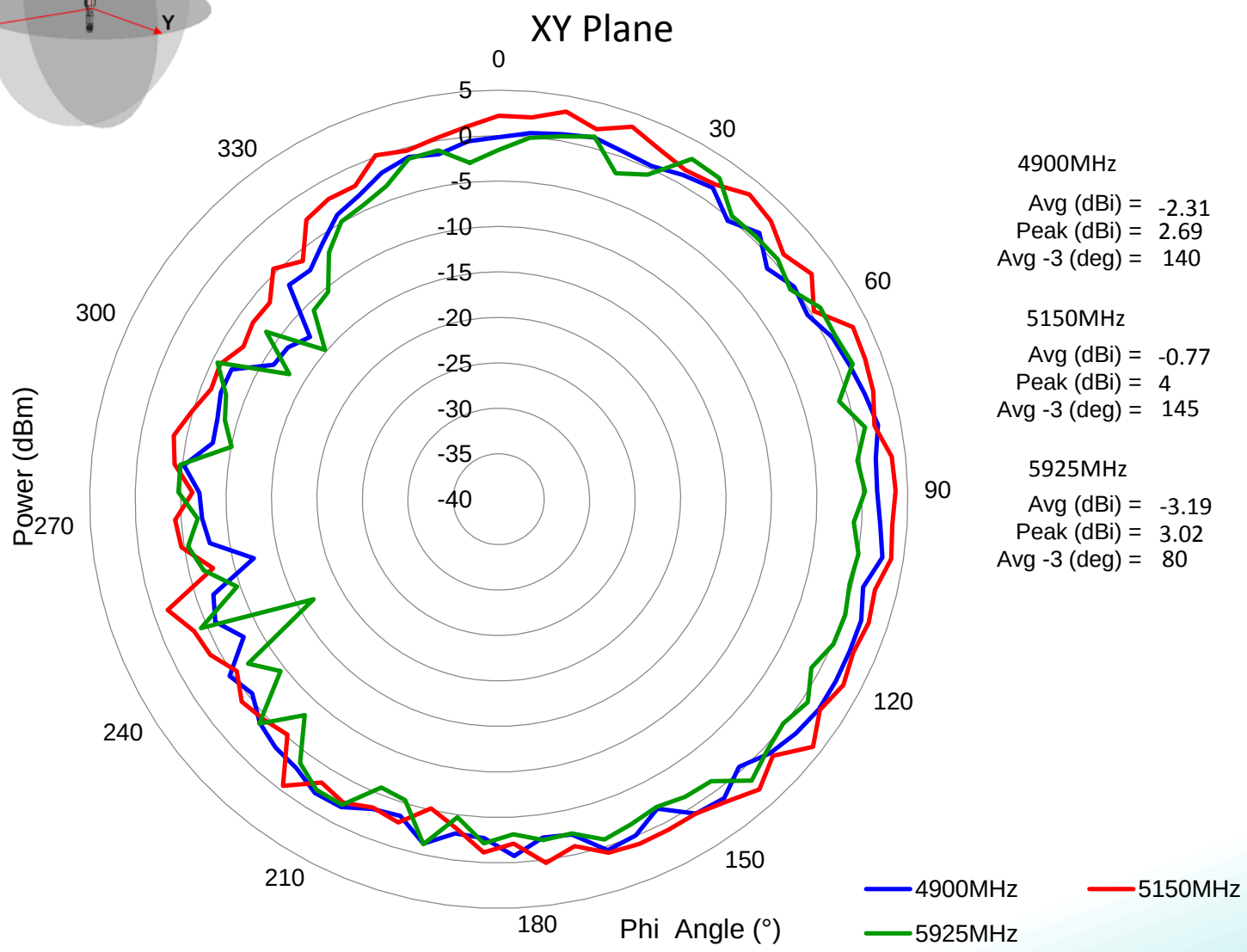
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





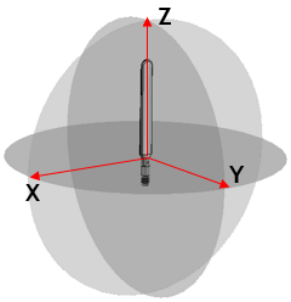
Note: Performance of ICEBLADEWS tested in free space

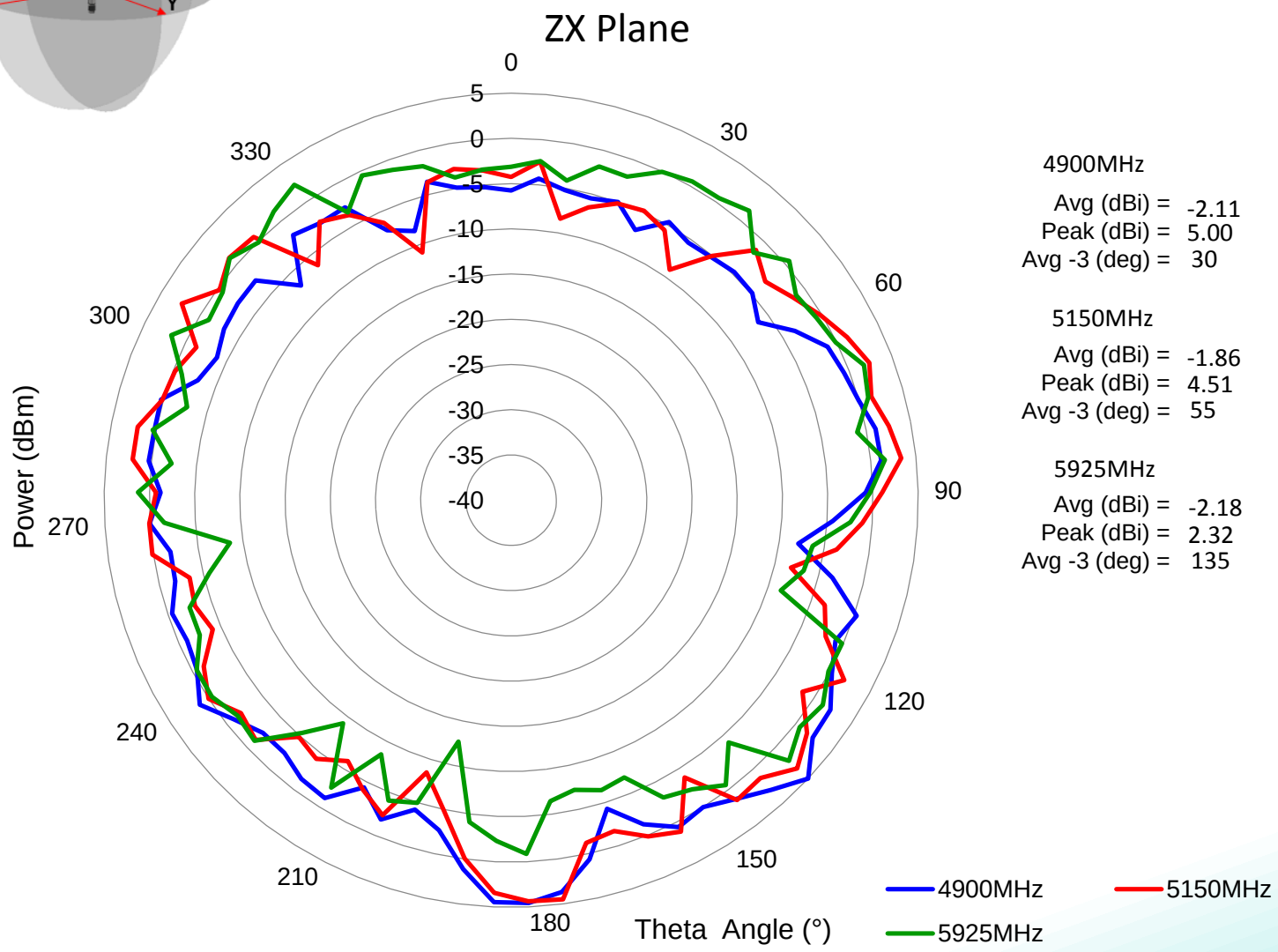
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





4900MHz

Avg (dBi) = -2.11
Peak (dBi) = 5.00
Avg -3 (deg) = 30

5150MHz

Avg (dBi) = -1.86
Peak (dBi) = 4.51
Avg -3 (deg) = 55

5925MHz

Avg (dBi) = -2.18
Peak (dBi) = 2.32
Avg -3 (deg) = 135

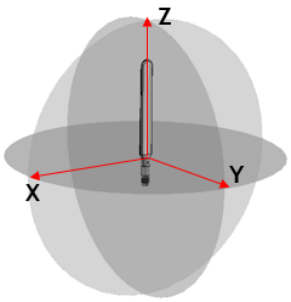
Note: Performance of ICEBLADEWS tested in free space

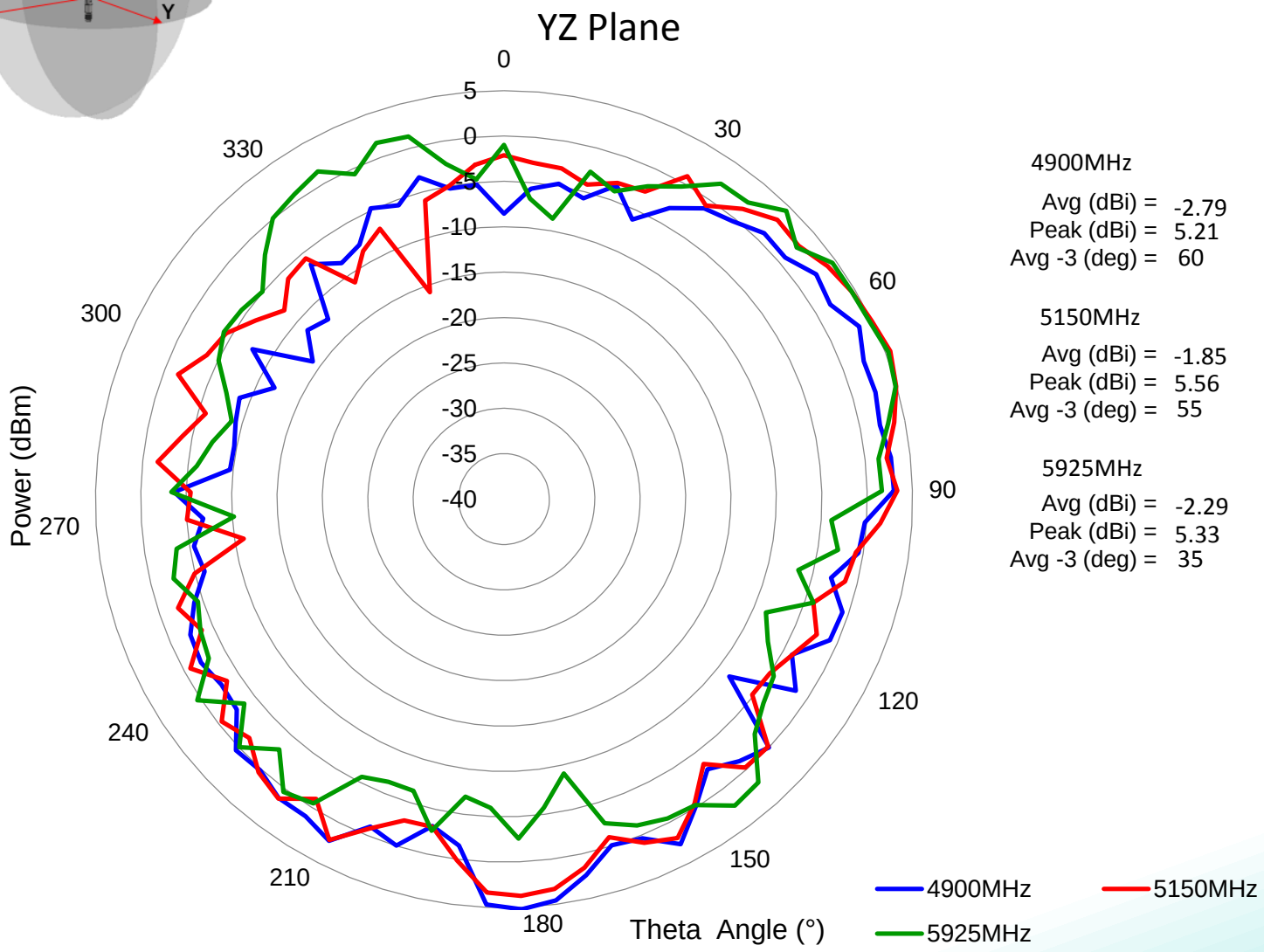
Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

CHARTS





Note: Performance of ICEBLADEWS tested in free space

Description: WiFi 2.4/5Ghz/DSRC Antenna

Series: IceBlade

PART NUMBER: ICEBLADEWx

PACKAGING

Pack 10 antennae in one box, each antenna has a PE bag with one label.