



EX-55

5.9GHz OMNI Antenna



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Modification History

REV	Content	Date
00		2022/10/14

Mechanical Properties

Operating Temperature	-20°C ~ +65 °C
Humidity	10 ~ 95% RH
Dimensions	21.8 x 215.5 mm
Enclosure Material	ABS
Weight	26.5 g
Color	Black
Connector	FAKRA Z Jack (SMB)
Connector Material	❖ Plastic Housing: Nylon ❖ Body: Brass ❖ Center Contact: Brass ❖ Insulator: Teflon ❖ Operating Temperature: -40°C ~ +105°C

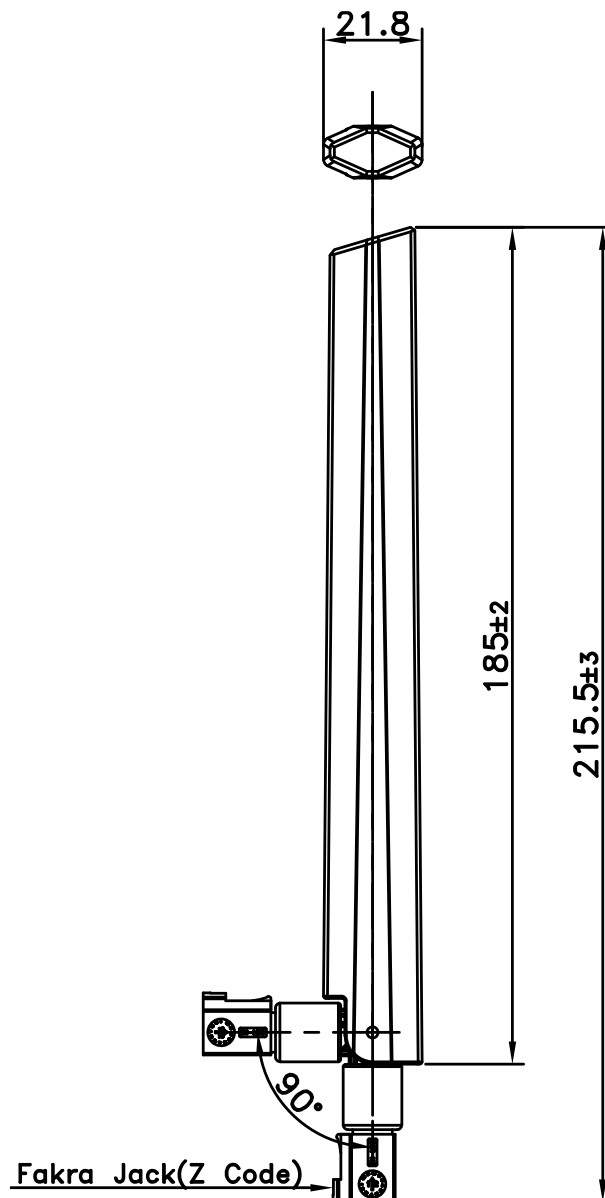
Electrical Properties

Frequency Range	5150 ~ 5950 MHz
Impedance	50 Ohm
VSWR	≤ 2.5
Radiation	Omni
Gain	5 dBi
Polarization	Vertical
Locking System	FAKRA Z jack (SMB)
Connector Properties	Impedance: 50 ohm ❖ Frequency Range: 0~4GHz ❖ V.S.W.R: 1.5(Max.) ❖ Dielectric Withstanding: ≤ 750 Vrms ❖ Voltage Insulation Resistance: ≥ 1000 Mega Ohms

- ❖ Contact Resistance:
 - ◆ Center contact: 8.0 Milliohms (Min.)
 - ◆ Outer contact: 6.0 Milliohms (Min.)

Durability (mating): ≥ 50 cycles

Drawing



Electrical Test



7/27/2022 10:08:47 AM
1328.5170K92-100710-ac

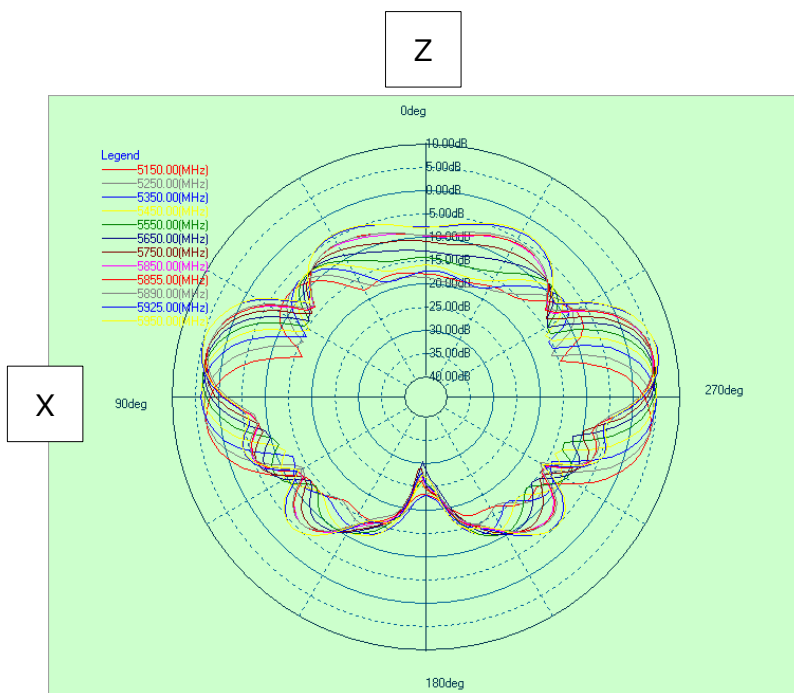
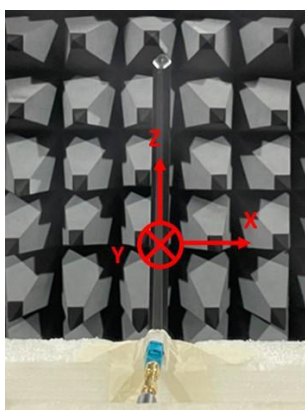


Antenna Efficiency

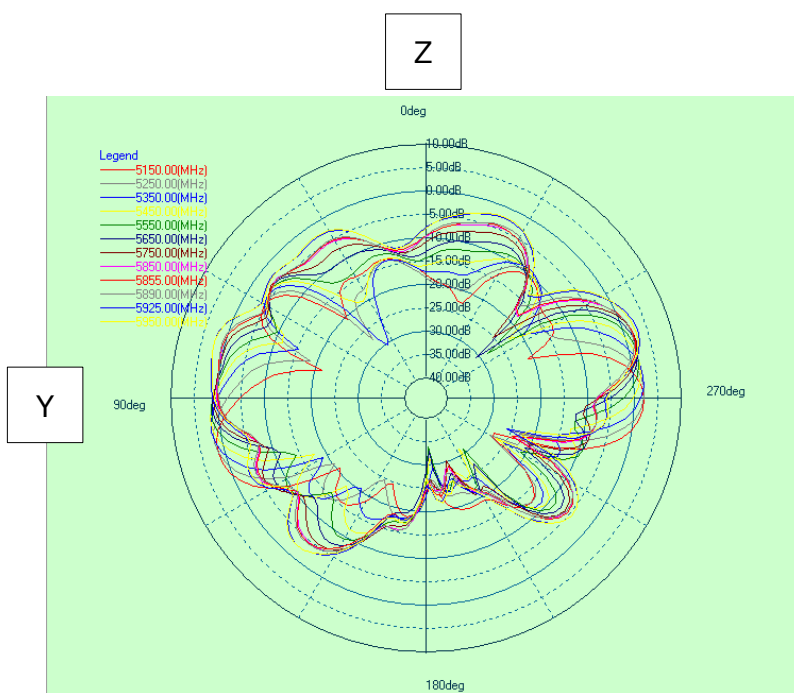
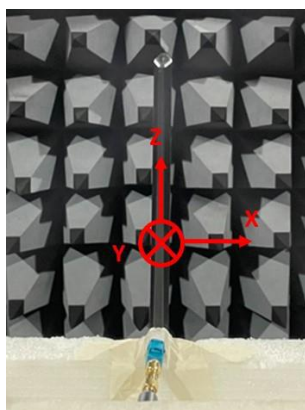
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5855	5890	5925	5950
Efficiency (%)	51	50	47	46	47	48	48	49	49	52	51	57
Peak Gain (dBi)	5.35	5.36	5.17	5.47	5.51	5.55	5.20	5.11	5.14	5.00	5.62	5.19

2D Radiation Pattern

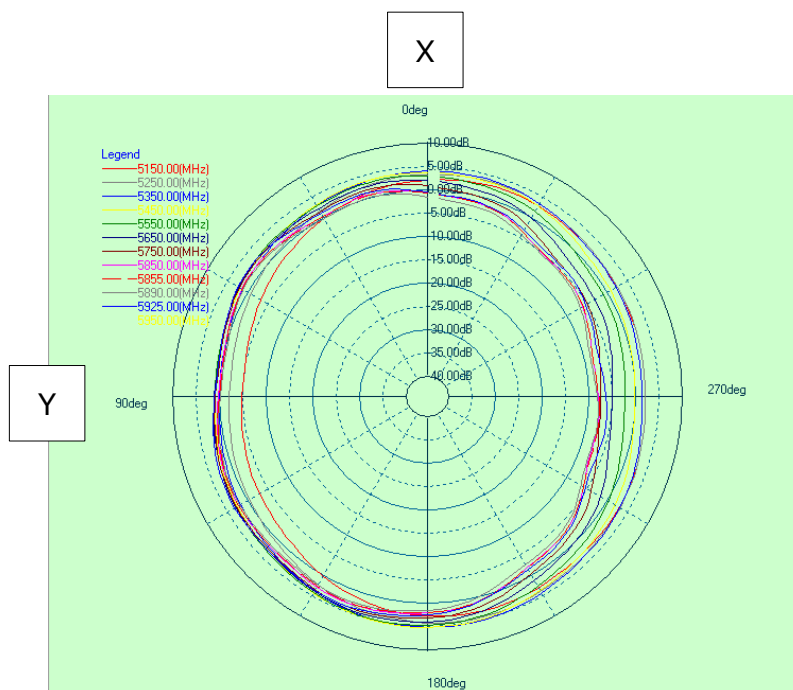
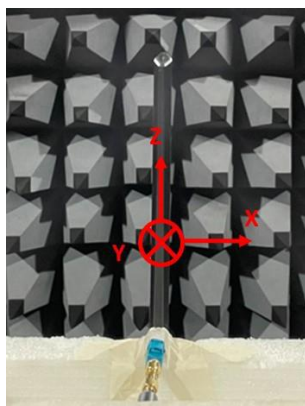
XZ Plane



YZ Plane

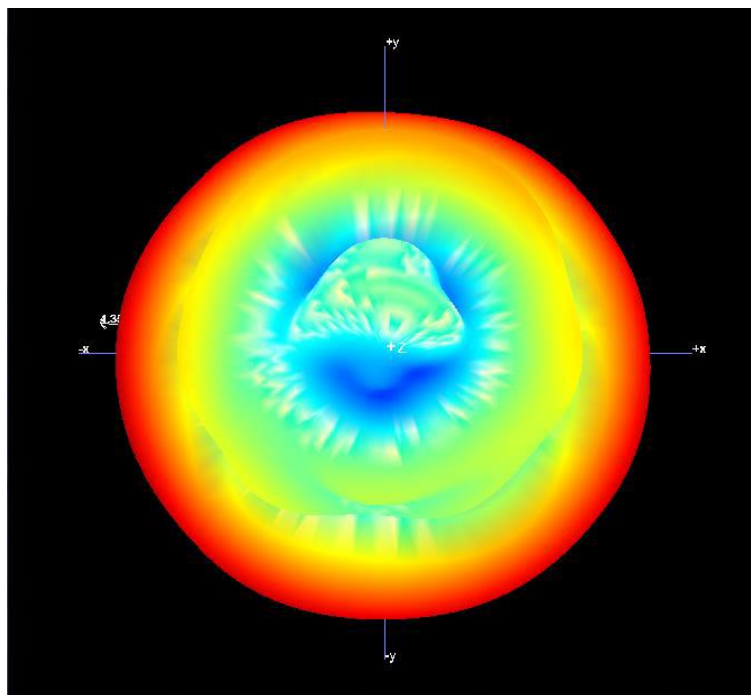


XY Plane

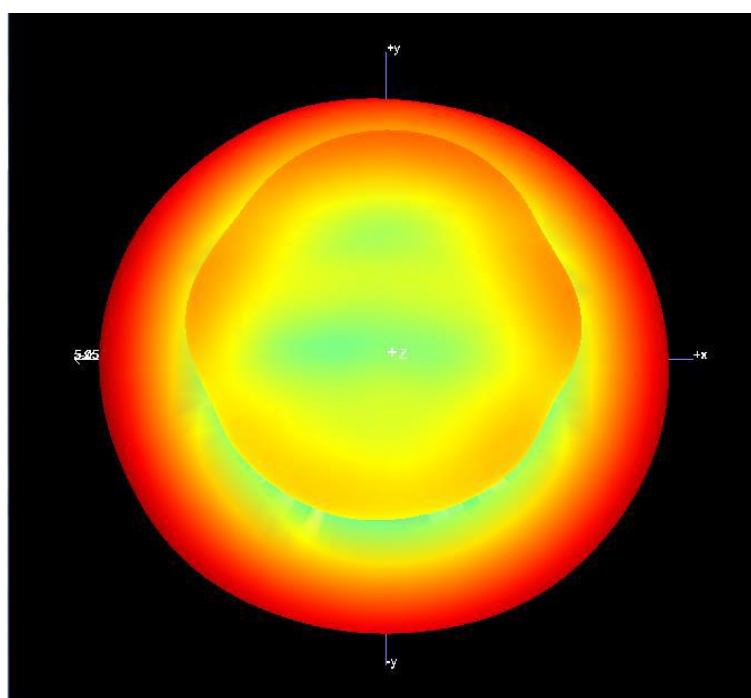


3D Radiation Pattern

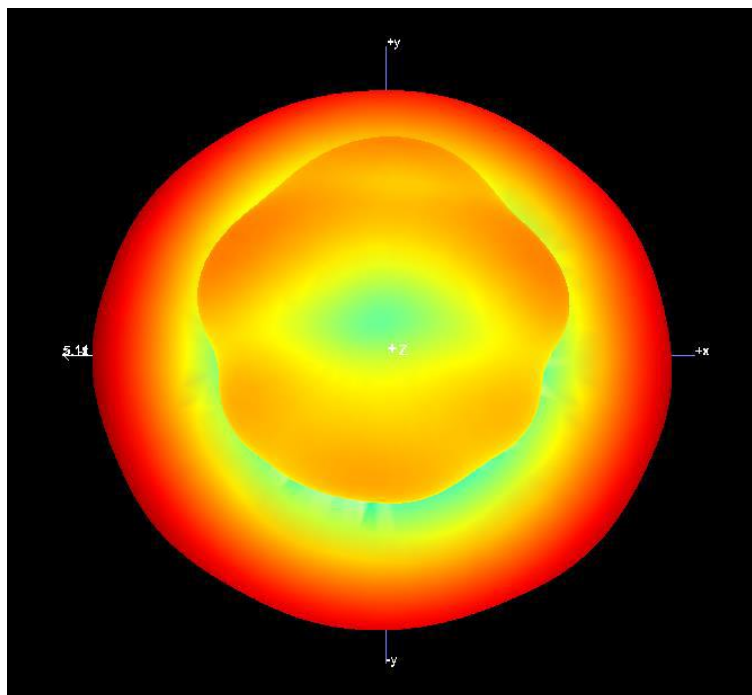
5150 MHz



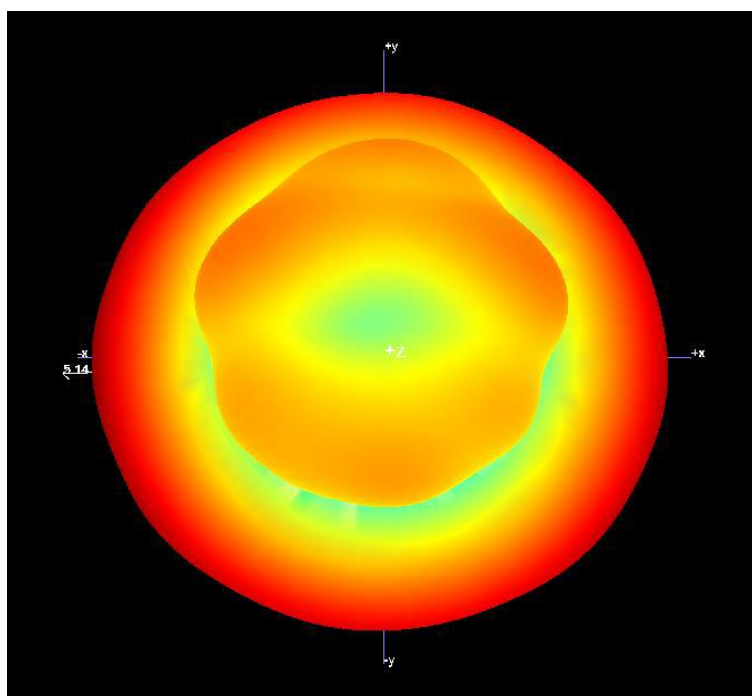
5550 MHz



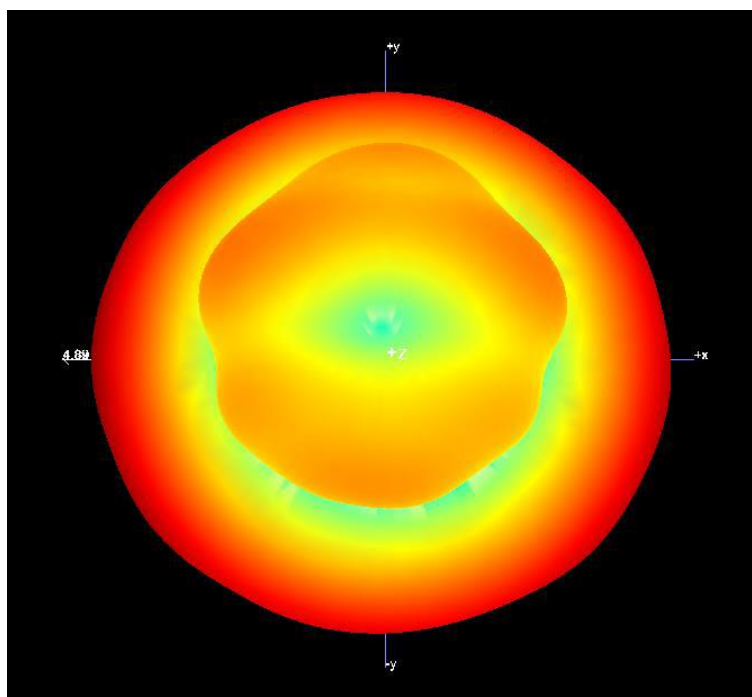
5850 MHz



5855 MHz



5890 MHz



5925 MHz

