

Outdoor

UHF/700/800+GNSS Direct Mount 2-in-1 Antenna

SKF450758L125DM(W) – 440-470 / 750-960 MHz GNSS L1, L2, L5



Features & Applications:

- Vehicle roof mount, directly on metal plane
- Port 1; 440-470 / 750-960MHz
- Port 2; Active GNSS L1, L2 & L5 with low noise 30dB amplifier
- Cable / length; RG-58 / 17ft (5.2m)
- GNSS Cable / length; RG-174 / 17ft (5.2m)
- Connector; SMA-Male
- Available in Black (P/N SKF450758L125DM) or White (P/N SKF450758L125DMW)
- Heavy and light vehicles
- IoT, navigation, tracking

Electrical specifications @ 25° C

Frequency Band – 440-470 / 750-960 MHz

Antenna type	Nominal Impedance	Polarization	Radiation pattern	Power withstanding	DC Ground
Dipole	50Ω	Vertical	Omni	45W	Yes

Frequency (MHz)	440-470	750-960
VSWR W/17FT (5.2M) Cable	2.5:1	2:1
Avg. Peak Gain (dBi)	3.3	3.5
Avg. Efficiency (%)	66	60
HPBW Vertical Plane (°)	36	42

GNSS Antenna: Frequency Bands – L1, L2 & L5

Frequency (MHz)	L1: 1561-1602	L2: 1215-1237	L5: 1164-1189
Return Loss (dB)	< -10	< -13	< -15
Gain – Radiating Element (dBic)	3.6	0.3	-0.4
Average Efficiency (%)	70	60	46
LNA Gain (dB) Typical	28	33	30
Noise Figure (dB)	1.7 @ 1575MHz	2.2 @ 1227MHz	2.2 @ 1164MHz
Polarization	RHCP		
Operating Voltage (V)	2.5 - 18		
Power Consumption	Max. 16mA		

Mechanical Specifications

SKF450758L125DM

Size W/H/L	Color	Weight	Cable / Connector Type	Fixing System
52.5 (2.07") x 63.6 (2.50") x 178.3 (7.02") mm	Black	375grms (0.83lbs)	RG-58 / SMA-Male RG-174 / SMA-Male	Direct Mount
Housing Material	Operating Temperature	Storage Temperature	Ingress Protection	RoHS-6 Compliant
UV Protected Plastic	-40°C to +85°C	-40°C to +85°C	IP67	Yes

Notes:

1. Measured on Ø52in (1.3m) ground plane.
2. Requires Ø.875" (22.3mm) hole.

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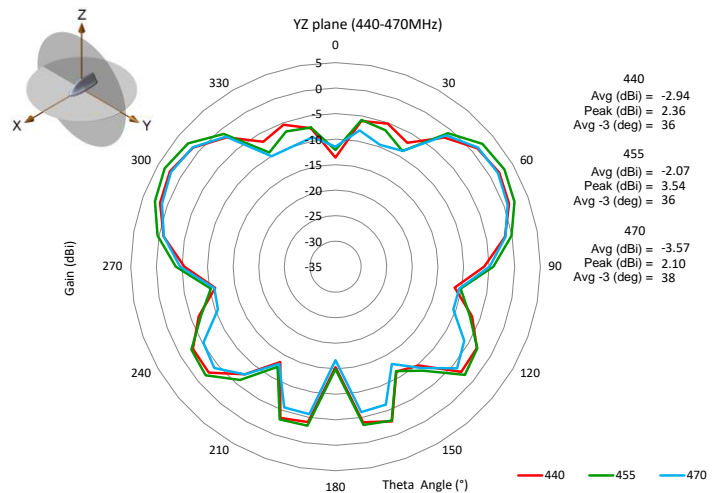
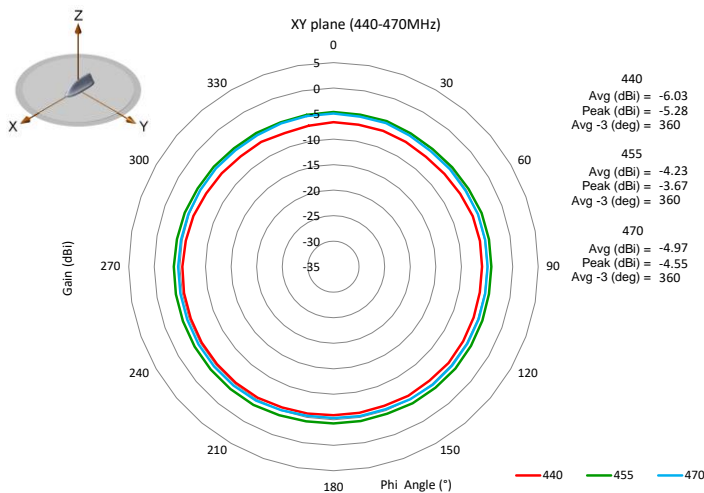
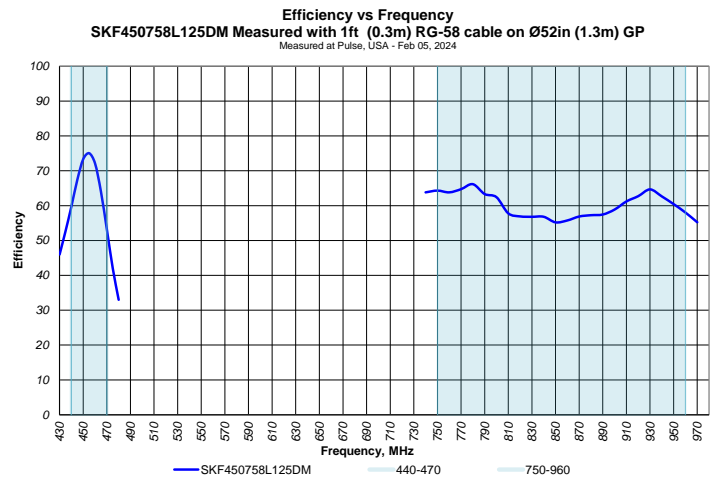
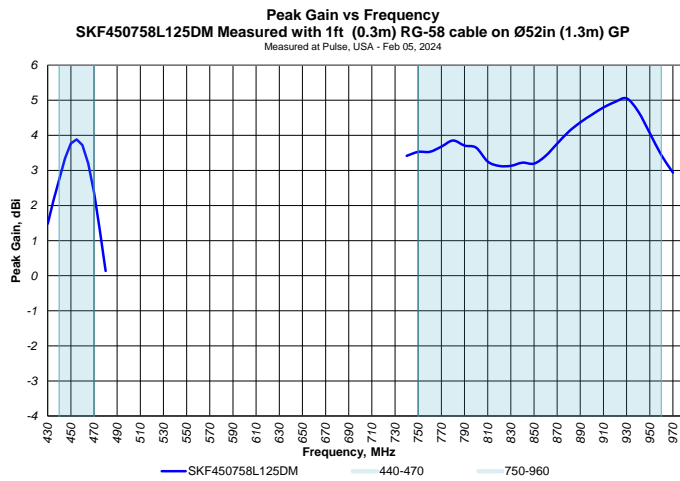
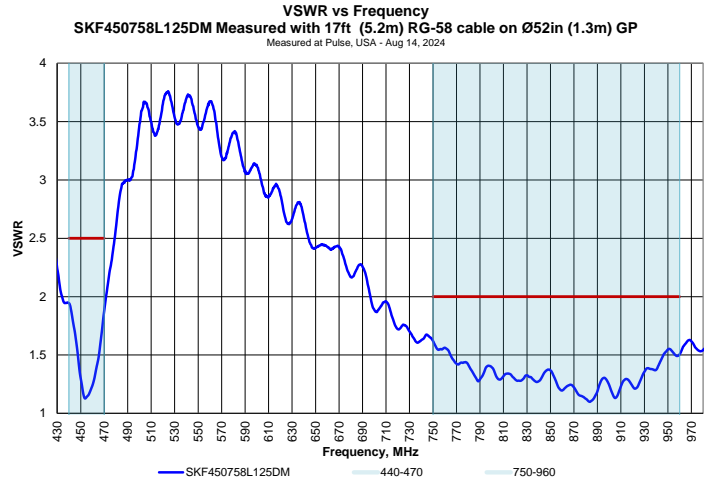


Test Setup / Charts

SKF450758L125DM

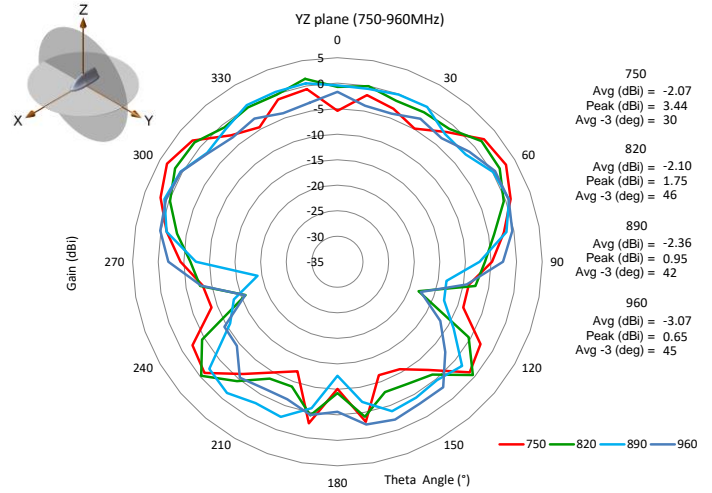
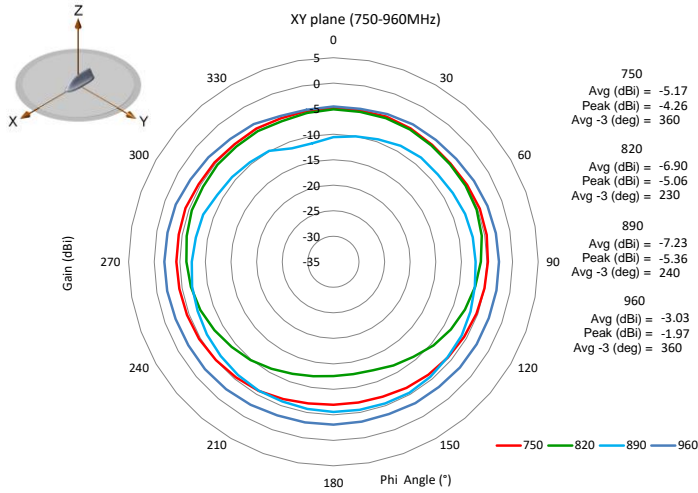


antenna sample measured on $\varnothing 52\text{in}$ (1.3m) ground plane

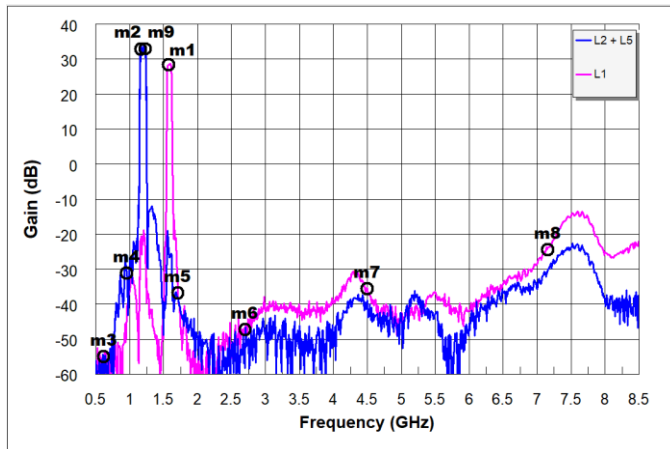


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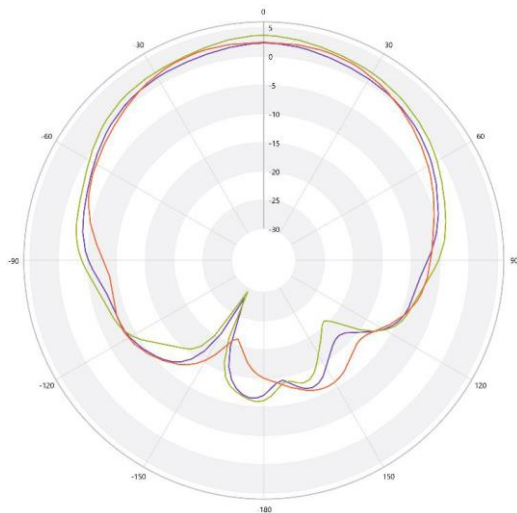
SKF450758L125DM(W) – 440-470 / 750-960 MHz GNSS L1, L2, L5



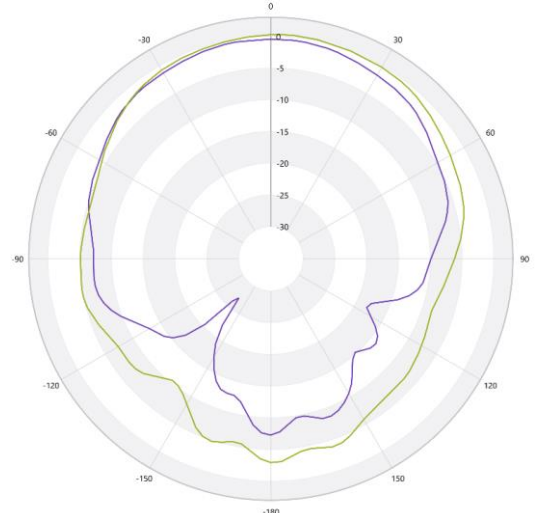
LNA Gain and out-of-band rejection.



L1 RHCP Pattern



L2 + L5 RHCP Pattern



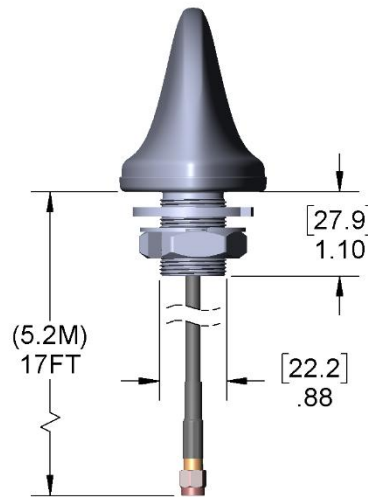
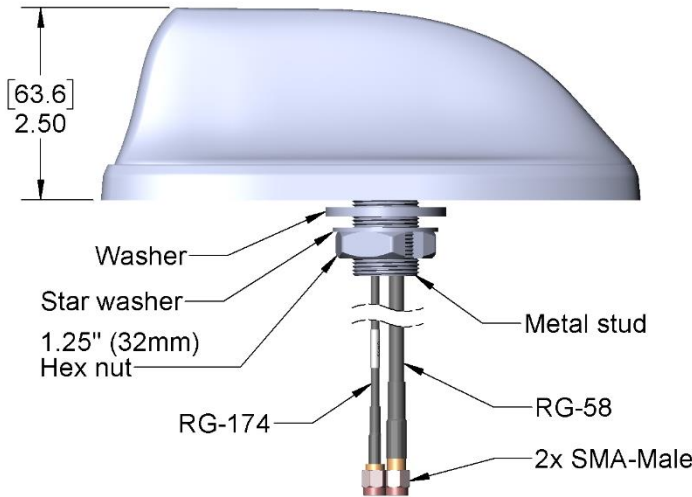
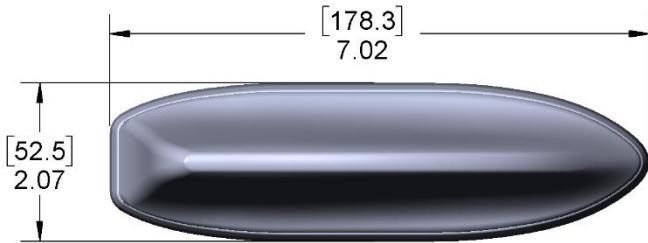
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Mechanical Drawing

SKF450758L125DM



Shown without gasket

Dimensions: Inches (mm)

Unless otherwise specified, all tolerances are ± 0.020 (0.5mm)

Packaging

SKF450758L125DM

- 1 antenna packed in a plastic bag.
- 1 label on each plastic bag with part number, description, date code.

Notes:

- Please contact sales for availability, lead time, and/or any special requests. Samples available upon request.
- Similar product: SKF490758L125DM (UHF band 470-512MHz).

For More Information:

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