


Customer: _____

Agent: _____

SPECIFICATION of Fresnel Lens

MODEL NO. : NCL-9S **NIPPON CERAMIC CO., LTD.**176-17 Hirooka, Tottori-shi, 689-1193 JAPAN
TEL: +81-857-53-4666 FAX: +81-857-53-3532

Approved by		Checked by		Prepared by	
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1. Scope

This specification describes a Fresnel lens which is used for passive infrared detector.

2. Type of Unit

2.1. Type Name: Spherical shape Fresnel lens

2.2. Model No.: NCL-9S

3. Dimensions

See Figure 1.

4. Material

High Density Polyethylene (HDPE)

5. Optical Characteristics**5.1. Number of Zones**

1 zone

5.2. Detection Area

See Figure 2.


6. Environmental Characteristics**6.1. Operating Temperature**

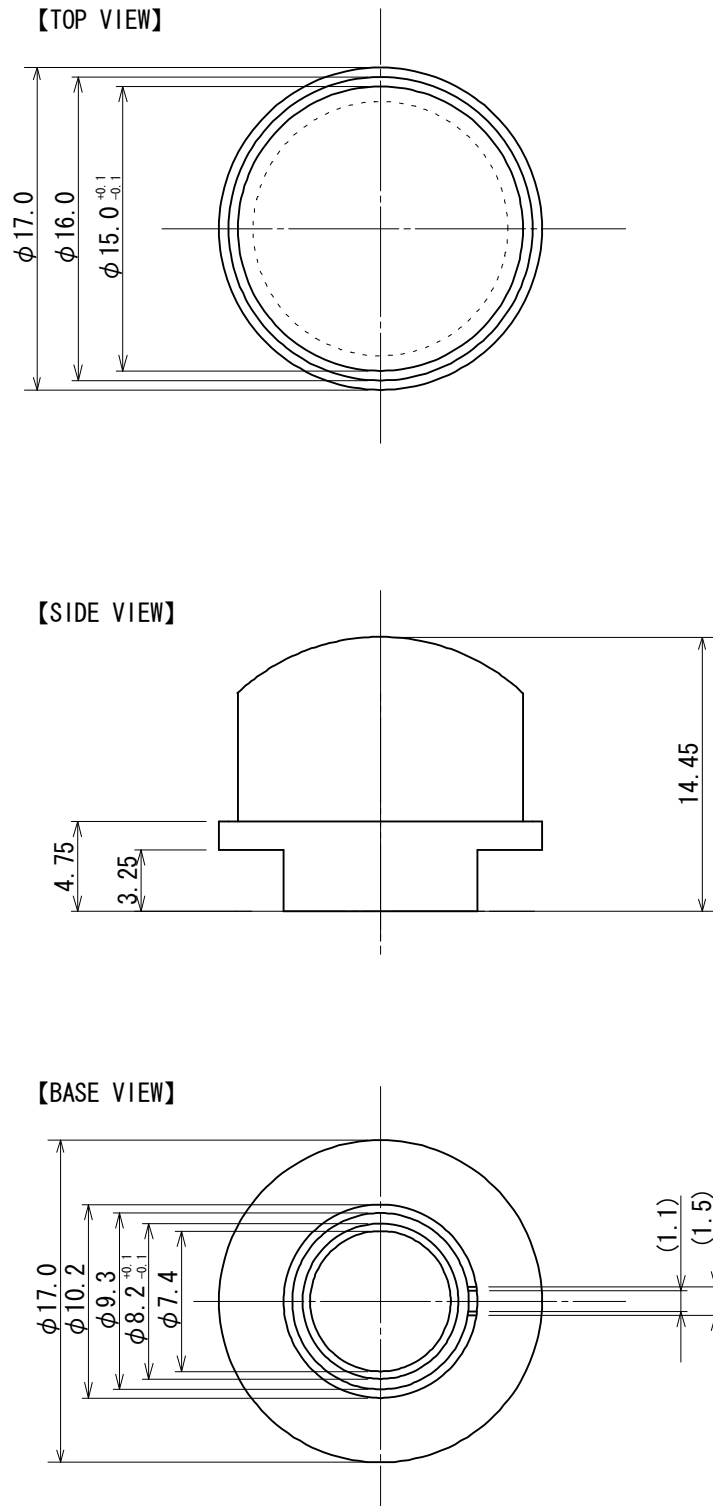
-20 °C ~ +70 °C

6.2. Storage Temperature

-25 °C ~ +75 °C

* Please avoid using the lens in direct sunshine conditions because it may cause degradation of the transmittivity.

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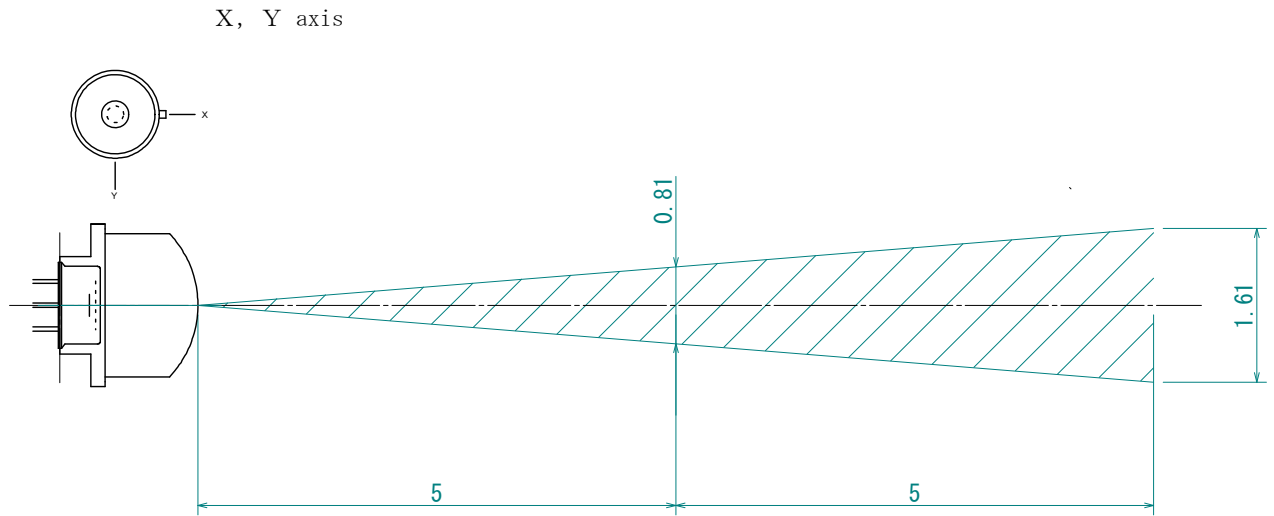


Tolerance : (+/-) 0.2

Unit [mm]

Figure 1: Dimensions

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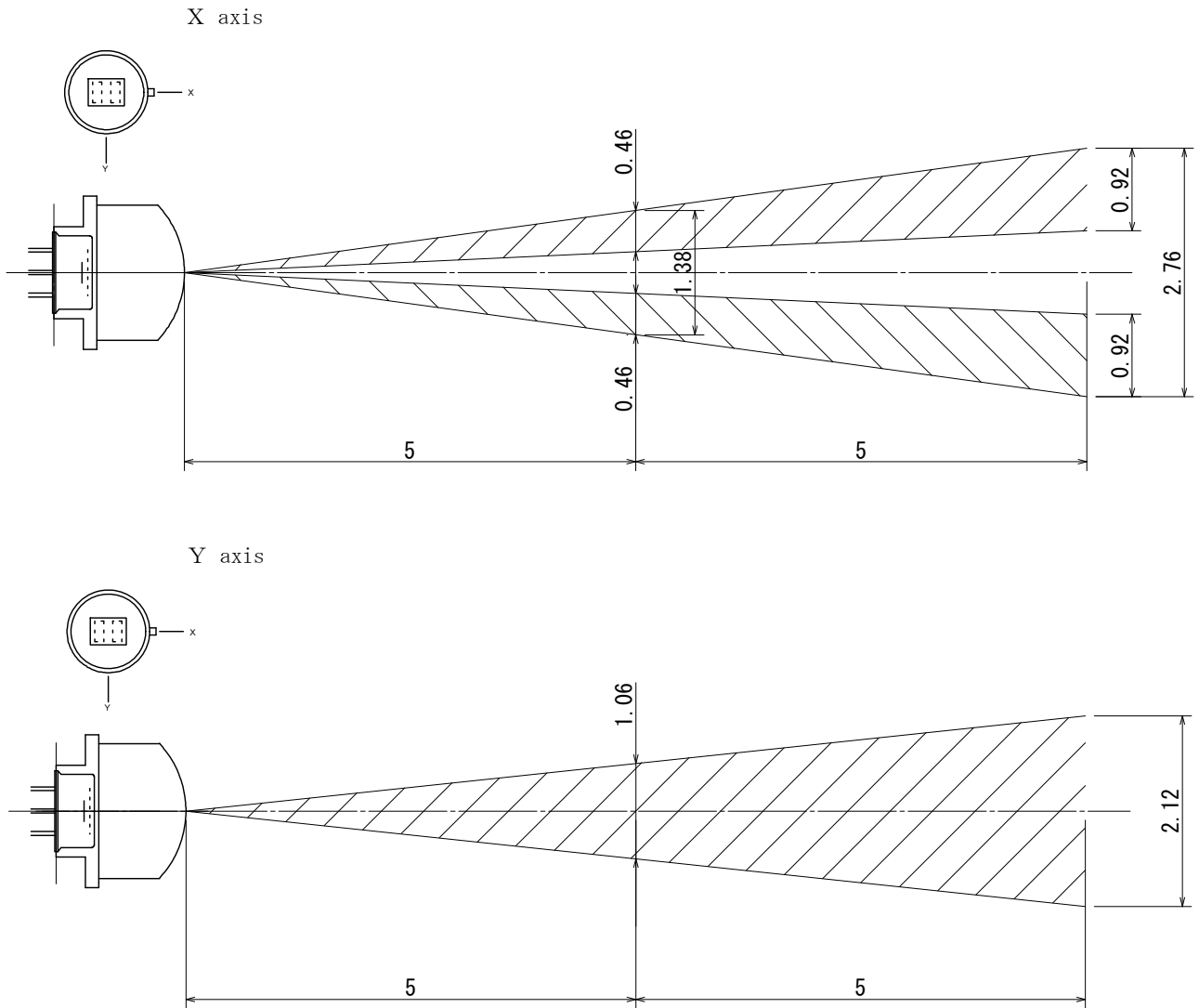


- Sensor: Pyro-electric Infrared Sensor, Single Element Type
- Element Size: $\Phi 1.75\text{mm}$

Unit [m]

Figure 2-A: Detection Area (with Single Element PIR)

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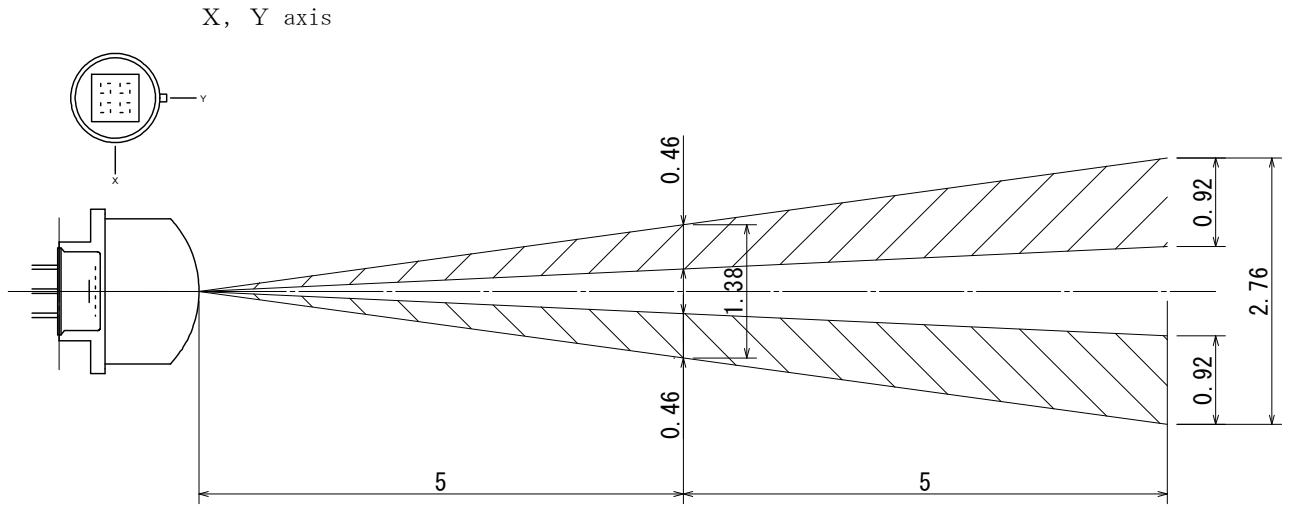


- Sensor: Pyro-electric Infrared Sensor, Dual Element Type
- Element Size: 2.3mm x 1.0mm x 1.0mm

Unit [m]

Figure 2-B: Detection Area (with Dual Element PIR)

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- Sensor: Pyro-electric Infrared Sensor, Quad Element Type (One output)
- Element Size: 1.0mm x 1.0mm, Gap1.0mm

Unit [m]

Figure 2-C: Detection Area (with Quad Element PIR)

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