

# Measurement Certificate

Requester RAYGEARS LLC

Address 7-4-15-4F Honcho, Funabashi-City, Chiba Prefecture, Japan

Product Name TSUKUYOMI · 55

Model RGT55

Manufacturer RAYGEARS LLC

Measurement Unit Illuminance [lx]

Measurement Method OTCL Calibration procedure(LAB-T001), ANSI / NEMA FL1

Environment of Measurement Temperature: 23 °C ± 2 °C Relative Humidity : 65 % ± 20 %

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Kyokko Trading Co.,Ltd.

Optical Test &amp; Calibration Laboratory

Optical Metrology Engineer



Takuro Hirano



## 旭光通商株式会社 光学試験校正室

光学試験校正室 (ISO/IEC 17025 認定校正機関)  
〒105-0014 東京都港区芝1-14-4 芝罎田ビルB1F  
TEL: 03-6371-6908 FAX: 03-6371-6944

**Optical Test and Calibration Laboratory**  
Shibamasuda Bldg. B1F, 1-14-4 Shiba, Minato-ku, Tokyo  
105-0014 JAPAN Phone: +81-3-6371-6908 Fax: +81-3-6371-6944

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# Mearsurement Results

## 1. Measurement Content

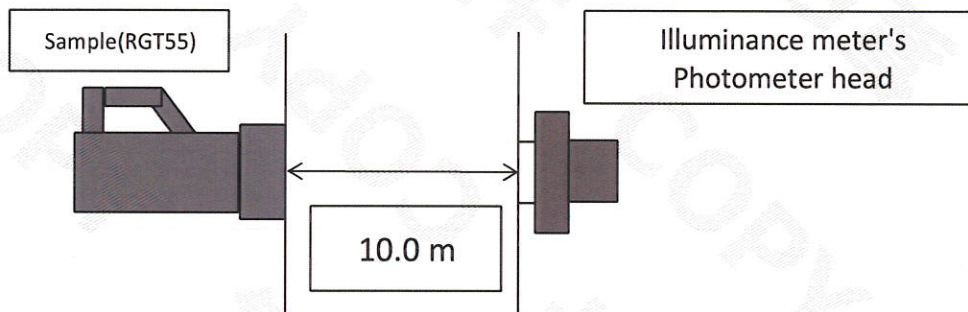
### 1-1 : Illuminance Measurement Results

Illuminance [klx]	RGT55
Setting : Strong	103.0
Setting : Weak	9.21

### 1-2 : Measurement Enviroiment

Temperature: 21.2 °C      Relative Humidity: 45.4%

1. A measurement distance is 10.0 m between B520 illuminance meter's photometer head surface and measuring sample's surface.
2. A sample is lit by the built-in battery.
3. The measurement was performed after lighting.
4. A measurement position is adjusted so that the illuminance meter's value was maximized.



### 1-3 : Reference Standards used for calibration

Reference standards	Manufacturer	Model	S/N	Lamp used for Calib.
NIST compliant Spectral Irradiance Working Standard	Optronic Laboratory	OL345RP	90101125	<input type="checkbox"/>
Illuminance meter	LMT	B520	04A5181 / 04A5182	<input checked="" type="checkbox"/>



## 2. PEAK BEAM INTENSITY [cd]

### 2-1 : PEAK BEAM INTENSITY [cd] Calculation

ANSI/NEMA FL1 Section 2.3.6, obtain the illuminance results and "PEAK BEAM INTENSITY" from distance by the following formula (1).

$$\text{Illuminance [lx]} \times (\text{Distance [m]})^2 = \text{PEAK BEAM INTENSITY [cd]} \quad \text{-----(1)}$$

\* Illuminance [lx] and Distance [m] from Illuminance measuring results (1-1).

### 2-2 : PEAK BEAM INTENSITY calculation results

Settings	PEAK BEAM INTENSITY [cd]
Strong	10,300,000
Weak	921,000

## 3. BEAM DISTANCE [m]

### 3-1 : BEAM DISTANCE [m] calculation method

ANSI/NEMA FL1 Section 2.2.6, obtain "BEAM DISTANCE" from "PEAK BEAM INTENSITY" by the following formula (2).

$$\sqrt{(\text{PEAK BEAM INTENSITY} / 0.25)} = \text{BEAM DISTANCE} \quad \text{-----(2)}$$

### 3-2 : BEAM DISTANCE [m] calculation results

	BEAM DISTANCE [m]
Strong	6419
Weak	1919