

Calibration Certificate Silicon Irradiance Sensor

Sensor Type: Si-RS485TC-T-SL
Serial No.: 485-10003-17-21010015
Comment:

Irradiance Calibration with Artificial Light in Comparison to a Reference Cell

Calibrated by: Richter
Date / Time: 05.01.2021 16:15

	Type	Calibration μV/W/m ²	Temperature Coefficient 1/°C	Output mV	Temperature °C	Irradiance ¹⁾ W/m ²
Reference Cell	Si-Ref mono PTB-2	56,62	0,0006	57,166	25,65	1009,2
	Type				Temperature °C	Irradiance ²⁾ W/m ²
Test Object	Si-RS485TC-T-SL				26,58	1009,4

Calibration of Temperature Measurement Transducer

Calibrated by: Palamut
Date / Time: 09.12.2020 08:00

Test Resistant Ohm	Target Temperature ³⁾ °C	Output Temperature ²⁾ °C
850,09	-38,14	-38,14
1320,11	82,92	82,90

Test Equipment Irradiance Calibration

Manufacturer	Type	Serial No.	Calibration Certificate	Trace
Ingenieurbüro Mencke & Tegtmeyer GmbH	Si-Ref mono PTB-2	02-20002-05-16159999	47073-PTB-20	PTB
Gantner Instruments	IDL100	191667	098220-02 D-K-15019-01-00	DKD
	ISM111	078743	098221-02 D-K-15019-01-00	DKD
OMEGA Engineering	IN510	9894	./.	./.

Test Equipment Temperature Measurement Transducer Calibration

Manufacturer	Type	Serial No.	Calibration Certificate	Trace
Vishay Precision Group	Y0007350R 000T9L	./.	./.	./.
	Y0062500R 000T9L	./.	./.	./.
	Y0007120R 000T9L	./.	./.	./.

$$^1) Irradiance = \frac{Output * 1000}{Calibration * (1 + Temperature Coefficient * (Temperature - 25))}$$

²⁾ Digital Reading via RS485

³⁾ Calculated by Test Resistance as Pt1000 Simulator