gentec-👀

CERTIFICATE OF CALIBRATION





Certificate #:

308803-230223

Model:

UP55N-300F-H12-BLU-D0

Serial Number: Cal. Procedure: 308803

420- 19325

Customer Name:

Instrument ID:

Date of Calibration: Calibration Due Date: February 22, 2023 August 22, 2024

Calibration Data and Measurement Condition

Calibration Data				Measurement Conditions								
	λ	Sensitivity	Instrument Uncertainty	Pow	er Level	Cooling		Ambient	Relative	0-95%	Into	
				Power	Rep. Rate	Temp	Flow Rate	Temp.	Humidity	Risetime	Load	Beam Ø
	μm	mV/W	% **	Watts	Hz	°C	l/min.	°C	%	S	Ω	mm
P	1.064	0.0520	± 2.5	99.0	CW	N/A	N/A	21	12	2.0	N/A	40.0
_												

- Value Corrected According To Spectral Absorption Curve
- Sensitivity programmed in detector head
- % of Reading + ±5µV
- The detector is calibrated using a laser emitting at 1.070 μm

.i..... and Chandarda Head

ID#	Description	Serial#	Last Cal.	Ву	Certificate #
EOC-1235	IPG, YLR-500-MM-WC-Y14, Ytterbium Fiber CW Laser, beam profile: Gaussian	PLMP31801343	N/A	N/A	N/A
	Gentec-EO, UP55G, wattmeter	259592	Nov. 29, 2022	NIST	686198-O-0000042275
	Gentec-EO, UP Calibrator	240865	Jan. 24, 2023	Gentec-EO	240865-230124
	Gentec-EO, UP Calibrator	240863	Jan. 24, 2023	Gentec-EO	240863-230124
	- Dept. Policy attended to app 107	A-			

Declaration of Conformity

Gentec Electro-Optics certifies that, at the time of calibration, the above listed instrument meets or exceeds all specifications. It has been calibrated using standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), the National Research Council Canada (NRC) or other National Metrology Institutes. Calibration results relate only to the instrument being calibrated. Calibration activities are compliant to ISO 9001:2015 and ISO/IEC 17025:2017. Total expanded uncertainties are reported with a coverage factor k=2, providing a level of confidence of approximately 95%. Any statement of compliance is made without taking measurement uncertainty into account and is based on the instrument's uncertainty.

Signature

Signature

Alexandre Loranger

Calibrated by

Charles Lalancette

Quality Assurance

February 23, 2023

Date of Issue

Date of Inspection

Variance Report

	Last Calibration	As Received	New Calibration
Date	N/A	N/A	February 22, 2023
Sensitivity (mV/W)	N/A	N/A	0.0520
Difference (from last calibration)	N/A	N/A	N/A
Change (%)	N/A	N/A	N/A
Status	N/A	N/A	Within Tolerance

Remark: there is no "Last Calibration" and "As Received" calibration for a new instrument.

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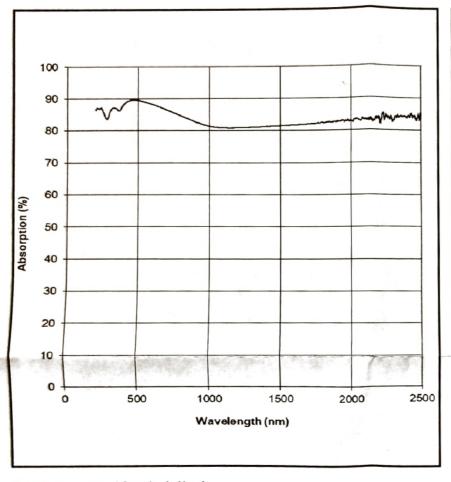
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Personal wavelength correction[™] Certificate

Spectral Absorption Plot measured for: UP55N-300F-H12-BLU-D0 Power Detector

Serial #308803



Personal Wavelength Correction [™]						
Measurement Condition	Calibration Data					
Wavelength (nm)	Multiplier	Uncertainty				
193	0.943	N/A				
213	0.930	N/A				
248	0.936	± 2.5 %				
266	0.959	± 2.5 %				
308	0.934	± 1.0 %				
337	0.930	± 1.0 %				
355	0.935	± 1.0 %				
488	0.904	± 1.0 %				
514	0.906	± 1.0 %				
532	0.908	± 1.0 %				
578	0.915	± 1.0 %				
632	0.923	± 1.0 %				
694	0.935	± 1.0 %				
720	0.940	± 1.0 %				
810	0.959	± 1.0 %				
980	0.992	± 1.0 %				
1064 *	1.000	N/A				
1550	0.992	± 1.0 %				
2100	0.973	± 1.0 %				
10600 **	0.944	N/A				

Galibration wavelength

Adjustment multiplier for wavelength under 248 nm are not

For Gentec-EO monitors, select the proper wavelength in menu

For other monitors, multiply by the correction multiplier Power corrected = Power read x correction multiplier xample: Power (720 nm) = 10mW x 0.94 = 9.4 mW

Test Equipment and Standards Used

ID#	Description	Serial#	Last Cal.	Ву	Certificate #
EOC-1102	Varian, CARY 5000, Spectrophotometer	NY1605001	N/A	N/A	N/A
EOCE-223	Labsphere, Spectralon Reflectance Standard 5%	05AA01-1115-4910	Jul. 11, 2022	NRC-CNRC	PAR-2022-3900
EOCE-224	Labsphere, Spectralon Reflectance Standard 20%	20AA-0-0116-4909	Jul. 11, 2022	NRC-CNRC	PAR-2022-3900

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Signature

Signature

BRUNO RENAUD

Calibrated by

Charles Lalancette Quality Assurance

February 22, 2023

Date of Issue

Date of Inspection

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GENTEC ELECTRO-OPTICS, Inc.

100046 revision AL ACI-3899

Typical value