

	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

TEST REPORT 1300-QL25-R01 ver. 0

Dates and authorization Date e autorizzazioni		
Report Date Data emissione rapporto di prova	13/10/2025	
Written by Preparato da	Matteo Roncali	
Authorized by Autorizzato da	Ing. Carsten Seyring	
Data declared under the sole responsibility of the applicant Dati dichiarati dal richiedente e sotto la sua responsabilità		
Applicant Richiedente	D.T.S. Illuminazione Srl - Via Fagnano Selve 12/14 - 47843 - Misano Adriatico (RN) - Italy	
Manufacturer Produttore	D.T.S. Illuminazione Srl - via Tavoleto 93 - 47832 - Sant'Andrea in Casale di San Clemente (RN) - Italy	
Sample description Descrizione campione	Moving Mirror White Laser Fixture / Proiettore laser a specchio mobile, luce bianca	
Type Modello	V-Snap CS	
Light source Sorgente luminosa	1 × White Laser Illumination Module, model BLL120-90-R00-003, CCT 9500 K (Class 1 Laser Product)	
Secondary optic Optica secondaria	Variable Focus optic	
Power supply Alimentazione	AC 230 V, 50 Hz	
Driver model Modello alimentatore	Custom Laser Driver 1ch	
Single led supply current Corrente sul singolo led	3,3 A	

The test results and observations indicated in this test report refer exclusively to the samples as received and tested. It is not permitted to transfer the results to other systems or configurations. The partial publication or duplication of this test report without a written consent of the test laboratory is not permitted. The test laboratory not assumes any liability to any party for any loss, expense or damage occasioned by the use of this report. Any use of the laboratories name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by the test laboratory. In case of a multilingual test report, the English version is the only official version.

I risultati e le osservazioni indicate in questo rapporto di prova sono riferiti esclusivamente ai campioni così come ricevuti e testati. Non è permesso utilizzare i risultati e le osservazioni di questo rapporto di prova per altri sistemi o configurazioni. Non è permessa la pubblicazione o la duplicazione parziale di questo rapporto di prova senza un consenso scritto da parte del laboratorio di prova. Il laboratorio di prova non si assume responsabilità nei confronti di terzi per danni o eventuali costi derivanti dall'utilizzo dei dati presenti in questo rapporto di prova. Ogni uso del nome del laboratorio di prova e dei suoi marchi per la vendita o per pubblicizzare il prodotto testato deve essere prima approvato in forma scritta dal laboratorio di prova. In caso di rapporto di prova con più lingue, la versione inglese è da considerarsi quella ufficiale.

	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

Applicable standards Norme applicabili	
	IEC TR 62778:2014 (application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires)
Test Setup Setup di prova	
Test instrument Strumenti di misura	Spectrometer QL-IN-009 (spectrometer calibration lamps QL-IN-015, QL-IN-016, QL-IN-017) Multimeter QL-IN-383 Meter QL-IN-478 Temperature datalogger QL-IN-021 Wattmeter QL-IN-182
Other test instrument used if risk group > 1 Altri Strumenti di misura utilizzati in caso di gruppo di rischio >1	Mirror Photogoniometer QL-IN-001 Temperature-humidity datalogger QL-IN-181
Test ambient temperature Temperatura ambiente durante la prova	25,0 °C ± 1,0 °C. Ambient temperature registrations available on request Le registrazioni delle temperature ambientali sono disponibili su richiesta

Test Name Identificazione prova	Test Method Metodo di prova	Test Measurement Misure di prova	Overall risk group Gruppo di rischio complessivo
Blue Light Risk Group (distance 200 mm)	IEC TR 62778:2014	Blue light	RISK GROUP 2
Blue Light Risk Group 1 threshold distance of the tested version (For derived versions see formula in annex II)	IEC TR 62778:2014	Blue light	118,94 m

Uncertainty Incertezza	
Radiance Radianza	3,6 %
Irradiance Irradianza	3,3 %
Risk Group 1 threshold distance Distanza di soglia gruppo di rischio 1	1,49 m
Statement Dichiarazione	The measured value (y) and the associated expanded uncertainty (U) represent the interval ($y \pm U$) which contains the value of the measured quantity with a probability of approximately 95 % and a coverage factor $k = 2$. If the limits are not breached by the measured value, then the product is considered compliant with the specification. Il valore misurato (y) e l'incertezza estesa associata (U) rappresentano l'intervallo ($y \pm U$) che contiene il valore della grandezza misurata con una probabilità di circa il 95 % e un fattore di copertura $k = 2$. Il prodotto viene considerato conforme alle specifiche se i limiti non vengono superati dal valore misurato.

	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

ANNEX I Blue light risk group IEC TR 62778

Test method	IEC TR 62778:2014
Sample identification	1300-QL25-S01
Place of test	Qualilab Srl - Via Trento, 87 - 25020 - Capriano del Colle (BS) - Italy
Date of test	13/10/2025
Test description	In accordance to IEC TR 62778 figure 7 the sample was measured at a distance of 200 mm to the sensor and blue light evaluated. If blue light risk at 200 mm is > 1 Out of E_B and E the factor $K_{B,v}$ was calculated with $K_{B,v} = E_B/E$ The threshold illuminance E_{thr} was calculated with $E_{thr} = E_B/K_{B,v}$, with $E_B = 1 \text{ W/m}^2$ By measuring the luminous intensity distribution of the luminaire on a mirror based photogoniometer, the maximum intensity I_{max} was determined. With the photometric square law the threshold distance d_{thr} with E_{thr} was calculated.
Test measurements	Sample at a distance of 200 mm:

Emission limits for risk groups of continuous wave lamps									
Risk	Action spectrum	Symbol	Units	Emission Measurement					
				Exempt - RG0	Low risk - RG1		Mod risk - RG2		
				Limit	Result	Limit	Result	Limit	Result
Blue light	$B(\lambda)$	L_B	$\text{W} \cdot \text{m}^{-2} \cdot \text{sr}^{-1}$	100	FAIL	10000	FAIL	4000000	8,11E+04
Blue light, small source	$B(\lambda)$	E_B	$\text{W} \cdot \text{m}^{-2}$	0,01*	Not applicable	1,0	-	400	-
* Small source defined as one with $\alpha < 0,011$ radian. Averaging field of view at 10000 s is 0,1 radian.									

The following table is applicable only if Blue light risk at 200 mm is > 1				
$K_{B,v}$	$I_{max} [\text{cd}]$	$E_{thr} [\text{lx}]$	$d_{thr} [\text{m}]$	
0,001174	12050000	852	118,94	
TEST RESULT				
RISK GROUP 200 mm: RISK GROUP 2				
RISK GROUP THRESHOLD DISTANCE: 118,94 m				

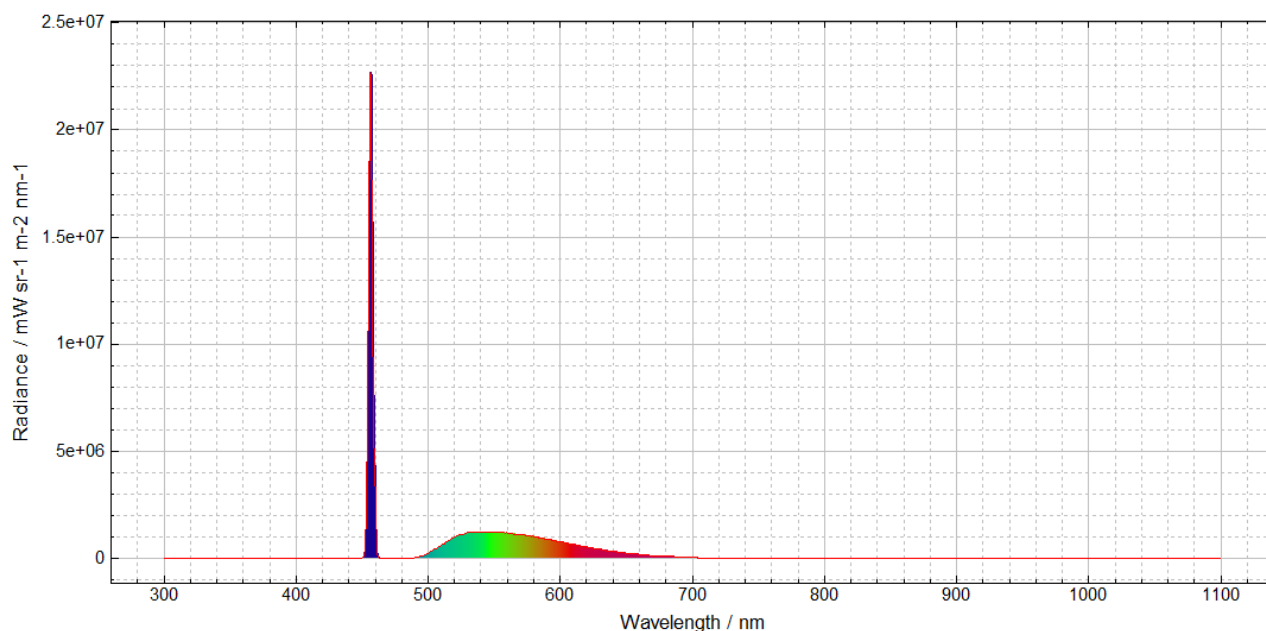
	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

ANNEX II	Extension of results on derived versions
	if Blue light risk at 200 mm is ≤ 1: see IEC TR 62778:2014 Annex D
	if Blue light risk at 200 mm is > 1: applicable formula for derived versions $d_{thr}[m] = \sqrt{\frac{I_{d_max}[cd]}{E_{thr}[lx]}}$ where $I_{d_max}[cd]$ = Max luminous intensity in cd evaluated from the luminous intensity distribution of the derived version

	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

ANNEX III

Photograph



	Test report	1300-QL25-R01 ver. 0	 00888 Signatory of EA and ILAC Mutual Recognition Agreements
	Applicant	D.T.S. Illuminazione Srl Via Fagnano Selve 12/14 47843 - Misano Adriatico (RN) - Italy	
	Type	V-Snap CS	

