



TL-749



TEST REPORT

For

LED ONE CORPORATION

45885 HOTCHKISS ST FREMONT, CA 94539

Model Number:	LOC-4FTVT-MW(25/35/50)MCCT(35/40/50)	
Report Type:	Electrical, Photometric and ISTMT tests according to the following standards and show the compliance to DLC Program SSL Technical Requirements V5.0	
Standards:	IES LM-79-08: Approved Method: Electrical & Photometric Measurement of Solid-state Lighting Products ANSI C82.77-10-2014: Harmonic Emission Limits – Related Power Quality Requirements for Lighting ANSI/UL 1598-2008: Standard for Safety of Luminaires CIE 190:2010 Calculation and presentation of unified glare rating tables for indoor lighting luminaires IES TM-30-18: IES Method for Evaluating Light Source Color Rendition	
Test Engineer:	George Yang	
Report Number:	PKS200817003-10	
Sample Size:	One sample was received on 2020-07-07 and used for testing.	
Test Date:	2020-07-15 to 2020-07-21	
Report Date:	2020-08-17	
Reviewed By:	Ray Gao/ EE Engineer	
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan). No.248 Chenghu Road, Kunshan, Jiangsu province, China. Tel: +86-0512-86175000 Fax:+86-0512-88934268	

1. Product Information and Description

Product Primary Use:	Direct Linear Ambient Luminaires
Voltage And Frequency:	120-277VAC, 50/60Hz
#LED Source Manufacturer:	Lumileds Holding B.V.
#LED Source Model:	L128-xx80RA35000Q1
Driver Model:	SDU50CS120V42DL3A
Luminaire length:	4ft
Auxiliary Ballast Model:	NA
Auxiliary Housing Model:	NA
White Tunable:	Yes
Field-Adjustable Light Output:	Yes

Note:

- The applicant *LED ONE CORPORATION* declared that their products are the same to the product in report# RKSB200707018-10 and is authorized by original applicant to use their test data.
- All the data in previous report (RKSB200707018-10 is shared in report.

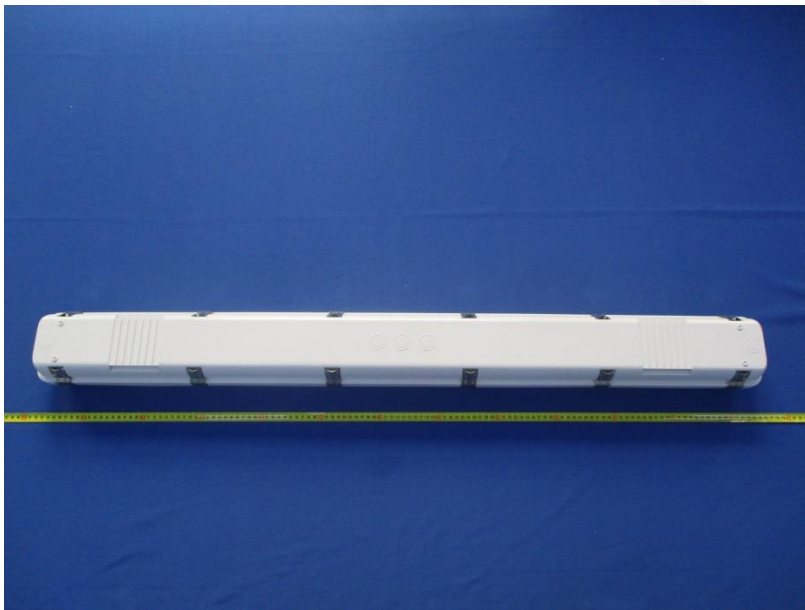
2. Product Rated Values

Test Model	CCT(K)	Light Output (lm)	Power(W)	Luminous Efficacy (lm/W)
LOC-4FTVT- MW(25/35/50)MCCT(35/40/50)	3500	6775	50	135.5
		4795	35	137
		3475	25	139
	4000	7150	50	143
		5075	35	145
		3675	25	147
	5000	6900	50	138
		4900	35	140
		3550	25	142

3. Test List

Test Model	CCT(K)	Power(W)	Test Item			
			Goniophotometer Test	Integrating Sphere Test	THDi and PF Test	In-Situ Temperature Measurement Test
LOC-4FTVT- MW(25/35/50)MCCT(35/40/50)	3500	50	NA	Yes	Yes	Yes

4. Product Photo



5. Test Result

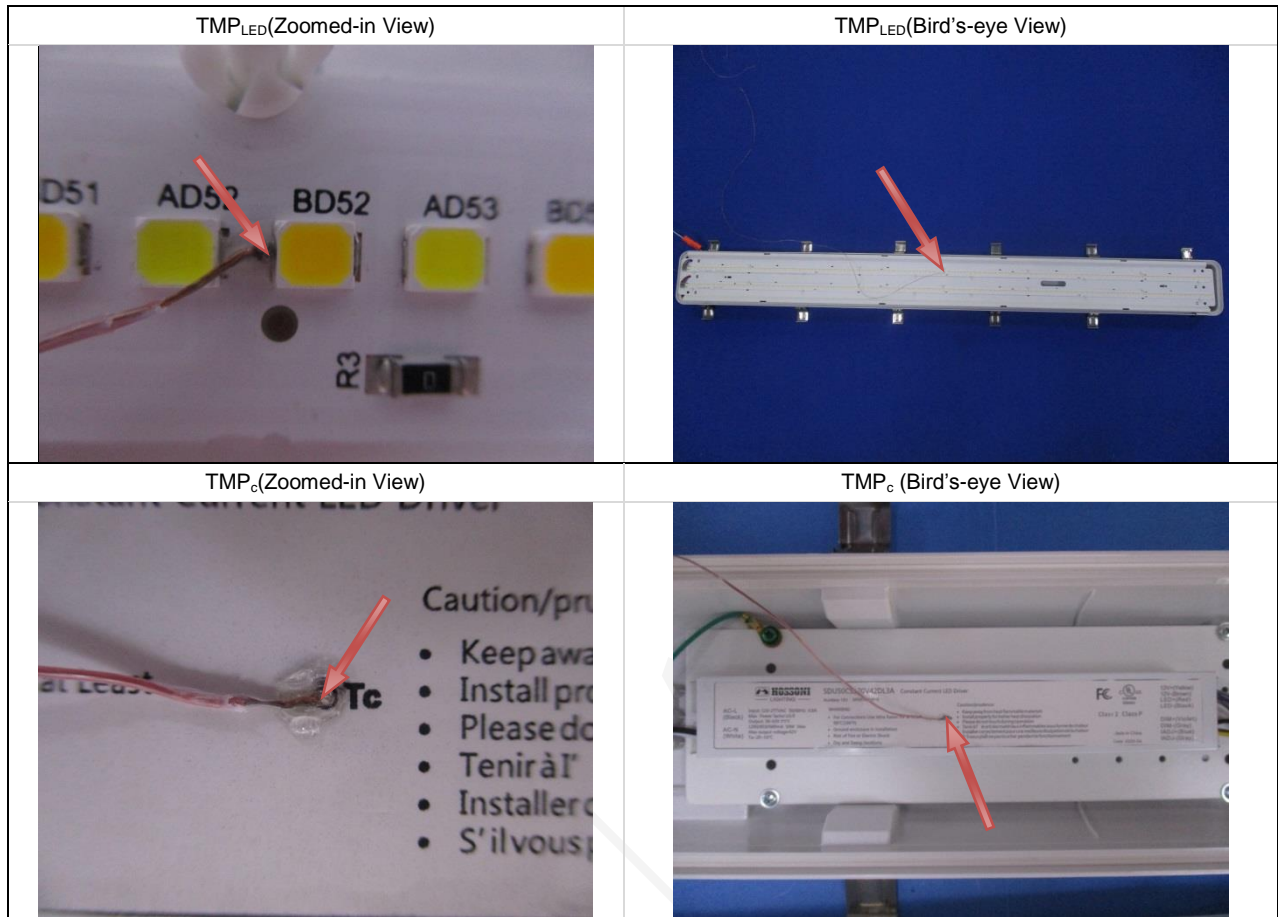
Integrating Sphere Test; Orientation: Downward; Test Voltage: 120V 60Hz;				
Test Item	Test Result	DLC Requirements	DLC Requirements(With tolerances and/or allowances)	Conclusion
Total Efficacy(lm/W)	135.83	≥130	≥126.1	Pass
CCT(K)	3398	3220~3710	3220~3710	Pass
Duv	-0.000595	-0.0055~0.0065	-0.0055~0.0065	Pass
R _a	81.7	≥80	≥78	Pass

THDi, PF Test; Orientation: Downward;					
Test Voltage	Test Item	Test Result	DLC Requirements	DLC Requirements(With tolerances and/or allowances)	Conclusion
120	Power Factor	0.9931	≥0.9	≥0.87	Pass
120	THDi	7.36%	≤20%	≤25%	Pass
277	Power Factor	0.9154	≥0.9	≥0.87	Pass
277	THDi	9.68%	≤20%	≤25%	Pass

In-Situ Temperature Measurement Test: Test Voltage: 120V 60Hz;				
Test Item	Test Result	DLC Requirements	DLC Requirements(With tolerances and/or allowances)	Conclusion
TMP _{LED} (°C)	45.3	≤115	With tolerance of ≤ 1.1°C or 0.4%, whichever is greater due to thermocouple tolerance	Pass
TMP _c (°C)	64.5	≤85	With tolerance of ≤ 1.1°C or 0.4%, whichever is greater due to thermocouple tolerance	Pass
Drive Current/Individual LED source(mA)	73.8	≤150	With +5% tolerance	Pass
TM-21 Projected Lumen Maintenance at 50000hours	90.25%	L ₇₀ Life≥50000	L ₇₀ Life≥50000	Pass
L ₇₀ Lumen Maintenance Life (Hours)	>54000			
L ₉₀ Lumen Maintenance Life (Hours)	51000	≥36000	≥36000	Pass

Note:

- The test results were measured directly from the test equipment.
- The DLC requirements were listed according to DLC Technical Requirements V5.0
- The conclusion is for reference only. Test report that indicate product performance meets DLC Technical Requirements do not represent official DLC product qualification. All decisions regarding product qualification are made by the DLC.



FILE

Test Data

[Integrating Sphere System]

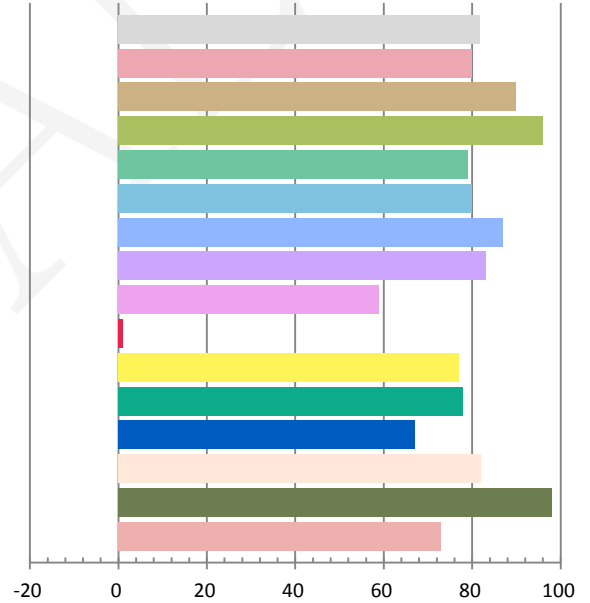
Photometric and Electrical Measurement Result

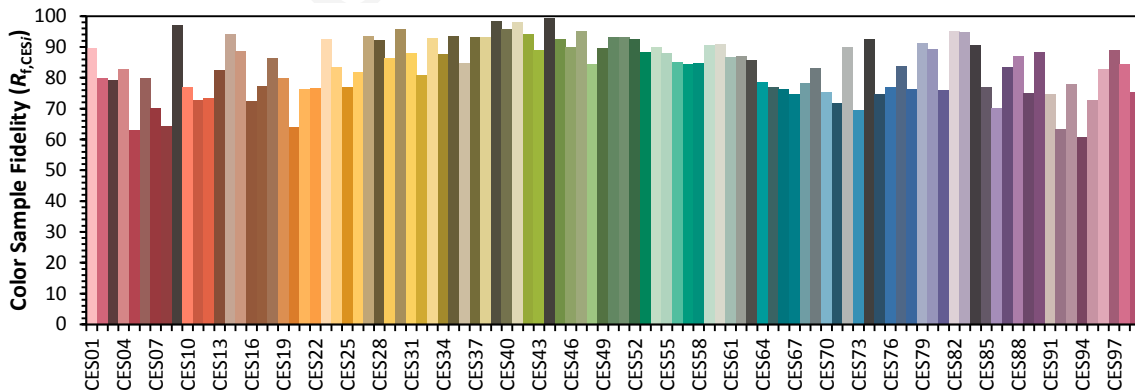
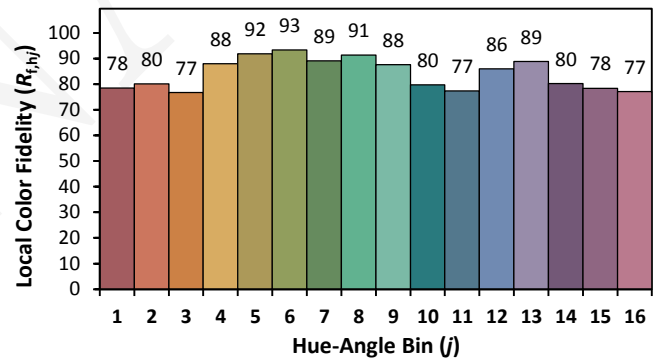
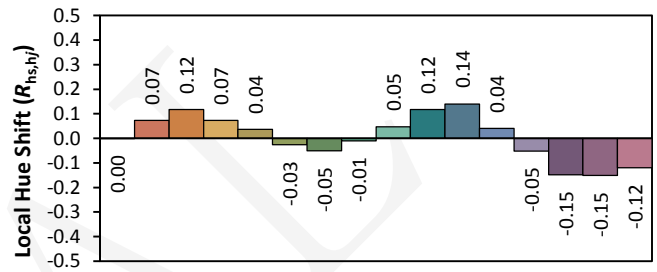
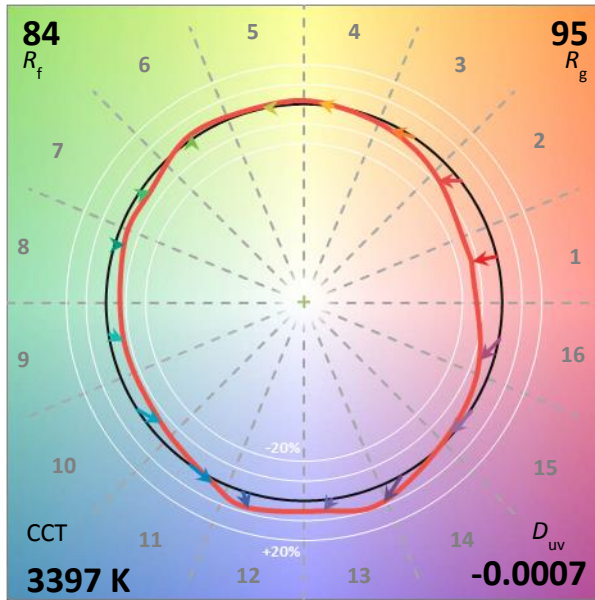
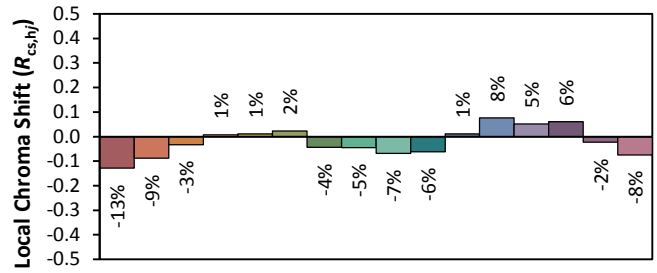
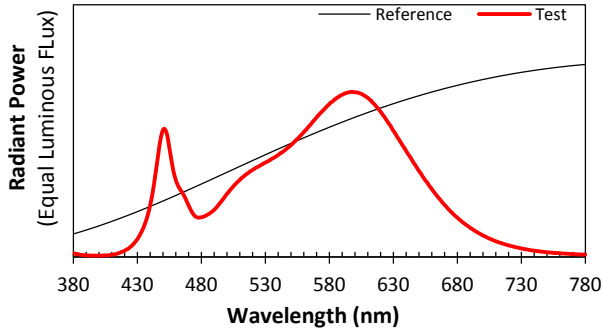
Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.4187	49.88	0.9931	6775.3	135.83

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
20.369	3398	-0.000595	0.4105	0.3919	0.2386	0.5125

Color Rendering Index

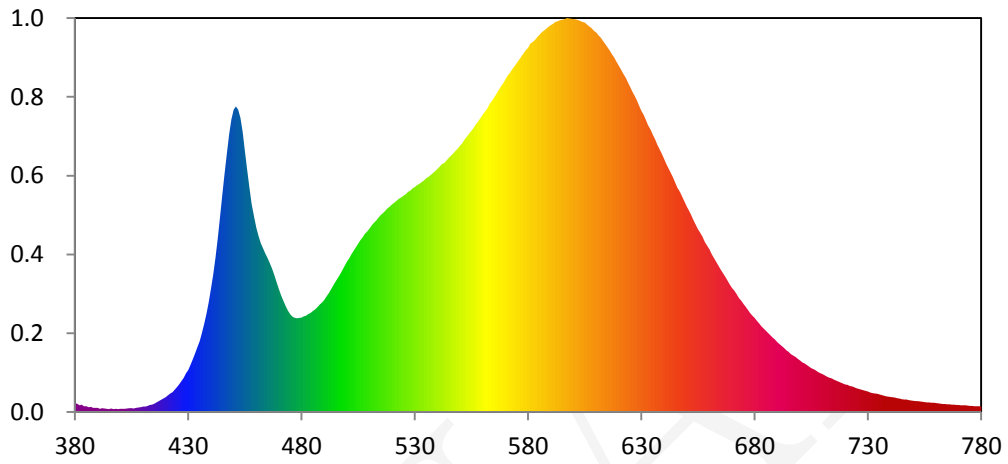
Ra			
81.7			
R1	R2	R3	R4
80	90	96	79
R5	R6	R7	R8
80	87	83	59
R9	R10	R11	R12
1	77	78	67
R13	R14	R15	
82	98	73	



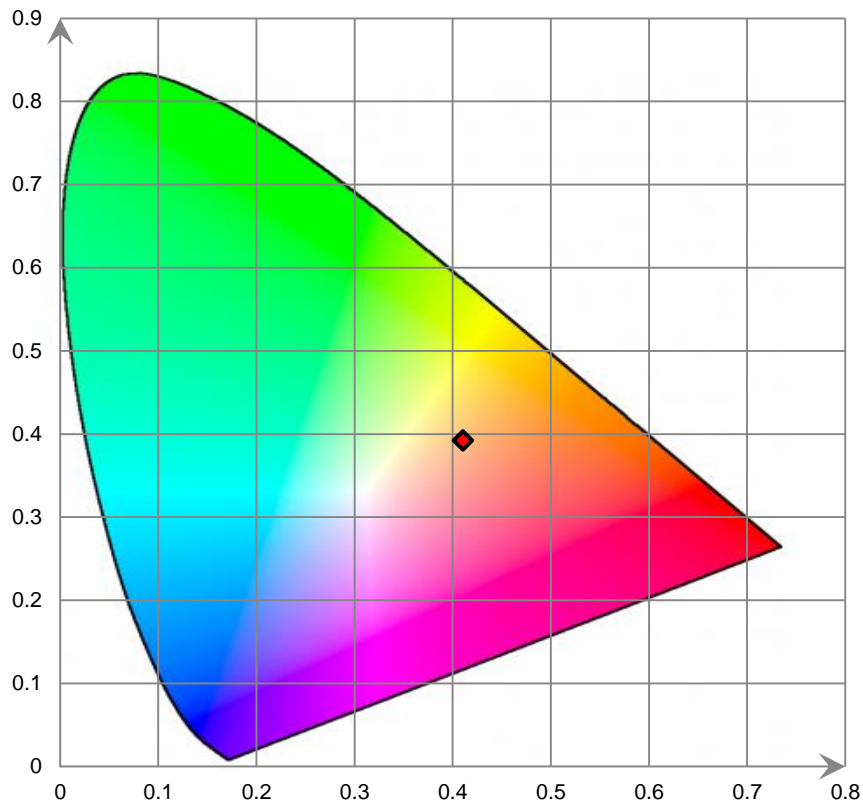


IES R_f	84
IES R_g	95
IES $R_{cs,h1}$	-13%

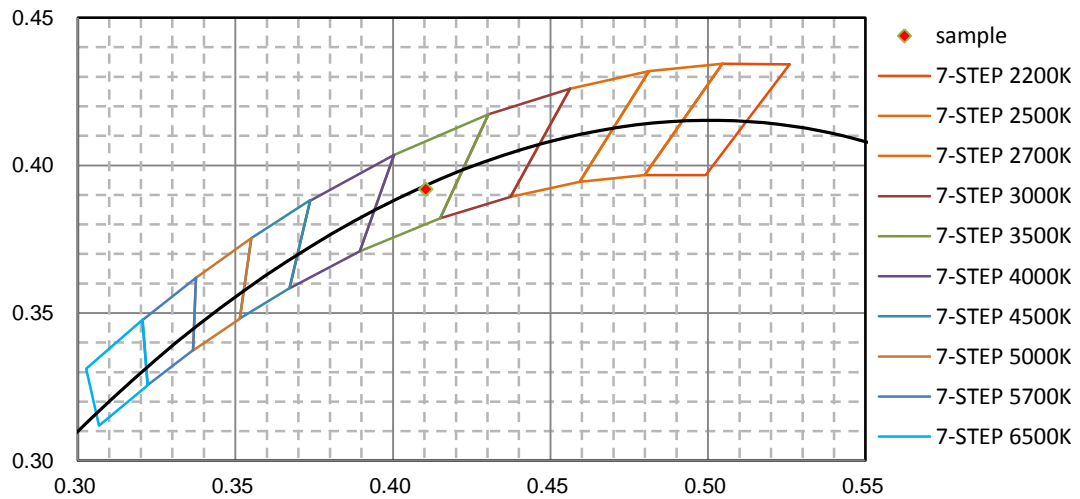
Relative Spectral Power Distribution



CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



6. Description of Test Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
2.0m integrating sphere	EVERFINE	R98	G121960CS1361154D	2019-12-24	2020-12-23
spectroradiometer	EVERFINE	HAAS-2000	M12048CS1361148	2019-12-24	2020-12-23
Digital CC&CV DC Power Supply	EVERFINE	WY305	G115986CN1361134	2019-12-20	2020-12-19
Temperature/humidity/clock	KEJIAN	TA298	EE053	2019-12-02	2020-12-01
Standard Light Source	INVENTFINE	N/A	JWWCR020106	2019-11-19	2020-11-18
Digital Power Meter	YOKOGAWA	WT210	91KB35700	2020-04-02	2021-04-01
Intelligence ac power supply	EVERFINE	DPS1005	G119890CS1361121	2020-04-02	2021-04-01
Digital Multimeter	FLUKE	115C	37840512WS	2019-10-08	2020-10-07
Hybrid Recorder	YOKOGAWA	DR230	4TJH0903	2020-04-02	2021-04-01
Power Supply	SC	SC/BP-11003	1608110030553	2019-12-14	2020-12-13

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attested that all calibration has been performed using suitable standards traceable to National Primary Standards and International System of Units (SI).

7. Test Method

Product was tested with no seasoning. All stabilization and measurements were made in compliance with IES LM-79-08. The ambient temperature of the sample was maintained at $25^{\circ}\text{C}\pm 1^{\circ}\text{C}$ during measurement. And relative humidity is less than 65%. The product was operated in its intended orientation in application during all testing.

Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, Spectroradiometer, and integrating sphere. The integrating sphere system is calibrated by standard spectrum light source before measurement. 4π geometry was used during measurement.

ISTMT Test

The LED which has the highest temperature was measured at the location of LED case which is specified by LED source manufacturer and detailed by LM-80 report. The drive current of LED package/module/array was calculated as the total output current of the driver measured by multimeter, divided by the number of branches in parallel of LEDs.

Directions

1. The information marked "superscript #" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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*****END OF REPORT*****