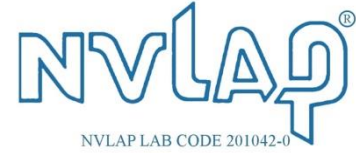




UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Integrating Sphere Test Report

Relevant Standards
IES LM-79-2008
ANSI C78.377-2011, ANSI C82.77-2002
CIE 13.3-1995, CIE 15-2004, IES TM-30-15

Prepared For
Elemental LED Inc, DBA Diode LED

Wes Buck
Suite 211, 1195 Park Ave.
Emeryville, CA 94608
United States

Catalog Number
DI-12V-2VA27-9016

Order Number
11358060
Test Number
1124757

Test Date

2015-07-10

Prepared By

Javier Caban, Technician

Approved By

Zachary Mooney, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Gray aluminum housing, frosted plastic enclosure
Lamp: 18 white LEDs
Mounting: Surface

Luminaire



Summary of Results

Radiant Flux:	894.2 mW
Luminous Flux:	237 lm
Luminaire Efficacy:	53.5 lm/W
CCT:	2740 K
CRI (Ra):	93.1
Chromaticity (x):	0.4555
Chromaticity (y):	0.4081
Chromaticity (u):	0.2608
Chromaticity (v):	0.3505
Duv:	-0.0008

Test Conditions

Test Temperature:	24.3 °C
Voltage:	12.00 VDC
Current:	0.3684 A
Power:	4.430 W

Testing was performed in a 2-meter integrating sphere using the 4 π geometry method.
Absorption correction was employed for this measurement.



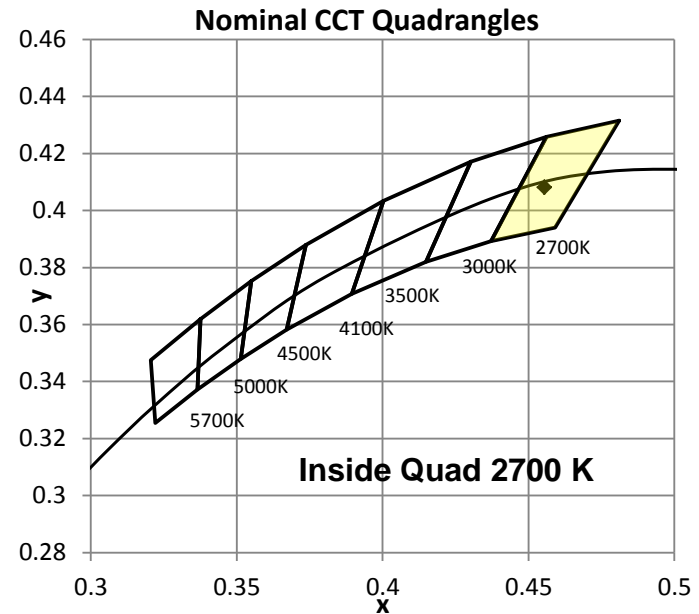
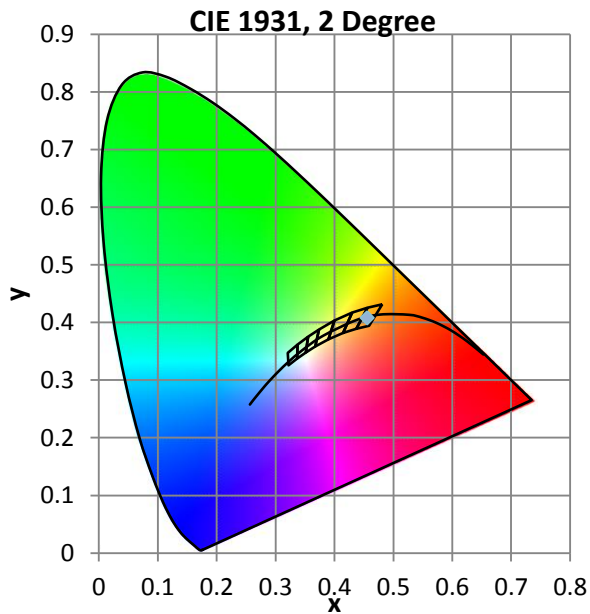
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.3 °C	12.00 VAC	0.3684 A	4.430 W	N/A	N/A	N/A

Summary of Results

Total Output:	237 Lumens	Chromaticity (x):	0.4555
Efficacy:	53.5 lm/w	Chromaticity (y):	0.4081
CCT:	2740 K	Chromaticity (u'):	0.2608
CRI (Ra):	93.1	Chromaticity (v'):	0.5257
CRI (R9):	72.9	TM-30 R_f:	90.4
Peak Wavelength:	634.2 nm	TM-30 R_g:	101.9
Dominant Wavelength:	584.2 nm	Duv:	-0.0008
S/P Ratio:	1.27		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
93.1	93.9	94.9	93.7	93.5	92.6	92.7	94.8	88.4	72.9	86.4	93.2	79.3	94.0	95.4

