



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**  
**RLE Industries**  
Damian Sookram  
35 Kulik Rd  
Fairfield, NJ 07004-3307  
United States

**Catalog Number**  
**RD2-2 4000K**  
Order Number  
11524480  
Test Number  
11524880.02

Test Date

2017-01-23

Prepared By

Javier Caban, Technician

Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.  
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:** White aluminum housing, frosted plastic lens enclosure  
**Lamp:** 96 white LEDs, two boards with 48 LEDs each  
**Mounting:** Pendant  
**Ballast/Driver:** One Philips Advance Xitanium XI054C150V054BST1

**Luminaire**



**Summary of Results**

Radiant Flux:	6498 mW
Luminous Flux:	2093 lm
Luminaire Efficacy:	65.6 lm/W
CCT:	4198 K
CRI (Ra):	83.9
Chromaticity (x):	0.3716
Chromaticity (y):	0.3695
Chromaticity (u):	0.2221
Chromaticity (v):	0.3314
Duv:	-0.0010

**Test Conditions**

Test Temperature:	24.5 °C
Voltage:	120.0 VAC
Current:	0.2676 A
Power:	31.88 W
Power Factor:	0.993
Frequency:	60 Hz
Current THD:	10.0 %

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



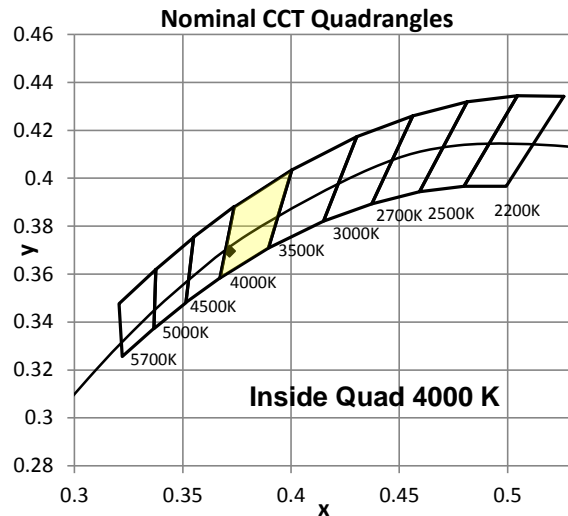
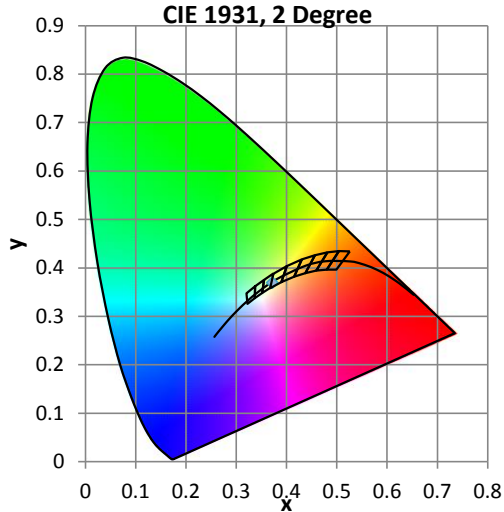
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.2676 A	31.88 W	0.993	60 Hz	10.0 %

### Summary of Results

<b>Total Output:</b>	2093 Lumens	<b>Chromaticity (x):</b>	0.3716
<b>Efficacy:</b>	65.6 lm/w	<b>Chromaticity (y):</b>	0.3695
<b>CCT:</b>	4198 K	<b>Chromaticity (u'):</b>	0.2221
<b>CRI (Ra):</b>	83.9	<b>Chromaticity (v'):</b>	0.4970
<b>CRI (R9):</b>	16.8	<b>TM-30 R<sub>f</sub>:</b>	81.8
<b>Peak Wavelength:</b>	453.2 nm	<b>TM-30 R<sub>g</sub>:</b>	95.2
<b>Dominant Wavelength:</b>	578.7 nm	<b>Duv:</b>	-0.0010
<b>S/P Ratio:</b>	1.757		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
83.9	82.6	90.2	94.4	81.9	82.1	85.2	87.0	67.9	16.8	75.6	80.3	59.8	84.7	97.0

