



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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Page 1 of 3

REPORT NUMBER: ITL83585
DATE: 12/09/14
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: K2-LED-X49-FL-12

ADDRESS: 40429 BRICKYARD DRIVE
MADERA, CA 93636-9515

LUMINAIRE: CAST METAL HOUSING WITH UNFINISHED BROWN INTERIOR FINISH, CAST METAL DRIVER HOUSING, MACHINED BLACK FINISHED CIRCUIT BOARD MOUNTING BLOCK, 1 CIRCUIT BOARD WITH ONE LED, MOLDED WHITE PLASTIC LED SURROUND, MOLDED PLASTIC REFLECTOR WITH TEXTURED SEMI-SPECULAR FINISH, CLEAR MICRO-PRISMATIC FLAT GLASS LENS IN MACHINED WHITE PAINTED METAL FRAME. LENS PRISMS IN.

LAMP: ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), AIMED AT THE HORIZON.

DRIVER: THOMAS RESEARCH PRODUCTS PLED75W-054-C1400-D, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER.

INSTRUMENTS:	Associated Power Technologies APT5040 AC Power Source	Calibration Due: N/A
	Yokogawa WT210 Digital Power Meter #8	12/31/14
	Ocean Optics QE65000 Spectroradiometer	07/14/15
	ITL 2.0m Diameter Integrating Sphere S20-2, 4PI Geometry	07/14/15

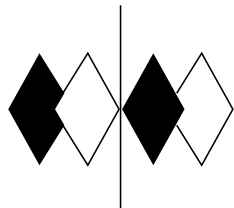
OBJECT OF TEST: Measure the Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Indices (CRI_a,1-14), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and electrical data including ANSI C82.77-2002 Power Factor (PF) to the test sample.

PROCEDURE: The test sample was provided by the customer and had an unknown number of burn hours. The test sample was mounted inside the integrating sphere and allowed to stabilize. After stabilization occurred, measurements were taken. In order to measure mean performance, multiple data sets were recorded and averaged. Readings were taken with the test sample operating at 120VAC input in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology.

RESULTS: (continued subsequent pages)

THIS ITL REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

Checked	<i>N THOMAS</i>
Approved	<i>P O'CONNOR</i> Sphere Lab Supervisor



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Page 2 of 3

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CATALOG NUMBER: K2-LED-X49-FL-12

RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4547
Chromaticity Ordinate y	0.4091
Correlated Color Temp CCT (K)	2761
Color Rendering Index (CRIa)	80
Color Rendering Index 1 (Light greyish red)	78
Color Rendering Index 2 (Dark greyish yellow)	89
Color Rendering Index 3 (Strong yellowish green)	97
Color Rendering Index 4 (Moderate yellowish green)	77
Color Rendering Index 5 (Light bluish green)	78
Color Rendering Index 6 (Light blue)	86
Color Rendering Index 7 (Light violet)	82
Color Rendering Index 8 (Light reddish purple)	58
Color Rendering Index 9 (Strong red)	8
Color Rendering Index 10 (Strong yellow)	74
Color Rendering Index 11 (Strong green)	73
Color Rendering Index 12 (Strong blue)	68
Color Rendering Index 13 (Light yellowish pink (skin))	80
Color Rendering Index 14 (Moderate olive green (leaf))	98
ANSI C78.377-2008 Duv	0.000
ELECTRICAL FOR SPECTRORADIOMETRIC TEST	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.490
Input Power (Watts)	58.3
Input Power Factor (%)	99.1



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NVLAP LAB CODE: 200925-0

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Page 3 of 3

RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.193	515	24.614	650	46.986
385	0.204	520	26.681	655	42.947
390	0.212	525	28.818	660	39.074
395	0.237	530	31.140	665	35.248
400	0.288	535	33.620	670	31.634
405	0.420	540	36.271	675	28.227
410	0.702	545	39.075	680	25.037
415	1.236	550	42.152	685	22.090
420	2.107	555	45.278	690	19.380
425	3.475	560	48.583	695	16.959
430	5.511	565	51.883	700	14.817
435	8.522	570	55.127	705	12.881
440	13.366	575	58.310	710	11.175
445	21.475	580	61.393	715	9.666
450	28.566	585	64.077	720	8.359
455	26.688	590	66.334	725	7.202
460	20.104	595	67.970	730	6.178
465	16.359	600	69.048	735	5.288
470	13.706	605	69.539	740	4.538
475	11.566	610	69.280	745	3.897
480	11.129	615	68.360	750	3.359
485	11.977	620	66.654	755	2.893
490	13.448	625	64.271	760	2.479
495	15.497	630	61.486	765	2.128
500	17.862	635	58.213	770	1.827
505	20.226	640	54.674	775	1.572
510	22.455	645	50.963	780	1.349

