



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

PHONE: (303)442-1255 • FAX: (970)535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

Page 1 of 3

REPORT NUMBER: ITL83586
DATE: 12/09/14
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: K2-LED-X50-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

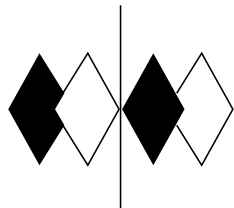
OBJECT OF TEST: Measure the Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Indices (CRI_a,1-14), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and electrical data including ANSI C82.77-2002 Power Factor (PF) to the test sample.

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



itl boulder

THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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

PHONE: (303)442-1255 • FAX: (970)535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

Page 2 of 3

REPORT NUMBER: ITL83586
DATE: 12/09/14
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: K2-LED-X50-FL-12

RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4357
Chromaticity Ordinate y	0.4032
Correlated Color Temp CCT (K)	3014
Color Rendering Index (CRIa)	92
Color Rendering Index 1 (Light greyish red)	92
Color Rendering Index 2 (Dark greyish yellow)	94
Color Rendering Index 3 (Strong yellowish green)	93
Color Rendering Index 4 (Moderate yellowish green)	92
Color Rendering Index 5 (Light bluish green)	91
Color Rendering Index 6 (Light blue)	91
Color Rendering Index 7 (Light violet)	95
Color Rendering Index 8 (Light reddish purple)	86
Color Rendering Index 9 (Strong red)	67
Color Rendering Index 10 (Strong yellow)	84
Color Rendering Index 11 (Strong green)	90
Color Rendering Index 12 (Strong blue)	73
Color Rendering Index 13 (Light yellowish pink (skin))	93
Color Rendering Index 14 (Moderate olive green (leaf))	95
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)	58.5
Input Power Factor (%)	99.5



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

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

PHONE: (303)442-1255 • FAX: (970)535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL83586
DATE: 12/09/14
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: K2-LED-X50-FL-12

Page 3 of 3

RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.197	515	27.290	650	54.912
385	0.198	520	29.945	655	52.461
390	0.203	525	32.361	660	49.701
395	0.216	530	34.621	665	46.635
400	0.256	535	36.677	670	43.411
405	0.354	540	38.442	675	40.115
410	0.562	545	39.986	680	36.759
415	0.980	550	41.414	685	33.465
420	1.698	555	42.632	690	30.206
425	2.868	560	43.740	695	27.123
430	4.687	565	44.737	700	24.244
435	7.412	570	45.646	705	21.544
440	11.530	575	46.686	710	19.056
445	18.510	580	47.844	715	16.779
450	28.078	585	49.146	720	14.740
455	32.806	590	50.586	725	12.852
460	27.622	595	52.109	730	11.177
465	21.364	600	53.760	735	9.661
470	17.755	605	55.471	740	8.356
475	14.734	610	57.044	745	7.232
480	12.849	615	58.418	750	6.269
485	12.800	620	59.357	755	5.408
490	13.924	625	59.866	760	4.666
495	15.823	630	59.857	765	4.015
500	18.408	635	59.383	770	3.457
505	21.398	640	58.429	775	2.970
510	24.397	645	56.968	780	2.548

