



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

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REPORT NUMBER: ITL86572
DATE: 01/28/16
PREPARED FOR: H.E. WILLIAMS, INC.
CATALOG NUMBER: S15-G-L6/840-FTG-DBZ-120

ADDRESS: 831 W. FAIRVIEW AVE
CARTHAGE, MO 64836

LUMINAIRE: CAST UNFINISHED METAL HOUSING, ONE LED MODULE, FABRICATED WHITE
PAINTED METAL REFLECTOR, FROSTED FLAT GLASS DIFFUSER IN CAST BROWN
PAINTED LOUVERED METAL FACEPLATE. DIFFUSER FROSTED SIDE IN.

LAMP: ONE LED MODULE, OSRAM PL-CUBE-2000-840-0.5A-G2, AIMED AT THE
HORIZON.

DRIVER: OSRAM OT25W/PRG1250C/UNV/DIM, DRIVER HAS MULTIPLE LEADS, ONLY LINE
INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST. CLIENT STATES
DRIVER PROGRAMMED FOR 500mA OUTPUT.

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 #6	12/07/16
	Ocean Optics QE65000 Spectroradiometer	12/14/16
	ITL 2.0m Diameter Integrating Sphere S20-2, 4PI Geometry	12/14/16

OBJECT OF TEST: Measure the Absolute Flux in lumens*, Spectral Power Distribution (SPD),
Correlated Color Temperature (CCT), Color Rendering Index (CRIa,1-14),
Chromaticity Coordinates (x,y; u',v'), ANSI C78.377 Duv, Total Radiant
Flux*, Scotopic / Photopic Lumen Ratio, and electrical data including
ANSI C82.77-2002 Power Factor (PF) and Total Harmonic Distortion (THD)
to the test sample.

PROCEDURE: The test sample was provided by the customer and had an unknown number
of operating 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 WHITE</i>
Approved	<i>P O'CONNOR</i> Sphere Lab Supervisor



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RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	618 *
SPECTORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3821
Chromaticity Ordinate y	0.3839
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2234
Chromaticity Ordinate v'	0.5050
Correlated Color Temp CCT (K)	4007
ANSI C78.377-2008 Duv	0.003
Total Radiant Flux (milliWatts)	1913 *
Scotopic / Photopic Lumen Ratio	1.691
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.191
Input Power (Watts)	22.8
Input Power Factor (%)	99.5
Input Current THD (%)	5.3
Input Voltage THD (%)	0.1
EFFICACY (lumens/Watt)	27.1

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	82
R1 Light greyish red	79
R2 Dark greyish yellow	87
R3 Strong yellowish green	92
R4 Moderate yellowish green	80
R5 Light bluish green	79
R6 Light blue	81
R7 Light violet	88
R8 Light reddish purple	67
R9 Strong red	13
R10 Strong yellow	68
R11 Strong green	77
R12 Strong blue	55
R13 Light yellowish pink (skin)	81
R14 Moderate olive green (leaf)	96

*NOTE: The total lumen output shown on this report was obtained from photometric test ITL86569



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NVLAP LAB CODE: 200925-0

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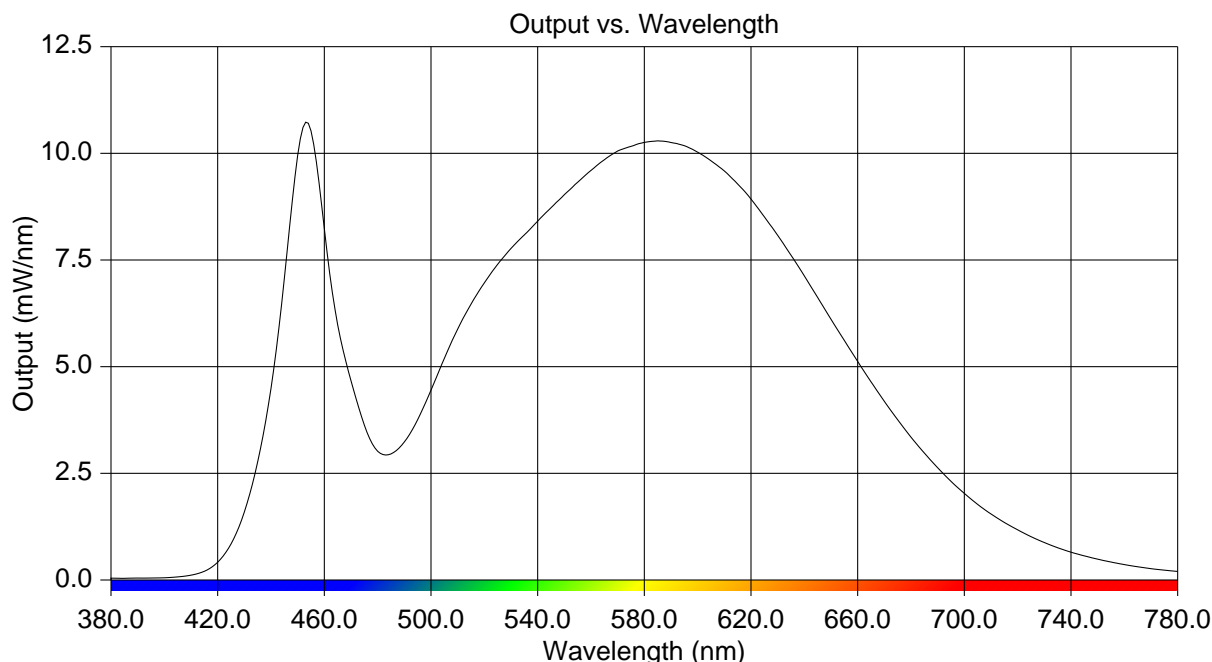
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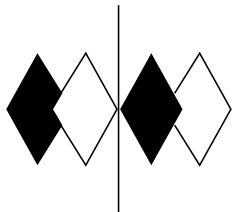
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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.043	515	6.464	650	6.111
385	0.039	520	6.963	655	5.615
390	0.045	525	7.400	660	5.122
395	0.046	530	7.771	665	4.645
400	0.052	535	8.088	670	4.188
405	0.073	540	8.410	675	3.756
410	0.113	545	8.724	680	3.347
415	0.204	550	9.031	685	2.976
420	0.415	555	9.322	690	2.631
425	0.843	560	9.599	695	2.312
430	1.593	565	9.849	700	2.030
435	2.769	570	10.055	705	1.771
440	4.489	575	10.163	710	1.548
445	7.066	580	10.257	715	1.349
450	9.952	585	10.293	720	1.176
455	10.527	590	10.254	725	1.016
460	8.236	595	10.179	730	0.878
465	5.982	600	10.027	735	0.756
470	4.670	605	9.825	740	0.652
475	3.631	610	9.587	745	0.565
480	3.017	615	9.280	750	0.489
485	2.955	620	8.928	755	0.421
490	3.236	625	8.513	760	0.361
495	3.758	630	8.079	765	0.310
500	4.449	635	7.612	770	0.265
505	5.193	640	7.127	775	0.231
510	5.880	645	6.622	780	0.200





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CIE Chromaticity Diagram

