



Reflector Lamp Test Report

Relevant Standards
IES LM-79-2008, IES LM-20-1994
ANSI C82.77

Prepared For
Technical Consumer Products, Inc
Paul Philips
325 Campus Drive
Aurora, OH 44202

Catalog Number
LED14E26P3030KFL

LTL Test Number
23517

Test Date
2011-05-26

Prepared By

Eric Gaudreau, Technician III

Approved By

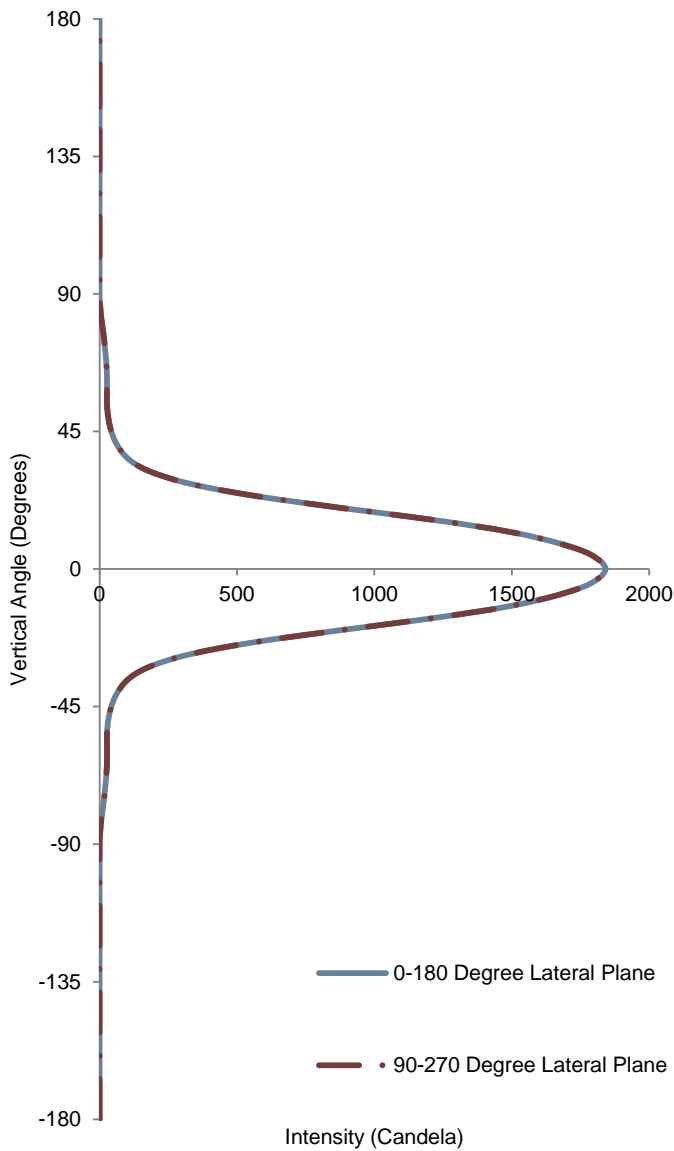
Zachary Mooney, Project Coordinator

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.

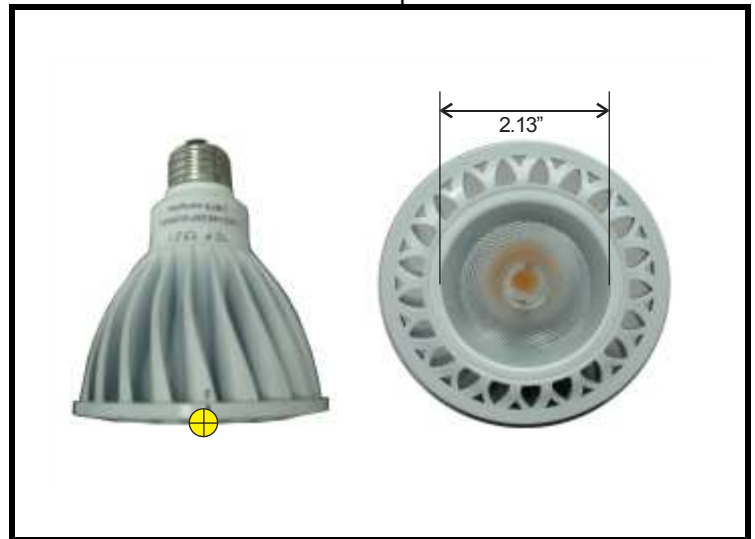


Lamp Description: Cast aluminum heatsink housing, clear patterned plastic optic
Catalog Number: LED14E26P3030KFL
Lamp: One PAR 30 LED replacement lamp
Mounting: VBU

Intensity vs Vertical Angle



Lamp



Test Conditions

Test Temperature: 25.6 °C
Voltage: 120.0 VAC
Current: 0.1337 A
Power: 14.24 W
Power Factor: 0.887
Frequency: 60 Hz

Total Lumen Output: 930.0 Lumens
Luminaire Efficacy: 65.3 Lumens/Watt
CIE Type: Direct
Spacing Criterion: 0.64 All Directions

Center Beam Intensity: 1841 Candela
Central Cone Intensity: 1818 Candela
Beam Flux: 500.1 Lumens
Beam Angle 0-180: 39.0 Degrees
Beam Angle 90-270: 39.0 Degrees
Field Angle 0-180: 63.8 Degrees
Field Angle 90-270: 63.8 Degrees

Data was acquired using the calibrated photodetector method of absolute photometry. A spectral mismatch correction factor was employed based on the spectral responsivity of the photodetector and the spectral power distribution of the test subject.



Candela Tabulation

Lateral Angle (Degrees)

Vertical Angle (Degrees)

Table with 17 columns (0, 22.5, 45, 67.5, 90, 112.5, 135, 157.5, 180, 202.5, 225, 247.5, 270, 292.5, 315, 337.5) and 27 rows (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180). Values range from 1841 down to 0.



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
Wall Reflectance	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **											
0	1134	1134	1134	1134	1107	1107	1107	1107	1081	1081	1081	1081
1	1078	1048	1022	998	1054	1027	1004	982	1031	1007	986	967
2	1025	974	933	898	1003	958	920	888	982	942	907	878
3	976	911	862	823	956	898	852	816	938	885	843	809
4	930	856	803	763	913	845	796	758	897	835	789	754
5	889	809	754	713	873	800	748	710	858	791	743	707
6	850	766	711	672	836	759	707	669	823	752	703	667
7	815	728	674	636	802	722	670	634	790	716	667	632
8	782	694	640	604	770	689	638	603	760	684	635	601
9	751	663	611	576	741	659	609	575	731	654	607	574
10	722	635	584	550	713	631	582	549	704	627	580	549

Ceiling Cavity Reflectance	50				30			10			0
Wall Reflectance	70	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **										
0	1033	1033	1033	1033	989	989	989	949	949	949	930
1	988	970	952	937	935	921	909	903	892	883	866
2	944	911	883	859	884	861	841	858	840	823	808
3	904	860	825	797	838	809	784	817	793	772	758
4	866	815	776	745	797	763	736	780	751	728	714
5	831	775	733	701	759	723	695	745	714	689	676
6	799	738	695	663	725	687	658	713	680	654	641
7	768	705	661	629	694	655	626	684	649	623	610
8	740	674	630	599	665	625	597	656	621	594	582
9	713	646	602	572	638	598	570	631	595	568	557
10	688	620	577	547	613	574	546	607	571	544	533

Average Luminance Table (cd/m²)

		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degree)	0	801000	801000	801000
	45	26370	26370	26370
	55	20230	20230	20230
	65	26870	26870	26870
	75	27460	27460	27460
	85	16190	16190	16190

This test was conducted using photometry techniques according to standard IES procedures. The user must therefore use caution in the following situations: 1) This test was performed using a specific ballast/lamp combination. Extrapolation of this data for other ballast/lamp combinations may produce erroneous results. 2) This test was conducted in a controlled laboratory environment where the ambient temperature was held at 25°C ±1°C. Field performance may differ particularly in regards to change in luminous output as a result of difference in ambient temperature and method of mounting the luminaire.



Zonal Lumen Tabulation (5 degree zones)

Table with 8 columns: Zone (Degrees), Lumens, Zone (Degrees), Lumens, Zone (Degrees), Lumens, Zone (Degrees), Lumens. It lists lumen values for various 5-degree zones from 0-5 to 175-180.

Polar Plot (Candela)

