



Reflector Lamp Test Report

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

Prepared For
Technical Consumer Products, Inc
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Aurora, OH 44202

Catalog Number
LED17E26P3830KFL (40 DEGREE)

LTL Test Number
22929

Test Date

2011-04-05

Prepared By

Zachary Mooney, Technician III

Approved By

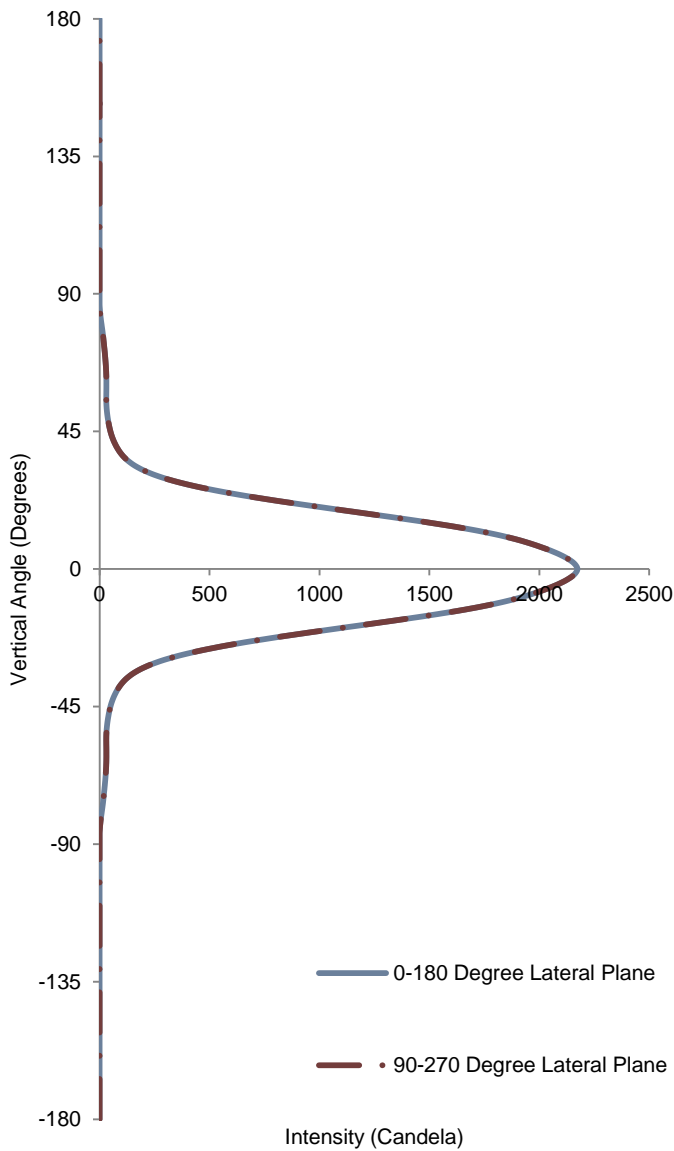
Brian Moyer, Engineer

The results contained in this report pertain only to the tested sample.
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Lamp Description: Cast white enamel aluminum heatsink housing, clear prismatic plastic lens / optic
Catalog Number: LED17E26P3830KFL (40 DEGREE)
Lamp: One PAR38 LED replacement lamp with one white LED
Mounting: VBU

Intensity vs Vertical Angle



Lamp



Test Conditions

Test Temperature: 25.1 °C
Voltage: 120.0 VAC
Current: 0.1611 A
Power: 17.15 W
Power Factor: 0.887
Frequency: 60 Hz

Total Lumen Output: 1082 Lumens
Luminaire Efficacy: 63.1 Lumens/Watt
CIE Type: Direct
Spacing Criterion: 0.64 All Directions

Center Beam Intensity: 2174 Candela
Central Cone Intensity: 2140 Candela
Beam Flux: 581.1 Lumens
Beam Angle 0-180: 38.8 Degrees
Beam Angle 90-270: 38.8 Degrees
Field Angle 0-180: 63.5 Degrees
Field Angle 90-270: 63.5 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 37 rows (0 to 180) of candela values.



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	1319	1319	1319	1319	1288	1288	1288	1288	1258	1258	1258	1258
1	1255	1221	1191	1164	1227	1197	1169	1145	1200	1173	1149	1127
2	1194	1135	1088	1048	1168	1116	1073	1036	1144	1097	1058	1025
3	1137	1062	1005	961	1114	1047	994	953	1093	1032	984	945
4	1084	999	937	891	1064	986	929	886	1045	974	921	880
5	1036	943	880	834	1018	933	874	830	1001	923	868	826
6	991	894	830	785	975	886	826	782	960	877	821	780
7	950	850	787	743	935	843	783	741	922	836	779	739
8	912	811	748	706	898	804	745	705	886	798	742	703
9	876	775	714	673	864	769	711	672	853	764	709	671
10	843	742	682	643	832	737	680	643	822	733	678	642

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	1202	1202	1202	1202	1151	1151	1151	1104	1104	1104	1082
1	1151	1129	1110	1092	1089	1074	1060	1052	1040	1029	1010
2	1100	1063	1030	1002	1030	1004	981	1001	980	961	943
3	1053	1003	963	930	977	944	916	953	925	902	885
4	1010	951	906	870	930	891	860	910	877	850	834
5	970	904	856	819	886	845	812	870	834	805	790
6	932	862	812	774	847	803	769	833	794	764	750
7	896	823	772	735	810	765	732	799	758	728	714
8	863	787	736	700	777	731	697	767	725	695	681
9	832	754	704	669	745	699	667	737	695	664	651
10	803	724	674	640	716	671	638	709	667	637	624

Average Luminance Table (cd/m²)

		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degree)	0	949900	949900	949900
	45	30500	30500	30500
	55	23230	23230	23230
	65	30650	30650	30650
	75	29990	29990	29990
	85	6394	6394	6394

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)

Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens
0-5	50.9	45-50	16.9	90-95	0	135-140	0
5-10	141.7	50-55	14.1	95-100	0	140-145	0
10-15	201.9	55-60	14.2	100-105	0	145-150	0
15-20	208.5	60-65	14.9	105-110	0	150-155	0
20-25	165.0	65-70	13.9	110-115	0	155-160	0
25-30	104.2	70-75	11.1	115-120	0	160-165	0
30-35	58.0	75-80	7.3	120-125	0	165-170	0
35-40	34.0	80-85	2.5	125-130	0	170-175	0
40-45	22.7	85-90	0.1	130-135	0	175-180	0

Polar Plot (Candela)

