



Integrating Sphere Test Report

Relevant Standards
IES LM-79-2008
ANSI C78.377-2008, ANSI C82.77
CIE 13.3-1995, CIE 15-2004

Prepared For
Nexus Lighting, Inc.
Kevin Carpenter
Suite 300
124 Floyd Smith Drive
Charlotte, NC 28262

Catalog Number
AE26PAR30113060

LTL Test Number
25297

Test Date

2011-09-09

Prepared By

Eric Gaudreau, 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: Molded plastic housing, clear plastic enclosure
Catalog Number: AE26PAR30113060
Lamp: One 11 watt PAR30 LED replacement lamp with 11 white LEDs
Lamp Catalog Number: Nexxus Lighting AE26PAR30113060
Mounting: VBU

Lamp



Summary of Results

Radiant Flux:	2277 mW
Luminous Flux:	694.8 Lumens
Lamp Efficacy:	72.1 Lumens/Watt
CCT:	3100 K
CRI (Ra):	85.4
Chromaticity (x):	0.4279
Chromaticity (y):	0.3973
Chromaticity (u):	0.2476
Chromaticity (v):	0.3449
Duv:	-0.0019

Test Conditions

Test Temperature:	24.2 °C
Voltage:	120.0 VAC
Current:	0.08241 A
Power:	9.638 W
Power Factor:	0.974
Frequency:	60 Hz
Current THD:	20.2 %

Testing was performed in a Labsphere SLMS7650 two meter integrating sphere using the 4π geometry method, a Labsphere CDS 1100 spectrometer, and LightMtrX software.
Absorption correction was employed for this measurement.

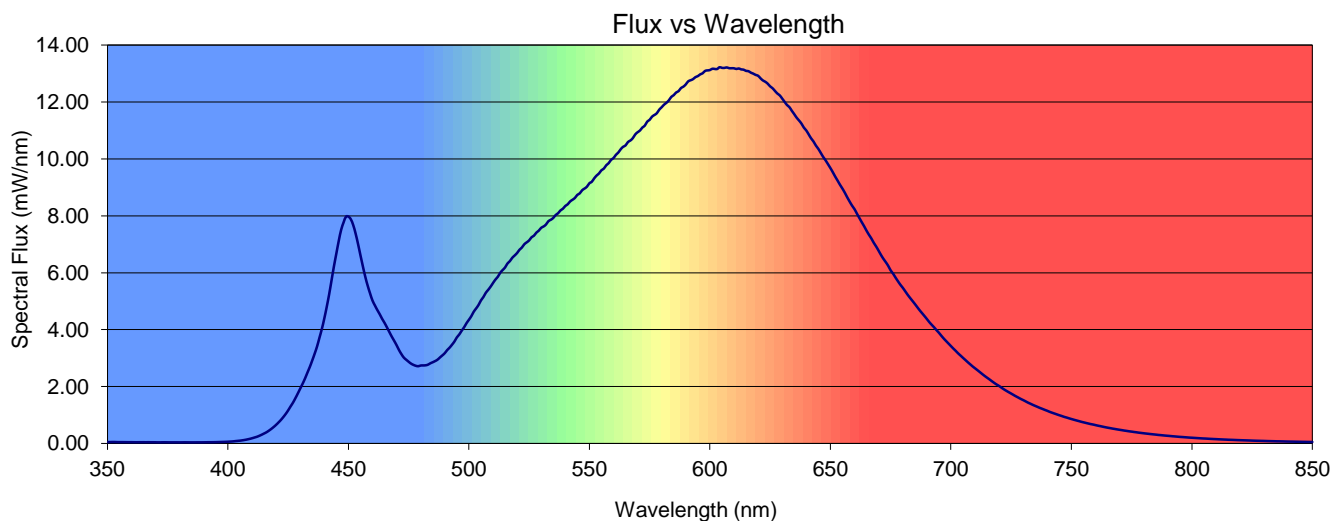
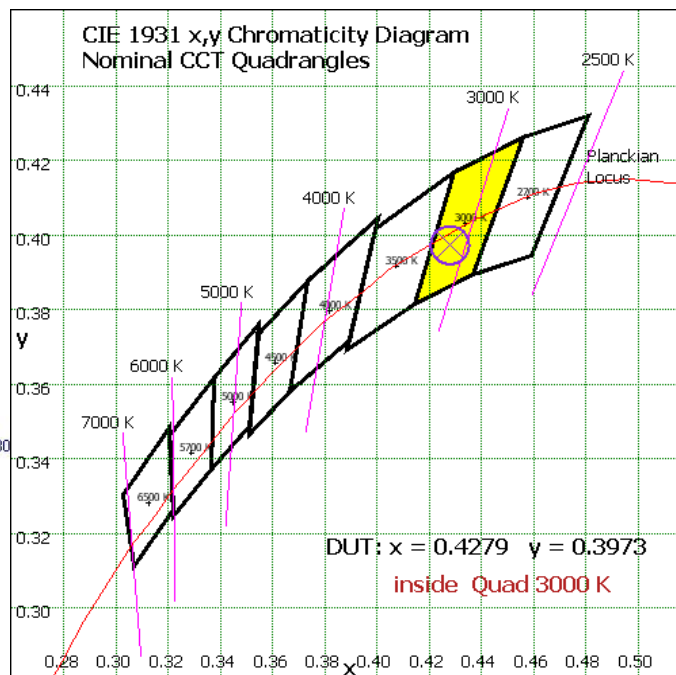
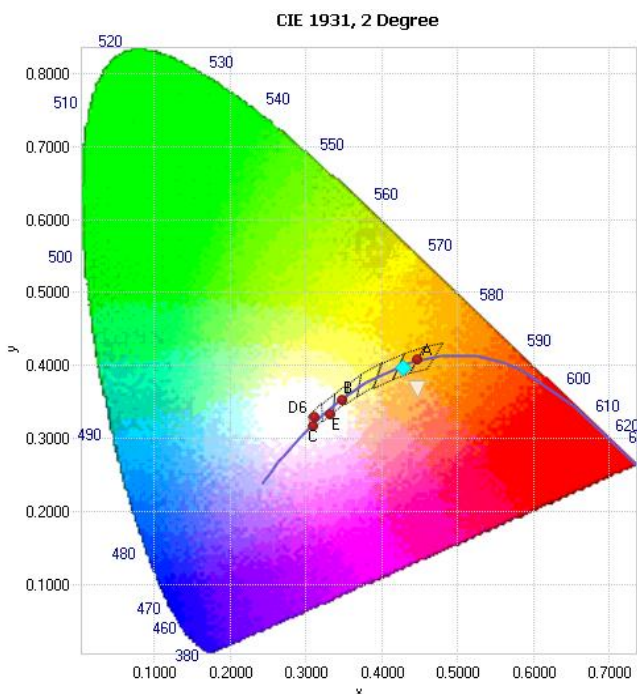


Chromaticity Coordinates

x	y	u	v	u'	v'	Duv
0.4279	0.3973	0.2476	0.3449	0.2476	0.5173	-0.0019

Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
85.4	84.3	90.9	95.5	84.0	83.8	87.6	87.3	69.7	29.9	78.1	82.5	71.6	85.7	97.2





Spectral Power Distribution

Table with 16 columns (λ(nm), mW/nm) and 42 rows of spectral data points.



Reflector Lamp Test Report

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IES LM-79-2008, IES LM-20-1994 (Withdrawn)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

Prepared For
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Catalog Number
AE26PAR30113060

LTL Test Number
25671

Test Date

2011-09-19

Prepared By

Eric Gaudreau, Technician III

Approved By

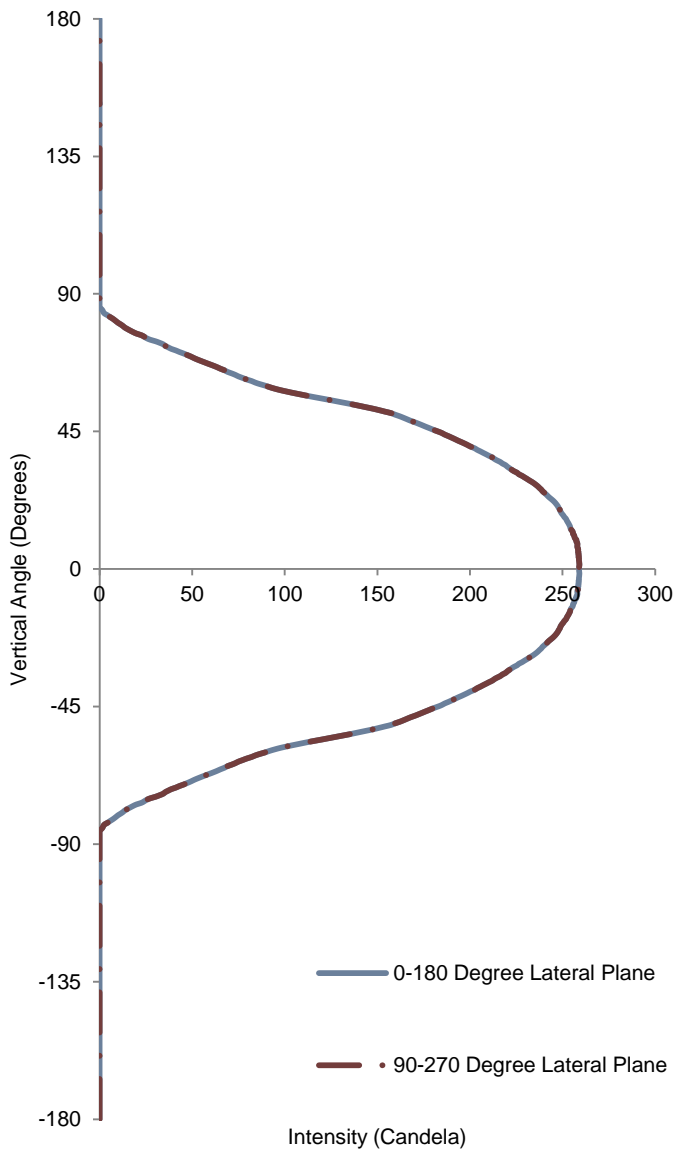
Brian Moyer, Engineer

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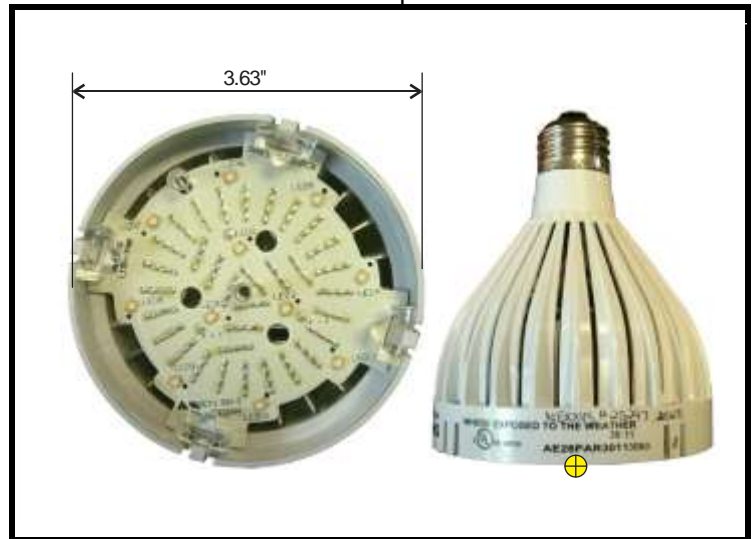


Lamp Description: Molded plastic housing, clear plastic enclosure
Catalog Number: AE26PAR30113060
Lamp: One 11 watt PAR30 LED replacement lamp with 11 white LEDs
Lamp Catalog Number: Nexxus Lighting AE26PAR30113060
Mounting: VBU

Intensity vs Vertical Angle



Lamp



Test Conditions

Test Temperature: 25.6 °C
Voltage: 120.0 VAC
Current: 0.08190 A
Power: 9.600 W
Power Factor: 0.977
Frequency: 60 Hz

Total Lumen Output: 694.5 Lumens
Luminaire Efficacy: 72.3 Lumens/Watt
CIE Type: Direct
Spacing Criterion: 1.31 All Directions

Center Beam Intensity: 259.0 Candela
Central Cone Intensity: 258.9 Candela
Beam Flux: 542 Lumens
Beam Angle 0-180: 109.4 Degrees
Beam Angle 90-270: 109.4 Degrees
Field Angle 0-180: 150.7 Degrees
Field Angle 90-270: 150.7 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 to 337.5) and 37 rows (0 to 180) of Candela Tabulation data.



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	847.0	847.0	847.0	847.0	826.8	826.8	826.8	826.8	807.6	807.6	807.6	807.6
1	783.4	750.7	721.5	695.4	763.9	734.3	707.8	683.9	745.4	718.8	694.7	672.9
2	718.2	660.3	612.9	573.4	699.5	646.8	603.2	566.6	681.7	633.9	593.9	559.9
3	658.2	583.2	526.0	480.9	640.5	571.9	518.9	476.6	623.8	561.1	512.0	472.3
4	604.4	518.4	456.5	409.7	588.0	509.0	451.1	406.9	572.5	499.9	445.9	404.1
5	556.7	463.9	400.3	354.0	541.6	456.0	396.2	352.0	527.3	448.3	392.1	350.1
6	514.3	417.9	354.5	309.6	500.5	411.2	351.2	308.2	487.5	404.7	348.0	306.8
7	476.7	378.8	316.6	273.6	464.2	373.1	314.0	272.6	452.4	367.5	311.4	271.6
8	443.5	345.4	285.0	244.1	432.1	340.5	282.9	243.3	421.4	335.7	280.8	242.6
9	413.9	316.7	258.4	219.5	403.6	312.5	256.6	218.9	393.9	308.3	254.9	218.4
10	387.6	291.9	235.7	198.9	378.3	288.2	234.3	198.4	369.5	284.6	232.8	198.0

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	771.7	771.7	771.7	771.7	738.9	738.9	738.9	708.7	708.7	708.7	694.5
1	711.2	689.6	669.8	651.7	662.7	646.7	631.9	638.0	625.2	613.2	599.2
2	649.0	609.6	576.0	547.0	587.3	559.3	534.7	566.6	543.5	522.9	508.6
3	593.0	540.8	498.7	464.1	522.0	486.2	456.1	504.5	474.3	448.4	433.9
4	543.9	482.8	435.8	398.6	466.9	426.2	393.3	452.1	417.1	388.1	373.6
5	501.1	433.8	384.3	346.4	420.3	376.8	342.7	407.7	369.7	339.1	324.8
6	463.6	392.3	341.8	304.2	380.8	335.9	301.5	370.0	330.1	299.0	285.1
7	430.7	356.9	306.4	269.7	347.1	301.6	267.7	337.8	297.0	265.8	252.4
8	401.7	326.6	276.7	241.1	318.1	272.8	239.7	310.1	269.0	238.2	225.3
9	376.0	300.5	251.5	217.2	293.1	248.3	216.1	286.1	245.1	215.0	202.6
10	353.2	277.8	230.0	197.1	271.3	227.3	196.2	265.2	224.6	195.4	183.4

Average Luminance Table (cd/m²)

		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degree)	0	38790	38790	38790
	45	38700	38700	38700
	55	33100	33100	33100
	65	23900	23900	23900
	75	15840	15840	15840
	85	1829	1829	1829

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 degrees.

Polar Plot (Candela)

