



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] L101403501  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUE DATE] 10/20/2014  
 [MANUFACT] PRUDENTIAL LTG.  
 [LUMCAT] ZDS-44-LED4-MO  
 [LUMINAIRE] 38"SQ. X 3"H. LED LUMINAIRE  
 [MORE] DIFFUSED LENS  
 [BALLASTCAT] OSRAM OPTOTRONIC  
 [BALLAST] INPUT: 120-277VAC, 0.52-0.24A,  
 [LAMPPOSITION] 0,0  
 [LAMPCAT] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [ INPUT] 120VAC,  
 [ TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9880
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	88
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.17 ft
Luminous Width (90-270)	2.17 ft
Luminous Height	0.10 ft

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES**

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5624	5440	5603
55	5628	5462	5490
65	5678	5692	5407
75	5680	6040	5264
85	7303	7564	6592

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES**

**CANDELA TABULATION**

	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>	<b>45</b>
<b>0</b>	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7
<b>5</b>	2904.9	2904.9	2904.9	2904.9	2907.2	2907.2	2904.9	2902.6	2902.6	2902.6
<b>10</b>	2854.3	2852.0	2854.3	2854.3	2856.6	2856.6	2854.3	2854.3	2854.3	2856.6
<b>15</b>	2757.7	2760.0	2757.7	2757.7	2764.6	2769.2	2769.2	2769.2	2769.2	2769.2
<b>20</b>	2626.6	2624.3	2624.3	2624.3	2628.9	2633.5	2635.8	2635.8	2635.8	2638.1
<b>25</b>	2461.0	2461.0	2463.3	2467.9	2472.5	2474.8	2474.8	2477.1	2477.1	2477.1
<b>30</b>	2293.1	2293.1	2295.4	2300.0	2302.3	2304.6	2302.3	2304.6	2302.3	2302.3
<b>35</b>	2127.5	2129.8	2134.4	2136.7	2136.7	2134.4	2129.8	2127.5	2125.2	2125.2
<b>40</b>	1973.4	1975.7	1978.0	1980.3	1978.0	1971.1	1966.5	1961.9	1955.0	1955.0
<b>45</b>	1821.6	1821.6	1828.5	1828.5	1826.2	1819.3	1810.1	1805.5	1798.6	1794.0
<b>50</b>	1667.5	1667.5	1674.4	1676.7	1676.7	1669.8	1662.9	1656.0	1649.1	1644.5
<b>55</b>	1506.5	1508.8	1518.0	1522.6	1522.6	1520.3	1513.4	1508.8	1501.9	1499.6
<b>60</b>	1347.8	1350.1	1363.9	1370.8	1375.4	1375.4	1375.4	1373.1	1368.5	1363.9
<b>65</b>	1154.6	1159.2	1173.0	1184.5	1196.0	1202.9	1205.2	1207.5	1205.2	1200.6
<b>70</b>	954.5	959.1	975.2	989.0	1002.8	1014.3	1023.5	1030.4	1032.7	1028.1
<b>75</b>	754.4	761.3	777.4	793.5	811.9	828.0	839.5	848.7	853.3	851.0
<b>80</b>	575.0	581.9	598.0	614.1	632.5	650.9	664.7	673.9	680.8	678.5
<b>85</b>	425.5	430.1	439.3	450.8	464.6	478.4	489.9	499.1	503.7	503.7
<b>90</b>	202.4	204.7	211.6	223.1	234.6	243.8	253.0	262.2	264.5	264.5
<b>95</b>	218.5	220.8	225.4	234.6	243.8	250.7	257.6	259.9	257.6	253.0
<b>100</b>	234.6	234.6	241.5	250.7	259.9	269.1	276.0	280.6	282.9	276.0
<b>105</b>	181.7	186.3	193.2	202.4	213.9	220.8	227.7	230.0	232.3	241.5
<b>110</b>	142.6	147.2	158.7	172.5	188.6	204.7	220.8	234.6	246.1	250.7
<b>115</b>	172.5	174.8	184.0	195.5	204.7	216.2	223.1	230.0	234.6	236.9
<b>120</b>	165.6	167.9	174.8	181.7	188.6	195.5	202.4	209.3	213.9	213.9
<b>125</b>	149.5	151.8	156.4	163.3	170.2	179.4	186.3	190.9	193.2	195.5
<b>130</b>	138.0	140.3	144.9	151.8	158.7	165.6	170.2	174.8	177.1	179.4
<b>135</b>	131.1	133.4	138.0	142.6	147.2	151.8	158.7	163.3	165.6	163.3
<b>140</b>	119.6	121.9	124.2	131.1	135.7	140.3	142.6	144.9	147.2	149.5
<b>145</b>	110.4	112.7	115.0	117.3	119.6	124.2	126.5	126.5	128.8	128.8
<b>150</b>	96.6	96.6	98.9	103.5	105.8	108.1	110.4	110.4	110.4	110.4
<b>155</b>	85.1	87.4	87.4	89.7	92.0	94.3	94.3	94.3	96.6	96.6
<b>160</b>	75.9	75.9	75.9	78.2	78.2	80.5	82.8	82.8	85.1	85.1
<b>165</b>	66.7	66.7	66.7	66.7	69.0	69.0	69.0	69.0	69.0	69.0
<b>170</b>	55.2	55.2	57.5	57.5	57.5	57.5	55.2	55.2	55.2	55.2
<b>175</b>	48.3	48.3	48.3	48.3	48.3	48.3	46.0	46.0	46.0	46.0
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Vert. Angles**      **Horizontal Angles**

	<b>50</b>	<b>55</b>	<b>60</b>	<b>65</b>	<b>70</b>	<b>75</b>	<b>80</b>	<b>85</b>	<b>90</b>
<b>0</b>	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7	2918.7
<b>5</b>	2902.6	2904.9	2907.2	2909.5	2909.5	2907.2	2907.2	2907.2	2907.2
<b>10</b>	2854.3	2856.6	2856.6	2858.9	2858.9	2858.9	2858.9	2856.6	2856.6
<b>15</b>	2769.2	2769.2	2771.5	2771.5	2766.9	2764.6	2762.3	2762.3	2762.3
<b>20</b>	2638.1	2638.1	2640.4	2638.1	2633.5	2628.9	2631.2	2633.5	2635.8
<b>25</b>	2479.4	2481.7	2481.7	2479.4	2479.4	2474.8	2474.8	2472.5	2472.5
<b>30</b>	2304.6	2309.2	2309.2	2311.5	2313.8	2309.2	2304.6	2302.3	2304.6
<b>35</b>	2127.5	2132.1	2134.4	2141.3	2143.6	2143.6	2141.3	2139.0	2139.0
<b>40</b>	1957.3	1959.6	1966.5	1973.4	1978.0	1982.6	1980.3	1978.0	1978.0
<b>45</b>	1796.3	1800.9	1807.8	1812.4	1819.3	1821.6	1819.3	1814.7	1814.7
<b>50</b>	1644.5	1646.8	1651.4	1656.0	1658.3	1658.3	1653.7	1646.8	1644.5
<b>55</b>	1497.3	1495.0	1495.0	1495.0	1495.0	1490.4	1483.5	1472.0	1469.7
<b>60</b>	1359.3	1354.7	1350.1	1345.5	1338.6	1329.4	1317.9	1304.1	1301.8

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES**

**CANDELA TABULATION - (Cont.)**

<b>65</b>	1196.0	1186.8	1177.6	1166.1	1152.3	1136.2	1120.1	1104.0	1099.4
<b>70</b>	1021.2	1009.7	993.6	977.5	959.1	938.4	920.0	901.6	894.7
<b>75</b>	844.1	830.3	811.9	791.2	768.2	745.2	724.5	706.1	699.2
<b>80</b>	671.6	657.8	639.4	618.7	595.7	572.7	549.7	533.6	526.7
<b>85</b>	496.8	485.3	471.5	453.1	434.7	416.3	400.2	388.7	384.1
<b>90</b>	262.2	255.3	246.1	232.3	220.8	207.0	195.5	188.6	186.3
<b>95</b>	243.8	232.3	218.5	207.0	195.5	184.0	172.5	165.6	163.3
<b>100</b>	266.8	255.3	246.1	241.5	236.9	227.7	220.8	213.9	211.6
<b>105</b>	248.4	255.3	250.7	243.8	232.3	220.8	209.3	202.4	200.1
<b>110</b>	250.7	250.7	246.1	236.9	225.4	213.9	202.4	193.2	190.9
<b>115</b>	236.9	234.6	230.0	223.1	213.9	202.4	193.2	186.3	184.0
<b>120</b>	213.9	211.6	204.7	200.1	193.2	184.0	177.1	170.2	167.9
<b>125</b>	195.5	193.2	188.6	181.7	174.8	165.6	158.7	151.8	149.5
<b>130</b>	179.4	177.1	172.5	167.9	158.7	151.8	144.9	140.3	135.7
<b>135</b>	165.6	163.3	158.7	154.1	147.2	140.3	135.7	131.1	128.8
<b>140</b>	147.2	144.9	142.6	140.3	135.7	128.8	124.2	119.6	117.3
<b>145</b>	128.8	126.5	126.5	121.9	119.6	117.3	112.7	110.4	108.1
<b>150</b>	110.4	110.4	108.1	105.8	105.8	101.2	98.9	96.6	96.6
<b>155</b>	96.6	94.3	94.3	92.0	92.0	89.7	87.4	85.1	85.1
<b>160</b>	85.1	82.8	82.8	80.5	78.2	78.2	75.9	75.9	73.6
<b>165</b>	69.0	69.0	69.0	69.0	66.7	66.7	66.7	66.7	64.4
<b>170</b>	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
<b>175</b>	46.0	46.0	46.0	48.3	48.3	48.3	48.3	48.3	48.3
<b>180</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1054.16	N.A.	10.70
0-30	2194.48	N.A.	22.20
0-40	3532.9	N.A.	35.80
0-60	6281.8	N.A.	63.60
0-80	8284.94	N.A.	83.90
0-90	8765.69	N.A.	88.70
10-90	8489.95	N.A.	85.90
20-40	2478.75	N.A.	25.10
20-50	3880.95	N.A.	39.30
40-70	3908.42	N.A.	39.60
60-80	2003.15	N.A.	20.30
70-80	843.62	N.A.	8.50
80-90	480.75	N.A.	4.90
90-110	492.84	N.A.	5.00
90-120	698.02	N.A.	7.10
90-130	855.93	N.A.	8.70
90-150	1047.32	N.A.	10.60
90-180	1113.95	N.A.	11.30
110-180	621.11	N.A.	6.30
0-180	9879.64	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	275.75
10-20	778.41
20-30	1140.33
30-40	1338.42
40-50	1402.2
50-60	1346.69
60-70	1159.53
70-80	843.62
80-90	480.75
90-100	252.96
100-110	239.87
110-120	205.19
120-130	157.90
130-140	115.42
140-150	75.96
150-160	42.86
160-170	19.52
170-180	4.26

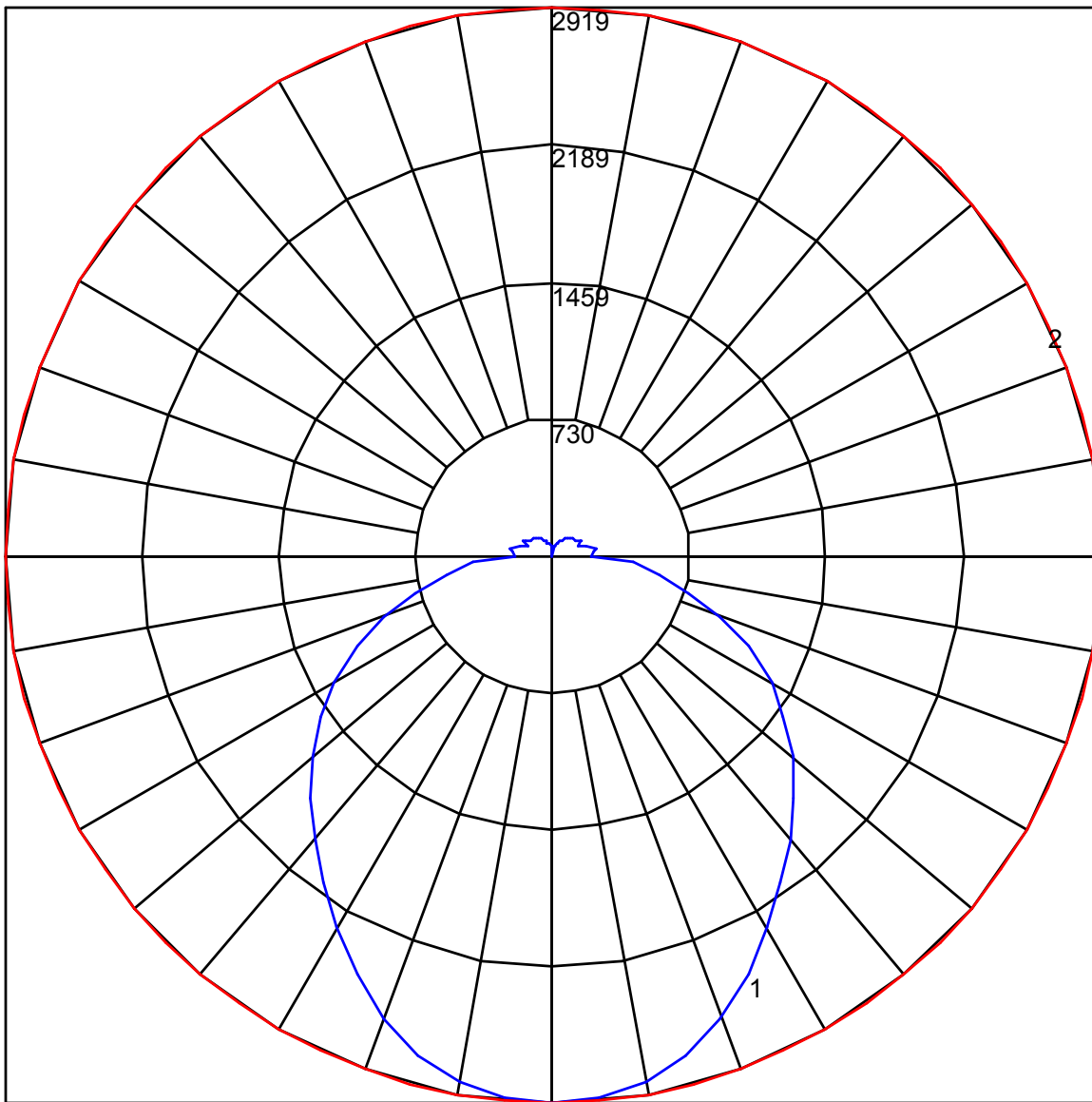
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZDS-44-LED4-MO.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	99	94	90	101	96	91	87	89	86	82	83	81	78	78	76	74	71
2	94	85	78	72	91	83	76	70	77	72	67	72	68	64	67	64	60	58
3	86	75	66	59	82	72	64	58	67	61	55	63	58	53	59	55	51	48
4	78	66	57	50	75	64	55	49	60	53	47	56	50	45	53	47	43	41
5	72	59	49	43	69	57	48	42	53	46	40	50	44	39	47	42	37	35
6	66	53	44	37	64	51	43	36	48	41	35	45	39	34	43	37	33	30
7	61	48	39	33	59	46	38	32	44	36	31	41	35	30	39	33	29	27
8	57	43	35	29	55	42	34	29	40	33	28	38	31	27	36	30	26	24
9	53	40	32	26	51	39	31	26	37	30	25	35	29	24	33	28	23	22
10	50	37	29	24	48	36	28	23	34	27	23	32	26	22	31	25	21	20

POLAR GRAPH



Maximum Candela = 2918.7 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)