



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : ZUS-22-LED4-LO.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] L101409101  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUE DATE] 10/30/2014  
 [MANUFACT] PRUDENTIAL LTG.  
 [LUMCAT] ZDS-22-LED4-LO  
 [LUMINAIRE] 26"SQ. X 3"H. LED LUMINAIRE  
 [MORE] DIFFUSED LENS  
 [BALLASTCAT] OSRAM OPTOTRONIC  
 [BALLAST] INPUT: 120-277VAC  
 [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	3866
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	34
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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 : ZUS-22-LED4-LO.IES**

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	158	194	156
55	219	279	219
65	332	440	354
75	535	671	590
85	1467	1487	1097

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZUS-22-LED4-LO.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>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>5</b>	18.9	18.9	18.9	18.9	18.9	18.9	18.0	18.0	18.0	18.0
<b>10</b>	21.6	21.6	22.5	22.5	22.5	22.5	21.6	21.6	21.6	21.6
<b>15</b>	26.1	26.1	26.1	26.1	27.0	27.0	27.0	27.0	27.0	27.0
<b>20</b>	29.7	29.7	29.7	30.6	30.6	31.5	32.4	32.4	33.3	33.3
<b>25</b>	33.3	34.2	34.2	35.1	36.0	36.9	36.9	36.9	37.8	37.8
<b>30</b>	37.8	37.8	38.7	40.5	41.4	42.3	43.2	43.2	43.2	43.2
<b>35</b>	43.2	44.1	45.0	45.9	46.8	48.6	49.5	49.5	50.4	50.4
<b>40</b>	46.8	47.7	48.6	51.3	53.1	54.9	55.8	56.7	57.6	58.5
<b>45</b>	51.3	52.2	54.0	55.8	57.6	59.4	62.1	63.9	64.8	63.9
<b>50</b>	54.0	54.9	56.7	59.4	62.1	64.8	66.6	68.4	69.3	70.2
<b>55</b>	58.5	59.4	61.2	63.9	66.6	70.2	72.9	74.7	75.6	76.5
<b>60</b>	64.8	65.7	68.4	71.1	73.8	76.5	79.2	81.9	83.7	83.7
<b>65</b>	67.5	68.4	72.0	76.5	80.1	84.6	87.3	90.0	91.8	92.7
<b>70</b>	55.8	57.6	62.1	67.5	73.8	80.1	86.4	91.8	96.3	98.1
<b>75</b>	71.1	72.9	75.6	79.2	83.7	86.4	89.1	90.0	90.9	94.5
<b>80</b>	91.8	91.8	94.5	98.1	101.7	105.3	108.0	109.8	110.7	108.0
<b>85</b>	85.5	86.4	88.2	91.8	95.4	98.1	100.8	101.7	100.8	99.0
<b>90</b>	79.2	80.1	82.8	87.3	91.8	95.4	99.0	102.6	103.5	103.5
<b>95</b>	166.5	168.3	171.9	176.4	181.8	187.2	191.7	195.3	197.1	197.1
<b>100</b>	225.0	227.7	234.0	240.3	247.5	254.7	260.1	263.7	266.4	265.5
<b>105</b>	295.2	297.9	304.2	310.5	317.7	324.0	328.5	332.1	333.9	333.0
<b>110</b>	373.5	375.3	381.6	387.0	392.4	396.9	400.5	403.2	404.1	402.3
<b>115</b>	451.8	453.6	459.0	463.5	468.0	470.7	471.6	472.5	471.6	469.8
<b>120</b>	527.4	528.3	533.7	536.4	538.2	538.2	538.2	537.3	535.5	533.7
<b>125</b>	589.5	590.4	594.0	595.8	595.8	594.9	592.2	590.4	587.7	586.8
<b>130</b>	652.5	652.5	655.2	656.1	656.1	653.4	650.7	648.0	645.3	643.5
<b>135</b>	712.8	712.8	715.5	715.5	714.6	711.9	708.3	706.5	703.8	702.0
<b>140</b>	772.2	773.1	774.0	774.9	774.0	771.3	769.5	767.7	765.0	765.0
<b>145</b>	832.5	833.4	835.2	836.1	836.1	835.2	833.4	832.5	831.6	831.6
<b>150</b>	897.3	897.3	898.2	900.0	900.9	901.8	900.9	901.8	900.9	900.9
<b>155</b>	963.0	963.0	963.9	965.7	967.5	968.4	968.4	969.3	969.3	969.3
<b>160</b>	1027.8	1026.9	1026.9	1026.9	1028.7	1030.5	1031.4	1031.4	1031.4	1032.3
<b>165</b>	1079.1	1080.0	1079.1	1079.1	1081.8	1083.6	1083.6	1083.6	1083.6	1083.6
<b>170</b>	1116.9	1116.0	1116.9	1116.9	1117.8	1117.8	1116.9	1116.9	1116.9	1117.8
<b>175</b>	1136.7	1136.7	1136.7	1136.7	1137.6	1137.6	1136.7	1135.8	1135.8	1135.8
<b>180</b>	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1

**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>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>5</b>	18.0	18.0	18.0	18.9	18.9	18.9	18.9	18.9	18.9
<b>10</b>	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
<b>15</b>	27.0	27.0	27.0	27.0	26.1	26.1	26.1	26.1	25.2
<b>20</b>	33.3	32.4	32.4	31.5	30.6	30.6	29.7	29.7	28.8
<b>25</b>	37.8	36.9	36.9	36.0	36.0	35.1	34.2	33.3	33.3
<b>30</b>	43.2	43.2	42.3	41.4	41.4	39.6	38.7	37.8	37.8
<b>35</b>	50.4	49.5	49.5	47.7	46.8	45.9	44.1	43.2	42.3
<b>40</b>	57.6	56.7	55.8	54.9	53.1	50.4	48.6	46.8	45.9
<b>45</b>	64.8	63.9	62.1	60.3	57.6	54.9	53.1	51.3	50.4
<b>50</b>	70.2	69.3	67.5	65.7	62.1	59.4	56.7	54.9	53.1
<b>55</b>	76.5	75.6	73.8	71.1	68.4	64.8	62.1	59.4	58.5
<b>60</b>	83.7	82.8	80.1	78.3	75.6	72.0	69.3	66.6	65.7

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZUS-22-LED4-LO.IES**

**CANDELA TABULATION - (Cont.)**

<b>65</b>	92.7	91.8	90.0	87.3	83.7	79.2	75.6	72.9	72.0
<b>70</b>	98.1	98.1	96.3	92.7	88.2	83.7	79.2	75.6	74.7
<b>75</b>	97.2	99.9	98.1	95.4	90.9	86.4	81.9	79.2	78.3
<b>80</b>	104.4	99.9	96.3	94.5	92.7	89.1	86.4	83.7	82.8
<b>85</b>	95.4	90.9	85.5	81.0	76.5	72.0	67.5	64.8	63.9
<b>90</b>	102.6	99.9	96.3	90.9	86.4	81.0	76.5	73.8	72.9
<b>95</b>	194.4	189.9	184.5	177.3	170.1	162.9	156.6	152.1	150.3
<b>100</b>	262.8	257.4	250.2	242.1	233.1	224.1	215.1	208.8	206.1
<b>105</b>	330.3	324.9	317.7	309.6	300.6	291.6	283.5	276.3	273.6
<b>110</b>	399.6	395.1	388.8	382.5	375.3	367.2	360.0	352.8	350.1
<b>115</b>	468.0	464.4	460.8	456.3	450.9	444.6	438.3	432.0	430.2
<b>120</b>	531.9	530.1	528.3	526.5	523.8	520.2	515.7	510.3	509.4
<b>125</b>	585.9	585.0	585.0	585.0	585.0	583.2	580.5	576.0	575.1
<b>130</b>	643.5	644.4	646.2	648.0	648.9	648.9	647.1	644.4	643.5
<b>135</b>	702.9	704.7	707.4	709.2	711.9	712.8	711.9	710.1	710.1
<b>140</b>	765.9	766.8	769.5	772.2	774.0	775.8	774.9	774.0	774.0
<b>145</b>	832.5	834.3	835.2	837.9	838.8	838.8	837.9	837.0	837.0
<b>150</b>	901.8	903.6	903.6	904.5	905.4	903.6	901.8	900.9	901.8
<b>155</b>	970.2	971.1	971.1	970.2	970.2	968.4	968.4	967.5	967.5
<b>160</b>	1032.3	1032.3	1033.2	1032.3	1030.5	1028.7	1029.6	1030.5	1031.4
<b>165</b>	1083.6	1083.6	1084.5	1084.5	1082.7	1081.8	1080.9	1080.9	1080.9
<b>170</b>	1116.9	1117.8	1117.8	1118.7	1118.7	1118.7	1118.7	1117.8	1117.8
<b>175</b>	1135.8	1136.7	1137.6	1138.5	1138.5	1137.6	1137.6	1137.6	1137.6
<b>180</b>	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1	1142.1

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZUS-22-LED4-LO.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	9.30	N.A.	0.20
0-30	26.07	N.A.	0.70
0-40	55.80	N.A.	1.40
0-60	162.75	N.A.	4.20
0-80	336.91	N.A.	8.70
0-90	435.89	N.A.	11.30
10-90	434.23	N.A.	11.20
20-40	46.50	N.A.	1.20
20-50	91.66	N.A.	2.40
40-70	187.24	N.A.	4.80
60-80	174.15	N.A.	4.50
70-80	93.86	N.A.	2.40
80-90	98.99	N.A.	2.60
90-110	518.23	N.A.	13.40
90-120	971.96	N.A.	25.10
90-130	1498.93	N.A.	38.80
90-150	2571.34	N.A.	66.50
90-180	3430.05	N.A.	88.70
110-180	2911.82	N.A.	75.30
0-180	3865.95	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	1.67
10-20	7.64
20-30	16.77
30-40	29.73
40-50	45.17
50-60	61.79
60-70	80.29
70-80	93.86
80-90	98.99
90-100	188.12
100-110	330.11
110-120	453.73
120-130	526.97
130-140	548.69
140-150	523.73
150-160	446.22
160-170	304.60
170-180	107.90

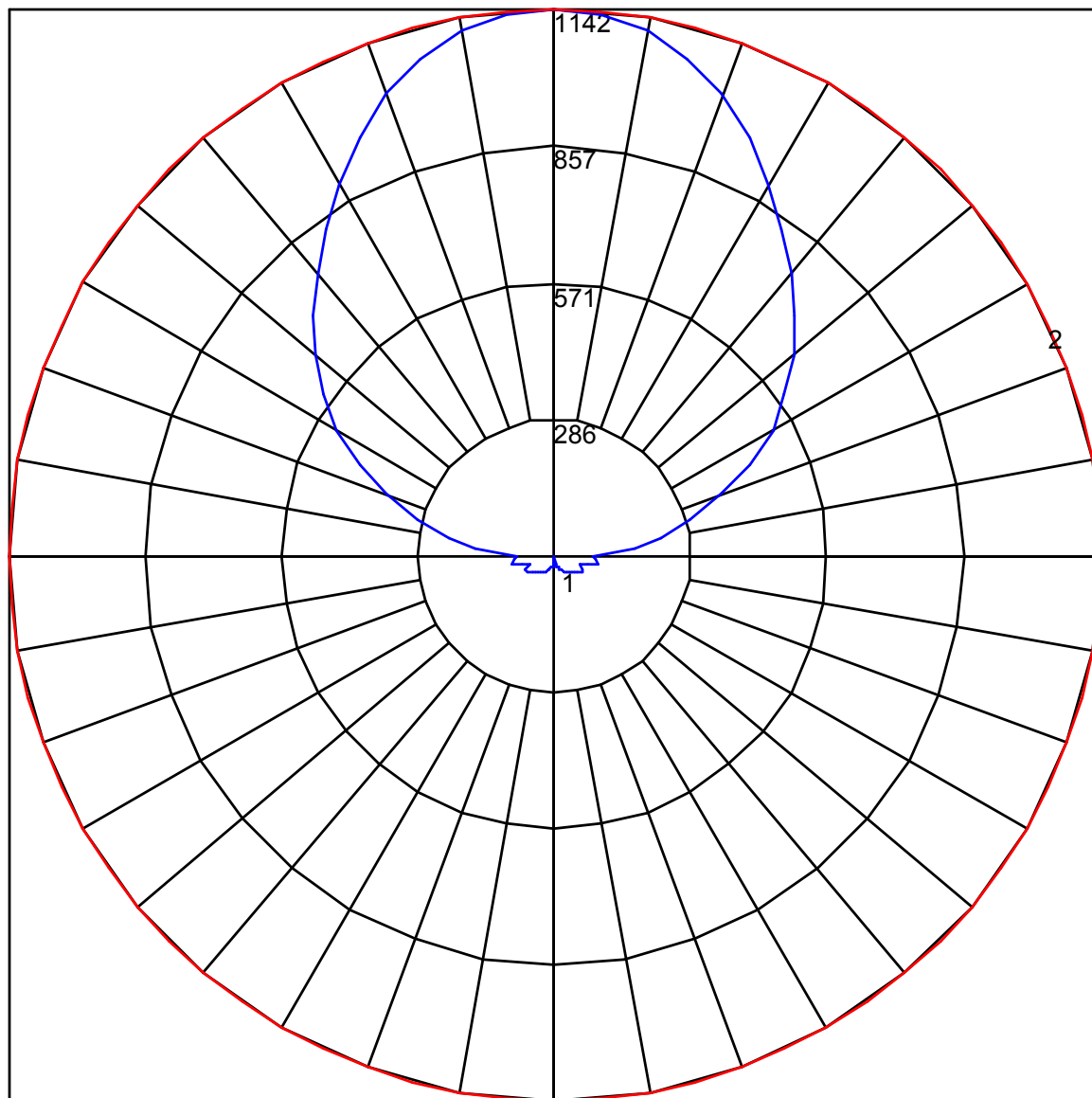
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : ZUS-22-LED4-LO.IES**

**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	98	98	98	98	85	85	85	85	62	62	62	40	40	40	21	21	21	11
1	88	83	79	75	76	72	69	66	52	50	48	33	32	31	16	15	15	7
2	79	72	66	60	69	62	57	53	45	41	38	28	26	25	13	12	11	5
3	72	63	55	49	62	54	48	43	39	35	32	25	22	20	11	10	9	3
4	66	55	47	41	57	48	41	36	34	30	26	22	19	17	10	9	7	3
5	60	49	41	35	52	42	36	31	30	26	22	19	16	14	9	7	6	2
6	55	43	35	30	47	38	31	26	27	22	19	17	14	12	8	6	5	2
7	50	39	31	26	44	34	27	22	24	20	16	15	13	10	7	6	5	1
8	47	35	27	22	40	30	24	20	22	17	14	14	11	9	6	5	4	1
9	43	31	24	19	37	27	21	17	20	15	12	13	10	8	6	4	3	1
10	40	29	22	17	35	25	19	15	18	14	11	11	9	7	5	4	3	1

POLAR GRAPH



Maximum Candela = 1142.1 Located At Horizontal Angle = 0, Vertical Angle = 180

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

# 2 - Horizontal Cone Through Vertical Angle (180) (Through Max. Cd.)