



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : ZIS-33-LED-MO.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] L101411401R01  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUE DATE] 11/20/2014  
 [MANUFAC] PRUDENTIAL LTG.  
 [LUMCAT] ZIS-33-LED-MO-SAL-DM10  
 [MORE] DIFFUSED LENS  
 [BALLASTCAT] OSRAM OPTOTRONIC  
 [BALLAST]  
 [LAMPPOSITION] 0,0  
 [LAMPCAT] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [ INPUT] 1  
 [ TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7466
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	66
Ballast Factor	1.00
CIE Type	General Diffuse
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)	2.02 ft
Luminous Width (90-270)	2.02 ft
Luminous Height	0.13 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2304	2421	2306
55	2628	2754	2616
65	3235	3349	3255
75	4482	4457	4598
85	8636	6043	8993

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**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>	595.584	595.584	595.584	595.584	595.584	595.584	595.584	595.584	595.584	595.584
<b>5</b>	605.223	604.899	605.403	605.052	604.683	604.917	605.034	605.088	605.025	605.250
<b>10</b>	624.987	624.753	624.924	624.726	625.104	626.049	626.643	627.102	627.327	627.741
<b>15</b>	646.632	646.677	647.019	647.658	648.945	650.763	652.230	653.391	654.246	654.948
<b>20</b>	665.766	665.415	667.413	669.168	671.787	674.559	677.169	679.356	681.165	682.416
<b>25</b>	678.924	679.545	682.434	685.926	689.949	694.503	698.013	701.037	703.377	704.907
<b>30</b>	684.216	685.539	690.075	695.025	700.686	706.545	711.657	715.275	718.200	719.946
<b>35</b>	675.576	677.295	683.721	690.894	699.777	708.381	715.806	720.738	724.005	725.841
<b>40</b>	666.135	668.475	675.576	683.559	692.307	700.191	707.616	713.304	719.118	721.791
<b>45</b>	657.954	661.509	669.267	677.835	685.476	691.668	697.365	702.963	706.671	708.570
<b>50</b>	640.071	644.517	652.248	661.941	672.084	679.950	686.178	691.227	692.631	693.162
<b>55</b>	624.627	628.767	638.019	647.613	656.343	663.309	669.519	674.172	676.602	677.214
<b>60</b>	610.749	615.267	624.744	634.050	641.835	648.720	654.399	658.143	660.087	661.392
<b>65</b>	590.265	594.963	604.350	614.178	622.854	629.955	635.094	638.415	640.602	641.844
<b>70</b>	569.709	574.587	584.631	593.532	600.912	606.492	610.632	613.548	615.834	617.706
<b>75</b>	545.895	550.539	559.242	566.325	572.049	576.459	579.627	582.003	584.343	586.359
<b>80</b>	522.270	526.086	530.721	533.259	534.303	534.060	533.493	533.250	534.015	535.851
<b>85</b>	495.657	492.336	479.925	465.336	450.207	435.663	423.009	413.604	408.357	407.709
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95</b>	496.143	492.723	479.520	463.104	446.715	431.811	419.184	410.661	406.458	406.566
<b>100</b>	518.922	522.945	527.706	530.415	531.531	531.720	531.378	531.648	532.845	535.203
<b>105</b>	539.838	544.716	553.545	560.952	566.928	571.707	575.487	578.754	581.994	584.793
<b>110</b>	561.375	566.451	576.666	586.152	593.937	600.183	605.160	609.066	612.450	615.294
<b>115</b>	581.121	585.801	595.638	606.114	615.546	623.250	629.280	633.627	636.831	639.243
<b>120</b>	601.938	606.600	616.392	626.319	634.914	642.573	649.179	653.895	656.784	658.593
<b>125</b>	617.328	621.405	630.900	641.043	650.376	657.918	664.731	669.879	673.065	674.280
<b>130</b>	635.391	638.964	647.712	657.369	667.341	675.909	682.578	687.672	689.319	690.012
<b>135</b>	654.813	657.729	666.090	674.613	682.479	688.977	694.485	699.579	702.990	704.475
<b>140</b>	664.587	666.504	673.047	680.958	689.535	697.383	704.250	709.263	714.555	716.463
<b>145</b>	672.957	674.631	681.003	687.951	696.420	704.682	711.432	715.689	718.326	719.460
<b>150</b>	680.202	681.228	685.305	690.327	695.646	701.199	705.636	708.912	711.216	712.161
<b>155</b>	673.029	673.542	676.134	679.428	683.037	686.880	690.039	692.505	694.260	695.214
<b>160</b>	657.432	656.937	658.395	659.952	662.220	664.893	667.188	669.006	670.347	671.193
<b>165</b>	635.688	635.634	635.724	636.435	637.596	639.252	640.557	641.439	641.988	642.474
<b>170</b>	612.378	612.153	612.252	611.784	612.009	612.909	613.458	613.827	613.863	614.232
<b>175</b>	591.642	591.327	591.777	591.390	590.913	590.922	590.850	590.733	590.526	590.580
<b>180</b>	579.807	579.807	579.807	579.807	579.807	579.807	579.807	579.807	579.807	579.807

**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>	595.584	595.584	595.584	595.584	595.584	595.584	595.584	595.584	595.584
<b>5</b>	605.403	605.817	606.168	606.366	606.339	606.798	607.113	606.645	606.933
<b>10</b>	627.858	628.200	628.407	628.416	628.065	628.344	628.893	628.722	629.181
<b>15</b>	655.452	655.776	655.794	655.227	654.345	654.030	654.111	654.354	654.426
<b>20</b>	683.190	683.217	682.731	681.561	679.815	678.258	677.772	676.530	676.989
<b>25</b>	705.717	705.465	704.583	702.873	700.128	697.113	694.395	692.451	691.857
<b>30</b>	720.513	719.775	718.011	714.915	710.478	705.906	701.307	697.752	696.501
<b>35</b>	725.886	724.338	721.359	716.679	711.297	705.051	698.985	693.288	691.209
<b>40</b>	721.485	719.154	715.194	709.299	702.423	694.593	686.835	680.481	677.772
<b>45</b>	709.362	707.040	702.450	695.988	687.780	679.473	670.941	662.616	658.404
<b>50</b>	692.514	690.165	686.016	679.842	671.445	661.554	651.636	642.726	637.866
<b>55</b>	675.531	672.921	668.781	663.237	656.307	647.064	636.939	627.021	621.585
<b>60</b>	660.798	658.800	654.831	649.575	643.185	635.328	625.671	615.699	610.020

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	641.673	640.800	638.640	634.464	628.029	619.632	609.453	599.517	593.982
<b>70</b>	618.426	618.444	617.319	614.673	610.380	603.810	594.819	584.559	579.015
<b>75</b>	587.925	589.023	589.437	588.546	585.702	581.157	574.128	564.984	559.944
<b>80</b>	538.479	541.728	545.508	549.171	551.583	551.889	550.026	545.166	541.062
<b>85</b>	411.993	420.669	433.224	448.920	466.029	483.453	499.860	513.279	516.141
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95</b>	411.291	419.922	431.901	446.301	462.753	478.998	495.315	511.956	515.529
<b>100</b>	538.146	541.449	545.076	548.163	550.377	550.665	548.523	544.149	539.667
<b>105</b>	587.034	588.582	589.176	588.231	585.378	580.887	574.146	565.713	559.800
<b>110</b>	617.157	618.102	617.652	615.096	610.830	604.647	596.205	586.593	579.816
<b>115</b>	640.152	640.044	638.118	634.149	628.308	620.577	611.190	601.776	594.855
<b>120</b>	658.512	657.117	653.796	648.549	642.267	635.004	626.040	616.410	609.147
<b>125</b>	673.101	670.833	666.954	661.032	654.354	645.687	636.084	626.229	619.038
<b>130</b>	689.562	687.078	682.659	676.251	668.142	658.656	649.107	639.882	633.384
<b>135</b>	704.835	702.189	697.455	690.804	682.587	674.460	665.937	656.964	651.249
<b>140</b>	715.554	712.701	708.129	701.802	694.728	686.916	679.185	672.138	668.124
<b>145</b>	718.722	716.373	712.701	707.346	701.505	695.196	689.085	682.344	679.068
<b>150</b>	711.837	710.235	707.778	704.088	699.246	694.332	689.274	684.495	682.434
<b>155</b>	695.484	694.548	692.982	690.696	687.519	684.225	680.769	677.700	676.341
<b>160</b>	671.670	671.139	670.185	668.637	666.549	664.560	663.057	661.077	661.167
<b>165</b>	642.825	642.924	642.528	641.637	640.296	639.342	638.721	638.361	638.145
<b>170</b>	614.232	614.358	614.205	613.773	612.981	612.774	612.981	612.603	612.936
<b>175</b>	590.499	590.688	590.814	590.859	590.715	590.931	591.120	590.526	590.805
<b>180</b>	579.807	579.807	579.807	579.807	579.807	579.807	579.807	579.807	579.807

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	243.93	N.A.	3.30
0-30	565.43	N.A.	7.60
0-40	1008.23	N.A.	13.50
0-60	2128.11	N.A.	28.50
0-80	3352.96	N.A.	44.90
0-90	3746.68	N.A.	50.20
10-90	3688.22	N.A.	49.40
20-40	764.30	N.A.	10.20
20-50	1295.66	N.A.	17.40
40-70	1738.15	N.A.	23.30
60-80	1224.85	N.A.	16.40
70-80	606.58	N.A.	8.10
80-90	393.72	N.A.	5.30
90-110	996.25	N.A.	13.30
90-120	1611.28	N.A.	21.60
90-130	2196.52	N.A.	29.40
90-150	3163.21	N.A.	42.40
90-180	3719.12	N.A.	49.80
110-180	2722.88	N.A.	36.50
0-180	7465.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	58.46
10-20	185.47
20-30	321.50
30-40	442.79
40-50	531.37
50-60	588.52
60-70	618.27
70-80	606.58
80-90	393.72
90-100	392.12
100-110	604.13
110-120	615.04
120-130	585.23
130-140	528.03
140-150	438.66
150-160	316.97
160-170	181.87
170-180	57.07

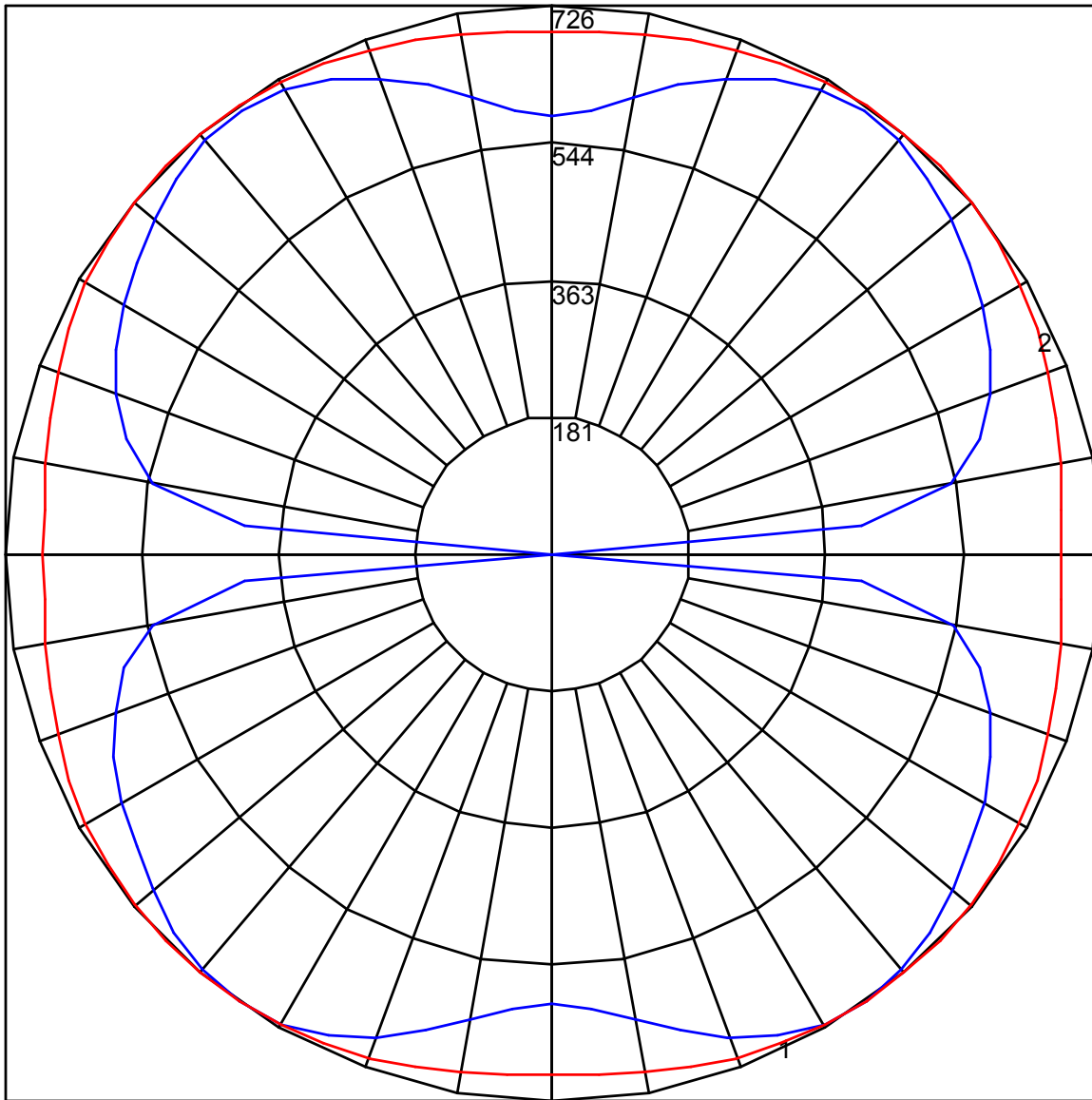
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	95	89	84	80	87	82	78	74	69	65	62	56	54	52	45	43	42	36
2	85	76	69	62	78	70	63	58	58	53	49	48	44	41	38	35	33	28
3	77	66	57	50	70	60	53	47	50	44	40	41	36	33	32	29	26	22
4	70	57	48	42	63	53	45	39	44	38	33	36	31	27	28	25	22	18
5	64	51	42	35	58	47	38	32	39	32	28	32	27	23	25	21	18	15
6	58	45	36	30	53	41	33	28	35	28	24	28	23	19	22	19	16	12
7	54	40	32	26	49	37	29	24	31	25	20	25	21	17	20	16	13	11
8	50	36	28	22	45	34	26	21	28	22	18	23	18	15	18	15	12	9
9	46	33	25	20	42	31	23	18	26	20	16	21	16	13	17	13	10	8
10	43	30	23	17	39	28	21	16	24	18	14	19	15	12	16	12	9	7

POLAR GRAPH



Maximum Candela = 725.886 Located At Horizontal Angle = 50, Vertical Angle = 35  
# 1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (35) (Through Max. Cd.)