



IES INDOOR REPORT

PHOTOMETRIC FILENAME : P59-A9-LED35-MO.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] P59-A9-LED35-MO
 [TESTLAB] Intertek
 [ISSUE DATE] 2/12/2016
 [MANUFAC] Prudential Lighting

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1859
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	77
Total Luminaire Watts	24
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	2.20
Spacing Criterion (Diagonal)	1.48
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.75 ft
Luminous Height	0.75 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1189	1599	1704
55	1082	1500	1649
65	919	1416	1596
75	659	1341	1551
85	204	1276	1543

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	405.855	405.855	405.855	405.855	405.855	405.855	405.855	405.855	405.855	405.855
2.5	409.702	418.485	422.415	427.545	427.395	425.820	419.168	411.855	409.342	402.952
5.0	408.750	427.582	440.152	451.425	453.053	449.355	436.613	420.435	407.685	393.277
7.5	406.845	435.967	456.990	474.390	478.462	472.327	453.075	428.070	404.700	378.442
10.0	403.545	442.822	473.303	496.950	503.130	494.805	469.163	434.535	400.868	360.668
12.5	399.480	448.590	488.550	519.090	527.587	516.952	484.402	440.317	396.240	342.270
15.0	394.507	453.525	502.853	541.170	552.450	538.372	498.608	445.335	390.735	324.000
17.5	388.950	457.507	516.668	563.550	577.125	559.688	512.145	449.618	384.525	305.550
20.0	382.553	460.725	529.747	585.045	600.878	580.350	525.143	452.970	377.738	286.965
22.5	375.772	463.298	542.055	605.018	622.957	599.918	537.720	455.595	370.200	268.275
25.0	367.808	464.895	553.612	622.732	643.470	618.075	549.390	457.290	361.913	249.780
27.5	358.717	465.780	563.872	638.985	662.528	634.485	559.837	458.332	352.890	231.510
30.0	348.840	465.728	572.977	653.805	679.950	649.313	569.122	458.280	343.140	213.390
32.5	338.745	464.902	581.160	667.013	689.325	662.347	577.170	457.650	332.723	195.442
35.0	328.320	463.313	587.543	670.500	688.665	665.805	583.605	455.985	321.788	177.907
37.5	317.385	460.973	592.913	667.215	686.362	661.755	588.000	453.630	310.275	160.762
40.0	305.595	457.725	595.890	662.153	682.770	656.415	590.595	450.480	297.960	144.083
42.5	292.553	453.330	590.880	656.048	678.045	650.107	585.067	446.400	284.985	127.875
45.0	278.632	447.795	580.178	648.525	672.315	642.690	574.395	441.337	271.215	112.335
47.5	264.135	441.000	568.102	640.253	666.210	634.680	562.553	435.165	256.942	97.500
50.0	249.690	432.945	555.255	631.283	658.822	625.883	549.885	427.822	242.167	83.453
52.5	234.998	423.675	541.875	621.375	650.438	616.133	536.378	419.055	226.882	70.155
55.0	219.532	412.882	527.985	611.122	640.763	605.115	522.390	408.428	211.028	57.735
57.5	202.928	400.485	513.322	599.640	630.008	593.423	507.683	396.098	194.618	46.403
60.0	185.738	382.170	498.202	587.145	618.232	581.212	492.173	377.183	177.803	36.292
62.5	168.780	360.772	483.015	573.607	605.625	567.960	476.618	355.913	160.597	27.330
65.0	151.965	338.873	467.572	559.410	591.847	554.122	460.995	333.772	143.333	19.718
67.5	134.827	316.830	451.418	544.192	577.155	539.438	445.155	311.092	125.895	13.523
70.0	116.843	294.712	434.663	528.143	562.020	524.010	428.723	288.788	108.427	10.432
72.5	98.603	272.220	417.630	511.950	546.143	508.125	412.140	266.400	90.998	9.285
75.0	80.880	251.528	400.192	495.293	529.770	491.820	395.115	245.243	73.748	8.220
77.5	63.780	232.882	382.260	478.800	513.540	475.178	377.632	226.905	56.550	7.245
80.0	46.530	215.085	364.380	462.308	497.520	459.007	360.015	209.183	39.653	6.383
82.5	30.262	197.843	346.507	445.853	481.808	442.598	342.863	192.405	24.142	5.588
85.0	15.570	180.202	328.717	429.728	466.192	426.675	325.462	175.455	12.420	4.830
87.5	8.010	162.330	310.515	413.512	450.517	410.438	307.748	158.123	6.758	4.072
90.0	3.525	144.097	291.645	396.413	434.070	393.300	289.087	140.490	3.442	3.502
92.5	2.902	129.360	277.147	383.783	422.220	380.303	274.358	125.850	3.473	3.547
95.0	2.940	113.873	265.080	376.673	415.785	373.785	263.587	111.323	3.502	3.765
97.5	2.985	92.963	244.860	353.197	392.595	350.918	243.623	92.175	3.533	3.735
100.0	3.022	57.285	220.725	331.087	371.475	328.800	220.072	55.995	3.540	3.803
102.5	3.060	26.483	192.195	303.195	343.283	301.545	192.023	47.895	3.547	3.825
105.0	3.112	20.782	147.833	271.283	313.455	271.598	147.548	17.392	3.547	3.817
107.5	3.165	16.913	87.052	226.950	274.995	229.500	86.528	13.290	3.547	3.788
110.0	3.217	13.777	222.300	163.762	219.675	168.442	354.450	10.155	3.533	3.712
112.5	3.277	11.385	29.813	96.210	146.130	99.308	27.578	8.385	3.518	3.652
115.0	3.330	10.133	24.630	365.280	104.843	413.190	22.613	6.585	3.518	3.630
117.5	3.397	9.105	20.685	32.648	531.982	30.832	17.805	4.110	3.510	3.600
120.0	3.465	8.295	16.358	26.280	28.012	24.938	14.115	2.970	3.518	3.607
122.5	3.533	7.635	13.395	21.180	22.102	20.235	10.447	1.732	3.525	3.592
125.0	3.623	7.095	9.765	17.017	17.550	15.900	6.525	0.480	3.533	3.600
127.5	3.690	6.645	8.422	12.938	13.117	11.678	3.300	0.698	3.547	3.592
130.0	3.772	6.277	7.162	9.060	9.098	7.957	2.235	0.495	3.563	3.585
132.5	3.840	5.963	7.103	5.963	5.700	4.447	1.147	0.637	3.578	3.607

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CANDELA TABULATION - (Cont.)

135.0	3.915	5.700	6.225	4.590	2.265	3.112	0.570	0.660	3.615	3.607
137.5	3.990	5.482	5.490	4.313	0.907	2.813	0.615	0.802	3.638	3.615
140.0	4.050	5.287	5.415	3.697	0.930	2.265	0.210	1.260	3.667	3.630
142.5	4.103	5.122	5.003	3.210	0.825	1.958	0.443	1.478	3.728	3.690
145.0	4.162	4.973	4.522	3.592	0.900	1.357	0.480	1.478	3.780	3.728
147.5	4.215	4.845	4.388	2.453	0.600	1.380	0.502	1.485	3.825	3.757
150.0	4.260	4.718	4.545	2.775	0.367	0.960	0.420	1.455	3.870	3.788
152.5	4.305	4.605	4.065	2.235	1.035	0.398	0.915	1.298	3.915	3.825
155.0	4.305	4.500	3.817	2.340	0.802	0.398	1.320	1.320	3.967	3.855
157.5	4.327	4.402	3.922	1.980	0.615	0.818	1.065	1.357	4.020	3.885
160.0	4.357	4.335	3.510	1.860	1.492	0.615	1.320	1.050	4.050	3.922
162.5	4.372	4.268	3.750	2.295	1.125	0.480	0.953	0.855	4.103	3.938
165.0	4.395	4.215	3.270	2.145	0.525	0.465	1.042	0.735	4.133	3.960
167.5	4.402	4.170	3.210	2.130	0.690	0.772	0.938	1.028	4.178	3.975
170.0	4.402	4.140	3.720	2.243	1.087	0.750	0.840	0.983	4.223	3.990
172.5	4.395	4.088	3.487	1.755	0.915	1.065	0.810	1.095	4.268	4.020
175.0	4.402	4.088	3.375	2.055	0.885	1.117	0.870	0.877	4.298	4.043
177.5	4.388	4.058	3.150	2.070	1.005	1.260	1.005	0.953	4.327	4.050
180.0	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	405.855	405.855	405.855	405.855	405.855	405.855	405.855
2.5	391.402	384.082	379.275	382.905	388.418	397.207	409.702
5.0	366.533	349.545	341.460	348.480	362.512	387.060	408.750
7.5	338.902	315.322	305.100	314.340	335.520	372.435	406.845
10.0	311.317	282.180	270.825	281.370	308.483	355.185	403.545
12.5	284.483	250.680	238.680	249.877	281.490	337.207	399.480
15.0	258.540	221.438	208.695	220.673	255.757	318.915	394.507
17.5	234.067	194.790	181.148	193.912	231.322	300.788	388.950
20.0	210.518	169.597	155.805	169.125	208.282	282.923	382.553
22.5	187.800	146.303	132.472	146.107	186.127	264.765	375.772
25.0	166.537	124.688	111.210	124.725	165.120	246.697	367.808
27.5	146.692	104.888	91.530	104.865	145.327	228.570	358.717
30.0	127.935	86.618	73.763	86.692	126.728	210.405	348.840
32.5	110.287	70.147	57.525	70.267	109.703	192.653	338.745
35.0	93.705	55.388	43.455	55.320	93.405	175.357	328.320
37.5	78.578	42.068	30.442	41.670	78.203	158.625	317.385
40.0	64.612	30.367	18.758	29.925	64.200	142.125	305.595
42.5	51.608	19.290	9.465	18.668	51.307	125.940	292.553
45.0	40.462	10.283	1.808	9.750	39.578	110.580	278.632
47.5	29.422	4.553	1.380	3.945	29.152	95.978	264.135
50.0	20.790	3.885	1.245	3.540	20.130	82.155	249.690
52.5	13.020	3.450	1.065	3.045	11.857	68.677	234.998
55.0	7.298	3.495	0.885	2.947	6.412	56.453	219.532
57.5	7.117	3.900	1.260	2.663	6.105	44.873	202.928
60.0	6.540	3.413	1.530	2.835	5.572	34.883	185.738
62.5	6.600	3.578	2.138	2.895	5.415	25.177	168.780
65.0	6.247	3.038	1.365	2.947	4.808	18.113	151.965
67.5	5.730	3.810	1.695	2.550	4.365	11.707	134.827
70.0	5.827	3.255	2.303	2.895	3.982	8.295	116.843
72.5	4.725	3.180	1.560	2.647	3.570	7.425	98.603
75.0	4.912	3.525	2.422	2.498	3.188	6.112	80.880
77.5	4.620	3.502	1.995	2.340	2.857	4.740	63.780
80.0	3.975	3.143	2.542	2.482	2.828	4.185	46.530

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CANDELA TABULATION - (Cont.)

82.5	4.268	3.188	2.775	3.060	2.415	3.300	30.262
85.0	3.953	3.510	2.670	2.453	2.130	2.482	15.570
87.5	3.397	2.453	2.212	2.018	1.695	1.417	8.010
90.0	3.712	2.595	1.980	1.718	1.462	1.373	3.525
92.5	3.592	2.430	1.740	1.732	1.567	0.960	2.902
95.0	4.125	3.458	2.775	2.490	1.755	1.515	2.940
97.5	3.645	2.790	2.265	2.295	1.590	0.728	2.985
100.0	4.050	2.873	2.362	2.490	1.710	0.833	3.022
102.5	3.270	2.760	1.980	1.980	1.627	1.305	3.060
105.0	3.788	2.888	2.385	1.950	1.732	1.035	3.112
107.5	3.353	2.453	2.325	1.905	1.448	1.545	3.165
110.0	3.053	2.422	1.538	1.530	1.552	0.637	3.217
112.5	3.210	2.775	1.275	1.530	1.042	0.877	3.277
115.0	3.007	2.167	1.545	1.545	1.110	0.810	3.330
117.5	3.180	1.972	1.875	1.320	1.920	0.787	3.397
120.0	3.330	2.205	1.478	1.470	1.410	0.915	3.465
122.5	3.667	2.723	1.905	1.755	1.478	0.623	3.533
125.0	3.375	2.115	1.260	1.492	1.087	1.050	3.623
127.5	3.240	2.603	2.197	1.515	1.440	1.313	3.690
130.0	3.225	2.092	1.485	1.260	0.892	0.900	3.772
132.5	2.873	2.513	1.252	0.855	1.440	0.968	3.840
135.0	3.188	2.438	1.575	1.357	1.290	0.660	3.915
137.5	3.090	2.100	1.620	1.215	0.900	0.983	3.990
140.0	3.090	1.853	1.268	0.983	1.087	0.870	4.050
142.5	3.337	2.445	1.440	0.915	1.200	1.020	4.103
145.0	3.053	2.167	1.140	1.395	1.327	0.983	4.162
147.5	3.060	2.123	1.215	1.238	1.222	1.020	4.215
150.0	3.225	2.490	1.343	1.605	0.870	0.938	4.260
152.5	3.067	2.467	1.433	0.953	1.343	1.230	4.305
155.0	3.015	3.090	1.028	1.343	0.802	0.915	4.305
157.5	3.442	2.070	1.357	1.410	1.282	1.103	4.327
160.0	3.525	2.415	1.275	1.200	1.103	0.945	4.357
162.5	3.607	1.988	1.575	1.350	1.552	0.998	4.372
165.0	2.902	2.430	1.200	1.117	1.560	1.058	4.395
167.5	3.533	2.610	1.252	1.208	0.960	0.990	4.402
170.0	3.240	2.565	1.087	1.185	1.012	1.410	4.402
172.5	3.292	2.295	1.170	1.230	0.975	0.998	4.395
175.0	3.615	2.333	0.998	1.335	1.110	0.892	4.402
177.5	3.510	1.897	1.170	1.200	1.268	1.365	4.388
180.0	2.220	2.220	2.220	2.220	2.220	2.220	2.220

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	146.44	N.A.	7.90
0-30	314.71	N.A.	16.90
0-40	528.29	N.A.	28.40
0-60	1004.87	N.A.	54.10
0-80	1429.51	N.A.	76.90
0-90	1592.31	N.A.	85.70
10-90	1554.19	N.A.	83.60
20-40	381.85	N.A.	20.50
20-50	617.96	N.A.	33.20
40-70	703.24	N.A.	37.80
60-80	424.64	N.A.	22.80
70-80	197.99	N.A.	10.70
80-90	162.80	N.A.	8.80
90-110	212.60	N.A.	11.40
90-120	255.19	N.A.	13.70
90-130	260.81	N.A.	14.00
90-150	264.64	N.A.	14.20
90-180	266.57	N.A.	14.30
110-180	53.97	N.A.	2.90
0-180	1858.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	38.13
10-20	108.31
20-30	168.27
30-40	213.57
40-50	236.11
50-60	240.47
60-70	226.65
70-80	197.99
80-90	162.80
90-100	129.89
100-110	82.72
110-120	42.59
120-130	5.62
130-140	2.31
140-150	1.52
150-160	1.07
160-170	0.64
170-180	0.22

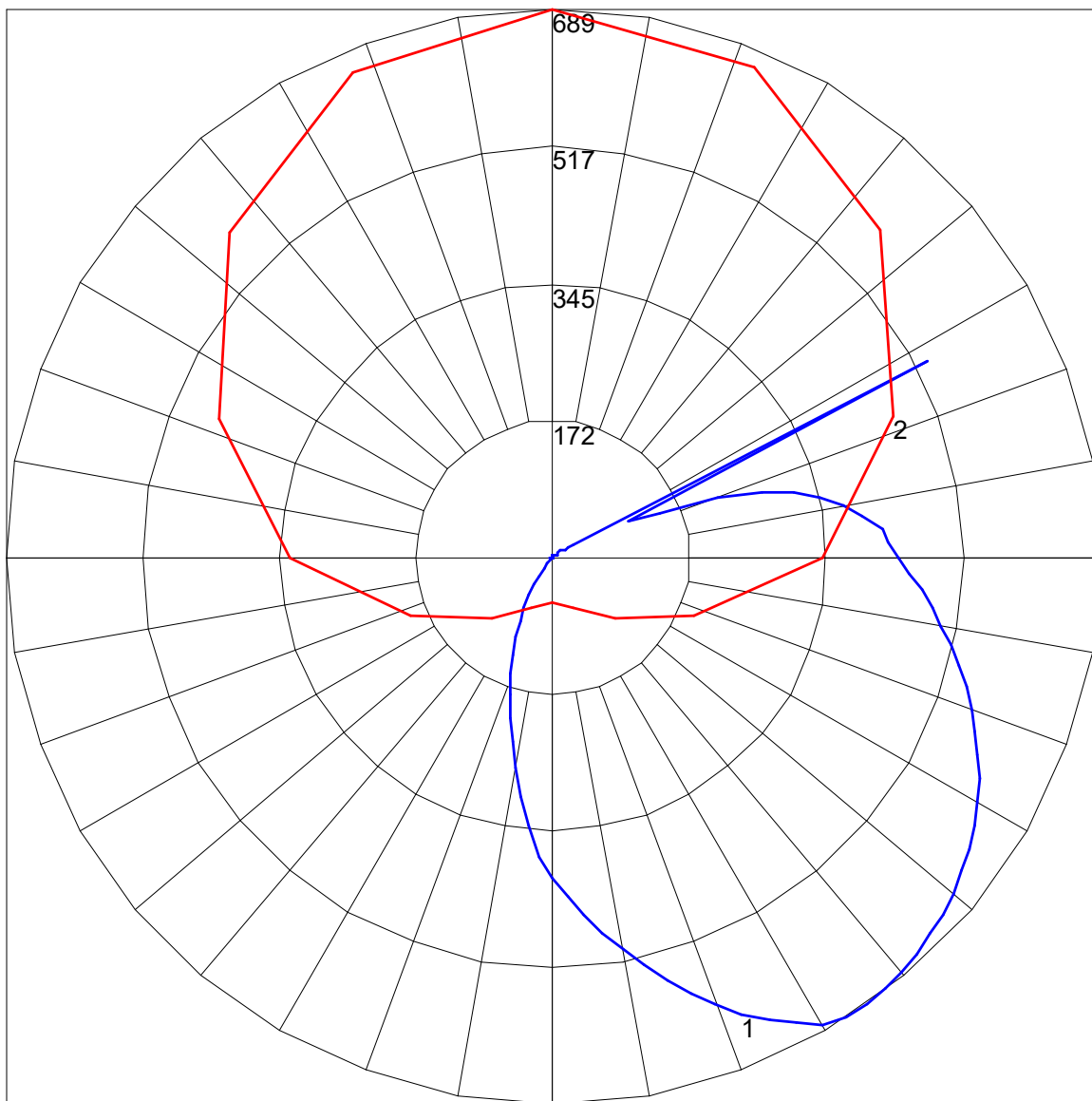
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	86
1	102	95	90	85	97	92	87	82	85	81	77	78	75	72	72	70	67	64
2	91	81	73	66	87	78	71	64	72	66	61	66	61	57	61	57	54	50
3	82	70	61	53	78	68	59	52	62	55	49	58	52	47	53	48	44	41
4	75	62	52	44	71	59	50	43	55	47	41	51	44	39	47	41	37	34
5	69	55	45	38	65	53	43	37	49	41	35	45	38	33	42	36	32	29
6	63	49	39	32	60	47	38	32	44	36	30	41	34	29	38	32	27	25
7	58	44	35	28	56	42	34	28	40	32	26	37	30	25	34	29	24	22
8	54	40	31	25	52	39	30	24	36	29	23	34	27	22	31	26	21	19
9	50	37	28	22	48	35	27	22	33	26	21	31	25	20	29	23	19	17
10	47	34	25	20	45	33	25	20	31	24	19	29	22	18	27	21	17	15

POLAR GRAPH



Maximum Candela = 689.325 Located At Horizontal Angle = 90, Vertical Angle = 32.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (32.5) (Through Max. Cd.)