



## IES INDOOR REPORT

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

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] P59-A9-LED35-LO  
 [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	1264
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	16
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	809	1087	1159
55	736	1020	1121
65	625	963	1086
75	448	912	1054
85	139	867	1049

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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>
<b>0.0</b>	275.981	275.981	275.981	275.981	275.981	275.981	275.981	275.981	275.981	275.981
<b>2.5</b>	278.598	284.570	287.242	290.731	290.629	289.558	285.034	280.061	278.353	274.008
<b>5.0</b>	277.950	290.756	299.304	306.969	308.076	305.561	296.896	285.896	277.226	267.429
<b>7.5</b>	276.655	296.458	310.753	322.585	325.354	321.183	308.091	291.088	275.196	257.341
<b>10.0</b>	274.411	301.119	321.846	337.926	342.128	336.467	319.030	295.484	272.590	245.254
<b>12.5</b>	271.646	305.041	332.214	352.981	358.759	351.528	329.394	299.416	269.443	232.744
<b>15.0</b>	268.265	308.397	341.940	367.996	375.666	366.093	339.053	302.828	265.700	220.320
<b>17.5</b>	264.486	311.105	351.334	383.214	392.445	380.587	348.259	305.740	261.477	207.774
<b>20.0</b>	260.136	313.293	360.228	397.831	408.597	394.638	357.097	308.020	256.861	195.136
<b>22.5</b>	255.525	315.042	368.597	411.412	423.611	407.944	365.650	309.805	251.736	182.427
<b>25.0</b>	250.109	316.129	376.456	423.458	437.560	420.291	373.585	310.957	246.100	169.850
<b>27.5</b>	243.928	316.730	383.433	434.510	450.519	431.450	380.689	311.666	239.965	157.427
<b>30.0</b>	237.211	316.695	389.625	444.587	462.366	441.532	387.003	311.630	233.335	145.105
<b>32.5</b>	230.347	316.134	395.189	453.568	468.741	450.396	392.476	311.202	226.251	132.901
<b>35.0</b>	223.258	315.052	399.529	455.940	468.292	452.747	396.851	310.070	218.815	120.977
<b>37.5</b>	215.822	313.461	403.180	453.706	466.726	449.993	399.840	308.468	210.987	109.318
<b>40.0</b>	207.805	311.253	405.205	450.264	464.284	446.362	401.605	306.326	202.613	97.976
<b>42.5</b>	198.936	308.264	401.798	446.112	461.071	442.073	397.846	303.552	193.790	86.955
<b>45.0</b>	189.470	304.501	394.521	440.997	457.174	437.029	390.589	300.109	184.426	76.388
<b>47.5</b>	179.612	299.880	386.310	435.372	453.023	431.582	382.536	295.912	174.721	66.300
<b>50.0</b>	169.789	294.403	377.573	429.272	447.999	425.600	373.922	290.919	164.674	56.748
<b>52.5</b>	159.798	288.099	368.475	422.535	442.297	418.970	364.737	284.957	154.280	47.705
<b>55.0</b>	149.282	280.760	359.030	415.563	435.718	411.478	355.225	277.731	143.499	39.260
<b>57.5</b>	137.991	272.330	349.059	407.755	428.405	403.527	345.224	269.346	132.340	31.554
<b>60.0</b>	126.301	259.876	338.778	399.259	420.398	395.224	334.677	256.484	120.906	24.679
<b>62.5</b>	114.770	245.325	328.450	390.053	411.825	386.213	324.100	242.020	109.206	18.584
<b>65.0</b>	103.336	230.433	317.949	380.399	402.456	376.803	313.477	226.965	97.466	13.408
<b>67.5</b>	91.683	215.444	306.964	370.051	392.465	366.817	302.705	211.543	85.609	9.195
<b>70.0</b>	79.453	200.404	295.570	359.137	382.174	356.327	291.531	196.375	73.731	7.094
<b>72.5</b>	67.050	185.110	283.988	348.126	371.377	345.525	280.255	181.152	61.878	6.314
<b>75.0</b>	54.998	171.039	272.131	336.799	360.244	334.438	268.678	166.765	50.148	5.590
<b>77.5</b>	43.370	158.360	259.937	325.584	349.207	323.121	256.790	154.295	38.454	4.927
<b>80.0</b>	31.640	146.258	247.778	314.369	338.314	312.125	244.810	142.244	26.964	4.340
<b>82.5</b>	20.578	134.533	235.625	303.180	327.629	300.966	233.146	130.835	16.417	3.799
<b>85.0</b>	10.588	122.538	223.528	292.215	317.011	290.139	221.314	119.309	8.446	3.284
<b>87.5</b>	5.447	110.384	211.150	281.188	306.352	279.097	209.268	107.523	4.595	2.769
<b>90.0</b>	2.397	97.986	198.319	269.560	295.168	267.444	196.579	95.533	2.341	2.382
<b>92.5</b>	1.974	87.965	188.460	260.972	287.110	258.606	186.563	85.578	2.361	2.412
<b>95.0</b>	1.999	77.433	180.254	256.137	282.734	254.174	179.239	75.699	2.382	2.560
<b>97.5</b>	2.030	63.214	166.505	240.174	266.965	238.624	165.663	62.679	2.402	2.540
<b>100.0</b>	2.055	38.954	150.093	225.139	252.603	223.584	149.649	38.077	2.407	2.586
<b>102.5</b>	2.081	18.008	130.693	206.173	233.432	205.051	130.575	32.569	2.412	2.601
<b>105.0</b>	2.116	14.132	100.526	184.472	213.149	184.686	100.332	11.827	2.412	2.596
<b>107.5</b>	2.152	11.500	59.196	154.326	186.997	156.060	58.839	9.037	2.412	2.575
<b>110.0</b>	2.188	9.369	151.164	111.358	149.379	114.541	241.026	6.905	2.402	2.524
<b>112.5</b>	2.229	7.742	20.272	65.423	99.368	67.529	18.753	5.702	2.392	2.484
<b>115.0</b>	2.264	6.890	16.748	248.390	71.293	280.969	15.376	4.478	2.392	2.468
<b>117.5</b>	2.310	6.191	14.066	22.200	361.748	20.966	12.107	2.795	2.387	2.448
<b>120.0</b>	2.356	5.641	11.123	17.870	19.048	16.957	9.598	2.020	2.392	2.453
<b>122.5</b>	2.402	5.192	9.109	14.402	15.030	13.760	7.104	1.178	2.397	2.443
<b>125.0</b>	2.463	4.825	6.640	11.572	11.934	10.812	4.437	0.326	2.402	2.448
<b>127.5</b>	2.509	4.519	5.727	8.797	8.920	7.941	2.244	0.474	2.412	2.443
<b>130.0</b>	2.565	4.269	4.870	6.161	6.186	5.411	1.520	0.337	2.422	2.438
<b>132.5</b>	2.611	4.054	4.830	4.054	3.876	3.024	0.780	0.433	2.433	2.453

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**PHOTOMETRIC FILENAME : P59-A9-LED35-LO.IES**

**CANDELA TABULATION - (Cont.)**

135.0	2.662	3.876	4.233	3.121	1.540	2.116	0.388	0.449	2.458	2.453
137.5	2.713	3.728	3.733	2.932	0.617	1.912	0.418	0.546	2.473	2.458
140.0	2.754	3.595	3.682	2.514	0.632	1.540	0.143	0.857	2.494	2.468
142.5	2.790	3.483	3.402	2.183	0.561	1.331	0.301	1.005	2.535	2.509
145.0	2.830	3.381	3.075	2.443	0.612	0.923	0.326	1.005	2.570	2.535
147.5	2.866	3.295	2.983	1.668	0.408	0.938	0.342	1.010	2.601	2.555
150.0	2.897	3.208	3.091	1.887	0.250	0.653	0.286	0.989	2.632	2.575
152.5	2.927	3.131	2.764	1.520	0.704	0.270	0.622	0.882	2.662	2.601
155.0	2.927	3.060	2.596	1.591	0.546	0.270	0.898	0.898	2.698	2.621
157.5	2.943	2.994	2.667	1.346	0.418	0.556	0.724	0.923	2.734	2.642
160.0	2.963	2.948	2.387	1.265	1.015	0.418	0.898	0.714	2.754	2.667
162.5	2.973	2.902	2.550	1.561	0.765	0.326	0.648	0.581	2.790	2.677
165.0	2.989	2.866	2.224	1.459	0.357	0.316	0.709	0.500	2.810	2.693
167.5	2.994	2.836	2.183	1.448	0.469	0.525	0.637	0.699	2.841	2.703
170.0	2.994	2.815	2.530	1.525	0.739	0.510	0.571	0.668	2.871	2.713
172.5	2.989	2.779	2.371	1.193	0.622	0.724	0.551	0.745	2.902	2.734
175.0	2.994	2.779	2.295	1.397	0.602	0.760	0.592	0.597	2.922	2.749
177.5	2.983	2.759	2.142	1.408	0.683	0.857	0.683	0.648	2.943	2.754
180.0	1.510	1.510	1.510	1.510	1.510	1.510	1.510	1.510	1.510	1.510

**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	275.981	275.981	275.981	275.981	275.981	275.981	275.981
2.5	266.154	261.176	257.907	260.375	264.124	270.101	278.598
5.0	249.242	237.691	232.193	236.966	246.508	263.201	277.950
7.5	230.454	214.419	207.468	213.751	228.154	253.256	276.655
10.0	211.696	191.882	184.161	191.332	209.768	241.526	274.411
12.5	193.448	170.462	162.302	169.917	191.413	229.301	271.646
15.0	175.807	150.577	141.913	150.057	173.915	216.862	268.265
17.5	159.166	132.457	123.180	131.860	157.299	204.535	264.486
20.0	143.152	115.326	105.947	115.005	141.632	192.387	260.136
22.5	127.704	99.486	90.081	99.353	126.567	180.040	255.525
25.0	113.245	84.787	75.623	84.813	112.282	167.754	250.109
27.5	99.751	71.323	62.240	71.308	98.823	155.428	243.928
30.0	86.996	58.900	50.158	58.951	86.175	143.075	237.211
32.5	74.995	47.700	39.117	47.782	74.598	131.004	230.347
35.0	63.719	37.663	29.549	37.618	63.515	119.243	223.258
37.5	53.433	28.606	20.701	28.336	53.178	107.865	215.822
40.0	43.936	20.650	12.755	20.349	43.656	96.645	207.805
42.5	35.093	13.117	6.436	12.694	34.889	85.639	198.936
45.0	27.514	6.992	1.229	6.630	26.913	75.194	189.470
47.5	20.007	3.096	0.938	2.683	19.824	65.265	179.612
50.0	14.137	2.642	0.847	2.407	13.688	55.865	169.789
52.5	8.854	2.346	0.724	2.071	8.063	46.701	159.798
55.0	4.962	2.377	0.602	2.004	4.360	38.388	149.282
57.5	4.840	2.652	0.857	1.810	4.151	30.513	137.991
60.0	4.447	2.320	1.040	1.928	3.789	23.720	126.301
62.5	4.488	2.433	1.453	1.969	3.682	17.121	114.770
65.0	4.248	2.065	0.928	2.004	3.269	12.316	103.336
67.5	3.896	2.591	1.153	1.734	2.968	7.961	91.683
70.0	3.963	2.213	1.566	1.969	2.708	5.641	79.453
72.5	3.213	2.162	1.061	1.800	2.428	5.049	67.050
75.0	3.340	2.397	1.647	1.698	2.167	4.156	54.998
77.5	3.142	2.382	1.357	1.591	1.943	3.223	43.370
80.0	2.703	2.137	1.729	1.688	1.923	2.846	31.640

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**CANDELA TABULATION - (Cont.)**

82.5	2.902	2.167	1.887	2.081	1.642	2.244	20.578
85.0	2.688	2.387	1.816	1.668	1.448	1.688	10.588
87.5	2.310	1.668	1.504	1.372	1.153	0.964	5.447
90.0	2.524	1.765	1.346	1.168	0.994	0.933	2.397
92.5	2.443	1.652	1.183	1.178	1.066	0.653	1.974
95.0	2.805	2.351	1.887	1.693	1.193	1.030	1.999
97.5	2.479	1.897	1.540	1.561	1.081	0.495	2.030
100.0	2.754	1.953	1.606	1.693	1.163	0.566	2.055
102.5	2.224	1.877	1.346	1.346	1.107	0.887	2.081
105.0	2.575	1.963	1.622	1.326	1.178	0.704	2.116
107.5	2.280	1.668	1.581	1.295	0.984	1.051	2.152
110.0	2.076	1.647	1.045	1.040	1.056	0.433	2.188
112.5	2.183	1.887	0.867	1.040	0.709	0.597	2.229
115.0	2.045	1.474	1.051	1.051	0.755	0.551	2.264
117.5	2.162	1.341	1.275	0.898	1.306	0.535	2.310
120.0	2.264	1.499	1.005	1.000	0.959	0.622	2.356
122.5	2.494	1.851	1.295	1.193	1.005	0.423	2.402
125.0	2.295	1.438	0.857	1.015	0.739	0.714	2.463
127.5	2.203	1.770	1.494	1.030	0.979	0.892	2.509
130.0	2.193	1.423	1.010	0.857	0.607	0.612	2.565
132.5	1.953	1.708	0.852	0.581	0.979	0.658	2.611
135.0	2.167	1.657	1.071	0.923	0.877	0.449	2.662
137.5	2.101	1.428	1.102	0.826	0.612	0.668	2.713
140.0	2.101	1.260	0.862	0.668	0.739	0.592	2.754
142.5	2.269	1.663	0.979	0.622	0.816	0.694	2.790
145.0	2.076	1.474	0.775	0.949	0.903	0.668	2.830
147.5	2.081	1.443	0.826	0.841	0.831	0.694	2.866
150.0	2.193	1.693	0.913	1.091	0.592	0.637	2.897
152.5	2.086	1.678	0.974	0.648	0.913	0.836	2.927
155.0	2.050	2.101	0.699	0.913	0.546	0.622	2.927
157.5	2.341	1.408	0.923	0.959	0.872	0.750	2.943
160.0	2.397	1.642	0.867	0.816	0.750	0.643	2.963
162.5	2.453	1.351	1.071	0.918	1.056	0.678	2.973
165.0	1.974	1.652	0.816	0.760	1.061	0.719	2.989
167.5	2.402	1.775	0.852	0.821	0.653	0.673	2.994
170.0	2.203	1.744	0.739	0.806	0.688	0.959	2.994
172.5	2.239	1.561	0.796	0.836	0.663	0.678	2.989
175.0	2.458	1.586	0.678	0.908	0.755	0.607	2.994
177.5	2.387	1.290	0.796	0.816	0.862	0.928	2.983
180.0	1.510	1.510	1.510	1.510	1.510	1.510	1.510

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	99.58	N.A.	7.90
0-30	214.00	N.A.	16.90
0-40	359.23	N.A.	28.40
0-60	683.31	N.A.	54.10
0-80	972.07	N.A.	76.90
0-90	1082.77	N.A.	85.70
10-90	1056.85	N.A.	83.60
20-40	259.66	N.A.	20.50
20-50	420.21	N.A.	33.20
40-70	478.20	N.A.	37.80
60-80	288.76	N.A.	22.80
70-80	134.63	N.A.	10.70
80-90	110.70	N.A.	8.80
90-110	144.57	N.A.	11.40
90-120	173.53	N.A.	13.70
90-130	177.35	N.A.	14.00
90-150	179.95	N.A.	14.20
90-180	181.27	N.A.	14.30
110-180	36.70	N.A.	2.90
0-180	1264.04	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	25.93
10-20	73.65
20-30	114.43
30-40	145.23
40-50	160.56
50-60	163.52
60-70	154.12
70-80	134.63
80-90	110.70
90-100	88.32
100-110	56.25
110-120	28.96
120-130	3.82
130-140	1.57
140-150	1.04
150-160	0.73
160-170	0.44
170-180	0.15

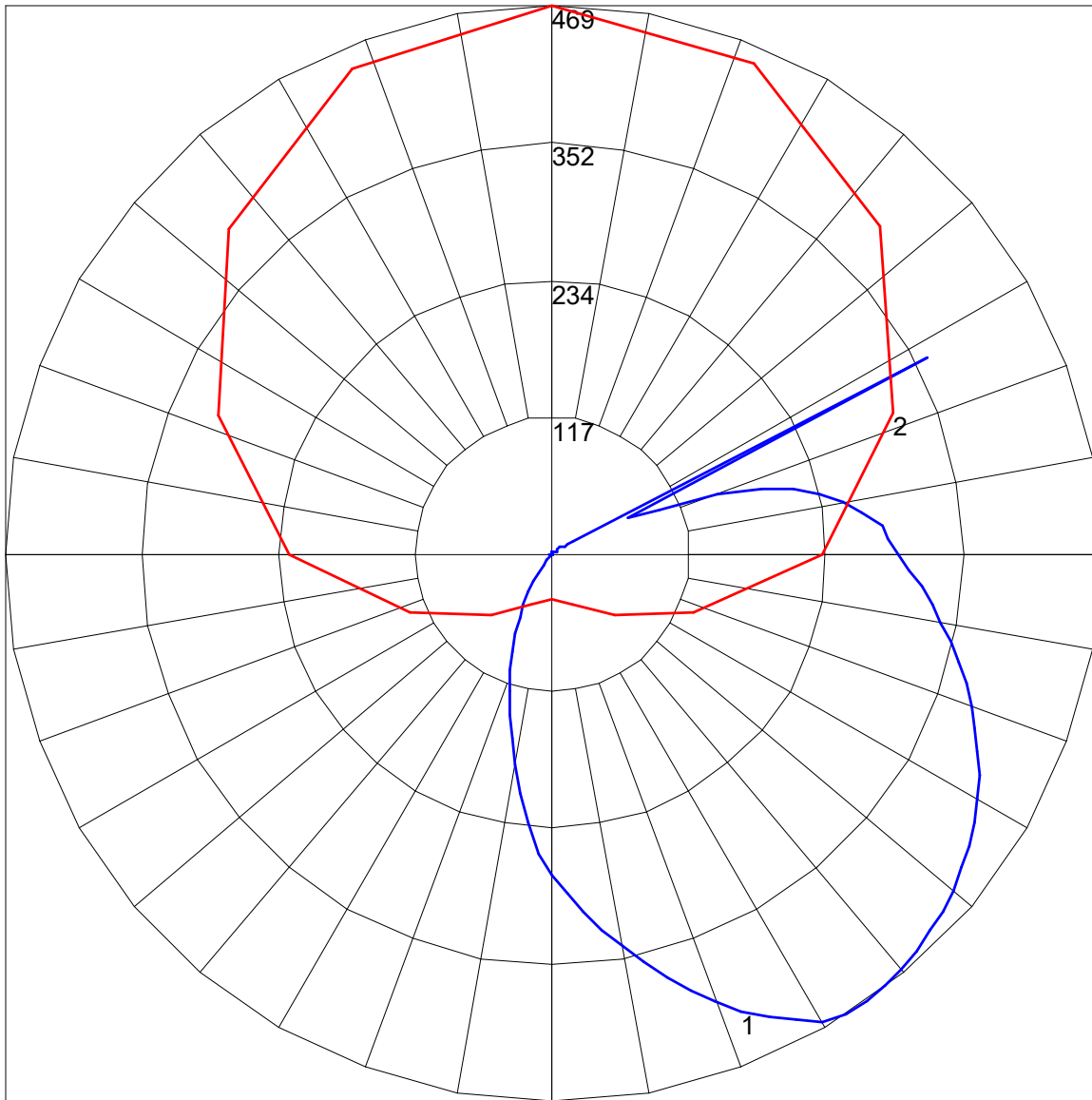
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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 = 468.741 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.)