



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : OSA6R-L14-835-AC-XX-DBZ-XX-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TESTLAB] GEN from Intertek TEST  
[ISSUEDATE] 01-27-2023  
[MANUFAC] WILLIAMS OUTDOOR  
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO  
[LUMCAT] OSA6R-L14-835-AC-xx-DBZ-xx-DIM-UNV  
[LUMINAIRE] LED 835cct  
[LAMP] LED. LUMINAIRE  
[ \_SEARCH\_SOURCE] LED  
[ \_SEARCH\_APPLICATION] OUTDOOR, AREA, SIDEWALK, SECURITY  
[ \_SEARCH\_MOUNTING] GROUND

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1127
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	18.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.02
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	0.02
Basic Luminous Shape	Point
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.00 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

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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>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>2.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>5.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>7.5</b>	33.023	24.854	25.204	26.838	45.858	48.192	48.775	55.193	56.010	55.193
<b>10.0</b>	87.399	88.216	87.165	93.933	99.884	98.601	100.118	100.234	99.534	100.234
<b>12.5</b>	104.785	109.453	108.519	116.104	114.470	115.404	118.671	116.571	111.670	116.571
<b>15.0</b>	106.652	110.970	115.871	117.854	120.188	116.221	120.305	118.438	115.054	118.438
<b>17.5</b>	107.236	111.670	115.170	116.571	113.070	107.002	111.086	108.753	106.536	108.753
<b>20.0</b>	99.418	103.735	106.652	108.869	107.586	106.652	110.036	107.469	106.069	107.469
<b>22.5</b>	98.017	102.568	105.252	109.103	109.219	104.785	106.536	103.852	102.685	103.852
<b>25.0</b>	98.367	103.968	107.819	111.203	106.302	105.485	104.669	102.452	99.768	102.452
<b>27.5</b>	94.400	103.385	108.986	110.970	108.403	109.686	109.336	106.652	104.085	106.652
<b>30.0</b>	94.283	103.852	112.020	117.271	117.621	121.355	121.122	116.921	113.303	116.921
<b>32.5</b>	106.069	117.154	125.322	131.157	132.790	136.641	138.041	135.357	131.390	135.357
<b>35.0</b>	123.455	136.641	141.775	145.042	148.893	149.943	153.561	150.643	145.743	150.643
<b>37.5</b>	143.409	156.594	158.228	160.212	162.896	159.162	162.079	159.745	155.894	159.745
<b>40.0</b>	151.927	162.896	162.079	164.996	165.696	160.328	161.962	159.978	157.528	159.978
<b>42.5</b>	150.760	159.278	159.745	165.346	165.346	160.562	160.679	157.761	154.961	157.761
<b>45.0</b>	151.460	157.528	159.628	166.396	165.346	161.029	161.495	158.578	156.478	158.578
<b>47.5</b>	154.961	159.045	163.479	170.130	171.997	171.997	171.997	166.396	163.712	166.396
<b>50.0</b>	160.679	167.213	173.164	179.349	186.233	187.400	189.617	184.133	179.932	184.133
<b>52.5</b>	173.864	182.849	187.400	194.051	204.786	207.937	212.021	209.454	203.853	209.454
<b>55.0</b>	192.301	204.436	209.221	215.172	224.507	229.057	235.709	236.992	230.458	236.992
<b>57.5</b>	213.538	229.291	231.041	234.542	242.826	247.611	257.529	260.096	253.445	260.096
<b>60.0</b>	232.908	249.944	251.345	252.862	258.696	262.197	272.932	278.650	277.016	278.650
<b>62.5</b>	253.328	265.347	265.230	262.197	263.714	264.880	278.299	289.151	290.902	289.151
<b>65.0</b>	272.465	274.682	268.964	259.980	259.629	259.396	273.399	284.367	290.318	284.367
<b>67.5</b>	279.350	270.831	263.830	253.678	255.545	252.278	261.730	265.464	268.381	265.464
<b>70.0</b>	261.496	254.379	251.461	242.593	240.609	232.441	234.425	235.125	237.342	235.125
<b>72.5</b>	232.441	224.740	223.806	216.922	213.071	203.036	199.652	197.435	198.369	197.435
<b>75.0</b>	193.001	188.217	188.567	184.366	180.399	170.364	163.479	158.928	156.828	158.928
<b>77.5</b>	154.261	151.344	153.794	152.277	148.310	137.108	128.473	122.522	121.005	122.522
<b>80.0</b>	117.971	117.738	121.472	122.405	117.971	108.053	98.951	92.416	90.783	92.416
<b>82.5</b>	87.516	87.866	93.117	95.684	91.600	82.731	74.330	68.029	65.928	68.029
<b>85.0</b>	61.378	63.595	68.612	71.646	67.562	60.677	54.610	49.592	47.959	49.592
<b>87.5</b>	42.941	44.808	48.775	51.576	48.075	42.941	38.624	35.123	33.956	35.123
<b>90.0</b>	28.472	29.755	32.439	34.306	31.506	27.888	25.555	23.688	22.987	23.688
<b>92.5</b>	21.821	22.987	24.154	24.738	24.271	23.337	22.754	22.287	22.171	22.287
<b>95.0</b>	27.538	27.772	28.238	27.888	27.071	26.255	25.905	25.671	25.555	25.671
<b>97.5</b>	29.989	30.105	29.872	29.522	28.472	28.005	27.655	27.655	27.538	27.655
<b>100.0</b>	31.739	31.856	31.739	31.622	30.455	29.639	28.705	28.355	28.238	28.355
<b>102.5</b>	27.772	27.655	28.005	28.355	27.188	26.255	25.204	24.621	24.504	24.621
<b>105.0</b>	24.038	24.271	24.504	24.971	24.854	24.154	23.221	22.871	22.754	22.871
<b>107.5</b>	22.637	22.871	23.337	24.154	24.504	23.921	22.871	22.287	22.171	22.287
<b>110.0</b>	22.054	22.404	23.337	24.388	24.388	23.571	22.637	22.054	21.937	22.054
<b>112.5</b>	21.470	21.937	22.287	22.287	21.354	20.654	20.654	20.537	20.654	20.537
<b>115.0</b>	19.253	19.487	19.487	19.720	19.603	19.603	19.487	19.253	19.370	19.253
<b>117.5</b>	18.553	18.787	19.020	19.370	19.487	19.370	19.020	18.787	18.787	18.787
<b>120.0</b>	17.736	17.853	18.203	18.320	18.203	18.203	18.203	18.203	18.203	18.203
<b>122.5</b>	16.920	17.153	17.270	17.386	17.153	17.386	17.503	17.620	17.620	17.620
<b>125.0</b>	16.103	16.336	16.453	16.453	16.453	16.686	16.803	16.803	16.803	16.803
<b>127.5</b>	15.286	15.403	15.519	15.519	15.519	15.753	15.869	15.986	15.986	15.986
<b>130.0</b>	14.353	14.469	14.586	14.586	14.586	14.819	14.936	15.053	15.053	15.053
<b>132.5</b>	13.302	13.536	13.536	13.536	13.652	13.886	14.002	14.119	14.002	14.119

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PHOTOMETRIC FILENAME : OSA6R-L14-835-AC-XX-DBZ-XX-DIM-UNV\_.IES

## CANDELA TABULATION - (Cont.)

135.0	12.252	12.369	12.486	12.486	12.486	12.836	13.069	13.069	13.069	13.069
137.5	11.202	11.202	11.319	11.319	11.435	11.669	11.902	11.902	11.902	11.902
140.0	10.152	10.268	10.385	10.385	10.385	10.385	10.502	10.619	10.619	10.619
142.5	9.102	9.102	9.218	9.218	9.218	9.218	9.335	9.335	9.452	9.335
145.0	7.935	7.935	8.051	8.051	8.051	8.051	8.168	8.285	8.285	8.285
147.5	6.885	6.885	6.885	6.885	6.885	6.885	7.001	7.118	7.118	7.118
150.0	5.718	5.718	5.718	5.718	5.718	5.834	5.951	6.068	6.068	6.068
152.5	4.551	4.551	4.551	4.551	4.667	4.784	4.901	5.018	5.134	5.018
155.0	3.617	3.617	3.617	3.501	3.617	3.851	3.851	3.967	4.084	3.967
157.5	2.684	2.684	2.684	2.567	2.684	2.800	2.917	3.034	3.034	3.034
160.0	1.867	1.750	1.750	1.634	1.634	1.750	1.867	1.984	2.100	1.984
162.5	0.933	0.933	0.933	0.817	0.700	0.817	0.933	1.050	1.050	1.050
165.0	0.117	0.117	0.000	0.000	0.233	0.000	0.000	0.233	0.233	0.233
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

## Vert. 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	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7.5	48.775	48.192	45.858	26.838	25.204	24.854	33.023
10.0	100.118	98.601	99.884	93.933	87.165	88.216	87.399
12.5	118.671	115.404	114.470	116.104	108.519	109.453	104.785
15.0	120.305	116.221	120.188	117.854	115.871	110.970	106.652
17.5	111.086	107.002	113.070	116.571	115.170	111.670	107.236
20.0	110.036	106.652	107.586	108.869	106.652	103.735	99.418
22.5	106.536	104.785	109.219	109.103	105.252	102.568	98.017
25.0	104.669	105.485	106.302	111.203	107.819	103.968	98.367
27.5	109.336	109.686	108.403	110.970	108.986	103.385	94.400
30.0	121.122	121.355	117.621	117.271	112.020	103.852	94.283
32.5	138.041	136.641	132.790	131.157	125.322	117.154	106.069
35.0	153.561	149.943	148.893	145.042	141.775	136.641	123.455
37.5	162.079	159.162	162.896	160.212	158.228	156.594	143.409
40.0	161.962	160.328	165.696	164.996	162.079	162.896	151.927
42.5	160.679	160.562	165.346	165.346	159.745	159.278	150.760
45.0	161.495	161.029	165.346	166.396	159.628	157.528	151.460
47.5	171.997	171.997	171.997	170.130	163.479	159.045	154.961
50.0	189.617	187.400	186.233	179.349	173.164	167.213	160.679
52.5	212.021	207.937	204.786	194.051	187.400	182.849	173.864
55.0	235.709	229.057	224.507	215.172	209.221	204.436	192.301
57.5	257.529	247.611	242.826	234.542	231.041	229.291	213.538
60.0	272.932	262.197	258.696	252.862	251.345	249.944	232.908
62.5	278.299	264.880	263.714	262.197	265.230	265.347	253.328
65.0	273.399	259.396	259.629	259.980	268.964	274.682	272.465
67.5	261.730	252.278	255.545	253.678	263.830	270.831	279.350
70.0	234.425	232.441	240.609	242.593	251.461	254.379	261.496
72.5	199.652	203.036	213.071	216.922	223.806	224.740	232.441
75.0	163.479	170.364	180.399	184.366	188.567	188.217	193.001
77.5	128.473	137.108	148.310	152.277	153.794	151.344	154.261
80.0	98.951	108.053	117.971	122.405	121.472	117.738	117.971

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : OSA6R-L14-835-AC-XX-DBZ-XX-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

82.5	74.330	82.731	91.600	95.684	93.117	87.866	87.516
85.0	54.610	60.677	67.562	71.646	68.612	63.595	61.378
87.5	38.624	42.941	48.075	51.576	48.775	44.808	42.941
90.0	25.555	27.888	31.506	34.306	32.439	29.755	28.472
92.5	22.754	23.337	24.271	24.738	24.154	22.987	21.821
95.0	25.905	26.255	27.071	27.888	28.238	27.772	27.538
97.5	27.655	28.005	28.472	29.522	29.872	30.105	29.989
100.0	28.705	29.639	30.455	31.622	31.739	31.856	31.739
102.5	25.204	26.255	27.188	28.355	28.005	27.655	27.772
105.0	23.221	24.154	24.854	24.971	24.504	24.271	24.038
107.5	22.871	23.921	24.504	24.154	23.337	22.871	22.637
110.0	22.637	23.571	24.388	24.388	23.337	22.404	22.054
112.5	20.654	20.654	21.354	22.287	22.287	21.937	21.470
115.0	19.487	19.603	19.603	19.720	19.487	19.487	19.253
117.5	19.020	19.370	19.487	19.370	19.020	18.787	18.553
120.0	18.203	18.203	18.203	18.320	18.203	17.853	17.736
122.5	17.503	17.386	17.153	17.386	17.270	17.153	16.920
125.0	16.803	16.686	16.453	16.453	16.453	16.336	16.103
127.5	15.869	15.753	15.519	15.519	15.519	15.403	15.286
130.0	14.936	14.819	14.586	14.586	14.586	14.469	14.353
132.5	14.002	13.886	13.652	13.536	13.536	13.536	13.302
135.0	13.069	12.836	12.486	12.486	12.486	12.369	12.252
137.5	11.902	11.669	11.435	11.319	11.319	11.202	11.202
140.0	10.502	10.385	10.385	10.385	10.385	10.268	10.152
142.5	9.335	9.218	9.218	9.218	9.218	9.102	9.102
145.0	8.168	8.051	8.051	8.051	8.051	7.935	7.935
147.5	7.001	6.885	6.885	6.885	6.885	6.885	6.885
150.0	5.951	5.834	5.718	5.718	5.718	5.718	5.718
152.5	4.901	4.784	4.667	4.551	4.551	4.551	4.551
155.0	3.851	3.851	3.617	3.501	3.617	3.617	3.617
157.5	2.917	2.800	2.684	2.567	2.684	2.684	2.684
160.0	1.867	1.750	1.634	1.634	1.750	1.750	1.867
162.5	0.933	0.817	0.700	0.817	0.933	0.933	0.933
165.0	0.000	0.000	0.233	0.000	0.000	0.117	0.117
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	34.81	N.A.	3.10
0-30	84.41	N.A.	7.50
0-40	174.72	N.A.	15.50
0-60	500.67	N.A.	44.40
0-80	948.25	N.A.	84.20
0-90	1018.6	N.A.	90.40
10-90	1015.18	N.A.	90.10
20-40	139.91	N.A.	12.40
20-50	267.50	N.A.	23.70
40-70	587.37	N.A.	52.10
60-80	447.57	N.A.	39.70
70-80	186.15	N.A.	16.50
80-90	70.35	N.A.	6.20
90-110	56.26	N.A.	5.00
90-120	76.28	N.A.	6.80
90-130	91.10	N.A.	8.10
90-150	106.08	N.A.	9.40
90-180	108.03	N.A.	9.60
110-180	51.77	N.A.	4.60
0-180	1126.63	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

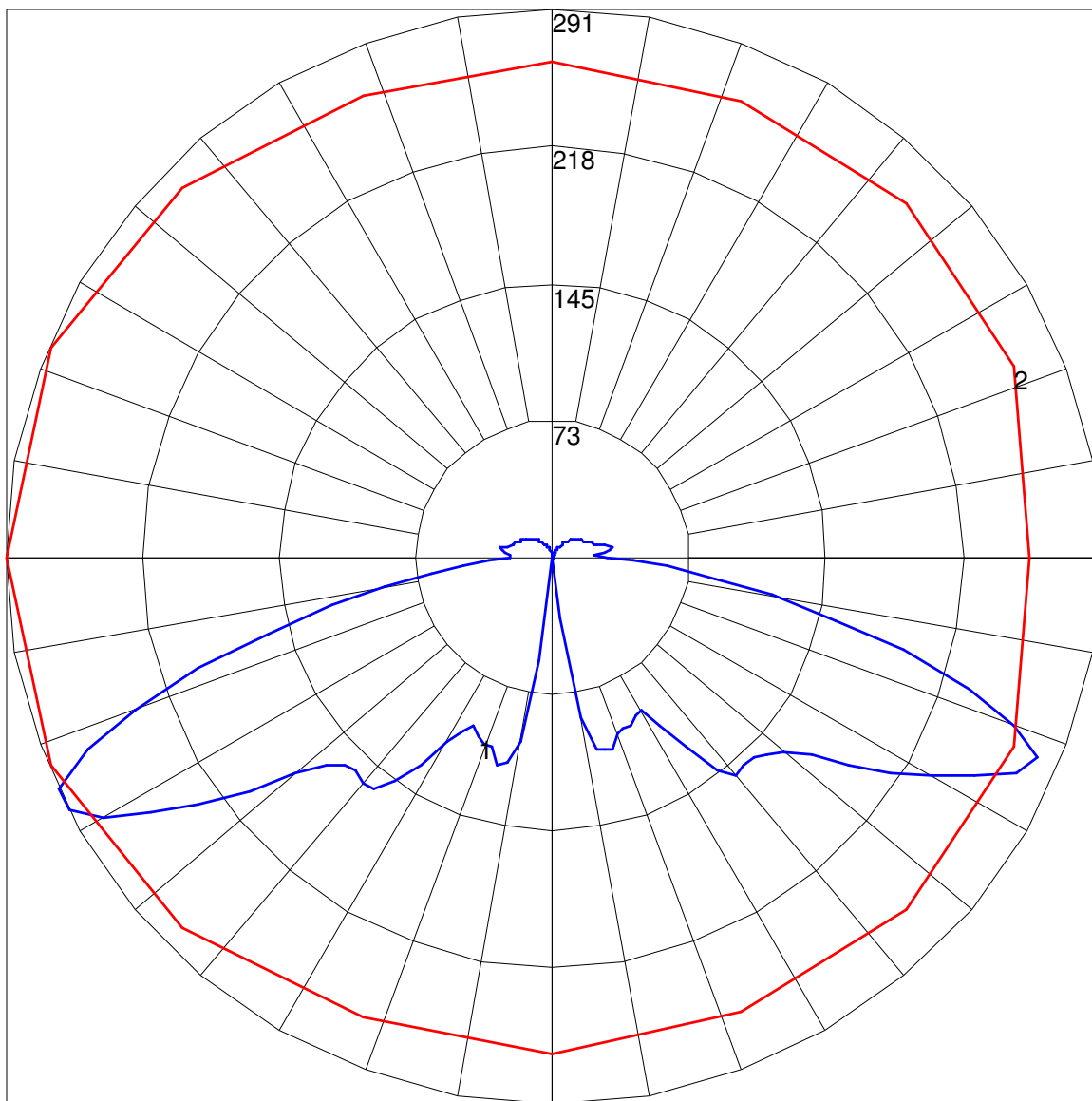
Zone	Lumens
0-10	3.41
10-20	31.40
20-30	49.59
30-40	90.31
40-50	127.59
50-60	198.36
60-70	261.42
70-80	186.15
80-90	70.35
90-100	29.61
100-110	26.66
110-120	20.01
120-130	14.83
130-140	9.83
140-150	5.14
150-160	1.80
160-170	0.16
170-180	0.00

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	101	95	88	83	97	91	86	81	85	80	76	79	76	72	74	71	68	65
2	89	78	68	60	85	75	66	59	69	62	56	64	58	53	60	55	51	47
3	78	65	54	46	75	62	52	45	58	49	42	53	46	40	49	43	38	35
4	70	55	44	36	67	53	43	35	49	40	33	45	38	32	42	35	30	27
5	63	48	37	28	60	46	35	28	42	33	27	39	31	25	36	29	24	21
6	58	42	31	23	55	40	30	23	37	28	22	34	27	21	32	25	20	17
7	53	37	27	19	50	36	26	19	33	24	18	31	23	17	28	22	17	14
8	49	33	23	17	46	32	23	16	30	21	15	28	20	15	26	19	14	12
9	45	30	21	14	43	29	20	14	27	19	13	25	18	13	23	17	12	10
10	42	27	18	12	40	26	18	12	25	17	12	23	16	11	21	15	11	9

POLAR GRAPH



Maximum Candela = 290.902 Located At Horizontal Angle = 180, Vertical Angle = 62.5  
# 1 - Vertical Plane Through Horizontal Angles (180 - 0) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)