



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4CS-L15-935-XXX-DIM-UNV-RM-CS.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM 13257153.20
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 02/08/2021
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4CS-L15-935-xxx-DIM-UNV-RM-CS
[LUMINAIRE] Square Aluminum housing, optics, and trim enclosure
[LAMP] One white LED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor, Downlight
[SEARCH_MOUNTING] Surface, Suspended, Wall

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1272
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
Total Luminaire Watts	17.3092
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.52
Spacing Criterion (90-270)	0.52
Spacing Criterion (Diagonal)	0.50
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.21 ft
Luminous Width (90-270)	0.21 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	37401	43502	37542
55	22915	26014	23298
65	17677	16354	17535
75	10188	9339	9955
85	4583	4583	4814

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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>
0.0	3191.899	3191.899	3191.899	3191.899	3191.899
0.5	3197.524	3182.256	3186.274	3194.310	3197.524
1.0	3190.292	3175.024	3179.845	3188.685	3192.703
1.5	3180.649	3166.184	3170.202	3179.845	3183.863
2.0	3166.988	3152.523	3157.344	3167.791	3172.613
2.5	3148.505	3135.647	3140.469	3150.916	3156.541
3.0	3127.611	3115.557	3120.379	3130.826	3135.647
3.5	3105.110	3091.449	3097.074	3107.521	3111.539
4.0	3078.592	3064.930	3071.359	3081.002	3083.413
4.5	3048.055	3035.197	3042.430	3050.466	3052.073
5.0	3015.107	3003.053	3009.482	3017.518	3019.125
5.5	2979.749	2968.498	2974.927	2982.963	2982.160
6.0	2940.372	2931.533	2938.765	2945.194	2943.587
6.5	2900.996	2892.960	2900.192	2905.014	2901.800
7.0	2859.209	2851.173	2859.209	2861.620	2859.209
7.5	2813.404	2807.778	2815.011	2815.011	2813.404
8.0	2764.384	2759.562	2768.402	2765.991	2762.777
8.5	2711.346	2707.328	2716.168	2712.150	2707.328
9.0	2654.291	2650.273	2661.523	2655.094	2650.273
9.5	2591.610	2589.199	2602.057	2594.824	2589.199
10.0	2522.500	2523.304	2536.965	2528.126	2521.697
10.5	2449.373	2451.784	2466.248	2459.016	2450.176
11.0	2372.227	2375.442	2390.710	2383.478	2373.834
11.5	2289.456	2294.278	2310.350	2303.118	2291.867
12.0	2201.864	2207.489	2225.972	2217.936	2205.882
12.5	2110.254	2116.682	2136.772	2129.540	2115.879
13.0	2013.822	2021.858	2045.162	2037.930	2021.054
13.5	1915.782	1926.229	1949.534	1942.301	1923.818
14.0	1812.118	1826.583	1850.691	1845.066	1825.779
14.5	1709.257	1726.133	1751.848	1746.223	1726.133
15.0	1605.593	1625.683	1653.809	1648.184	1626.486
15.5	1502.732	1526.840	1557.377	1550.948	1526.036
16.0	1402.282	1430.408	1462.552	1455.320	1429.604
16.5	1305.046	1337.190	1371.745	1362.906	1335.583
17.0	1211.025	1247.187	1283.349	1274.510	1245.580
17.5	1124.236	1162.006	1199.775	1189.328	1158.791
18.0	1041.466	1080.842	1121.022	1108.164	1076.824
18.5	963.516	1005.304	1047.894	1032.626	1001.286
19.0	893.603	936.194	979.588	962.713	930.569
19.5	830.119	873.513	918.515	898.425	867.084
20.0	772.742	815.654	861.459	839.762	807.618
20.5	722.035	762.857	810.029	785.358	754.259
21.0	676.792	716.409	763.420	736.419	706.445
21.5	637.255	674.140	721.713	692.141	663.934
22.0	601.173	637.094	684.185	652.684	625.040
22.5	570.154	603.664	650.434	617.647	590.003
23.0	542.109	573.931	619.817	585.985	558.341
23.5	517.117	547.252	592.253	557.457	529.974
24.0	494.937	523.304	567.101	531.340	504.339
24.5	474.365	501.768	544.439	507.956	481.035
25.0	455.239	481.999	523.626	486.901	459.498
25.5	437.319	463.758	504.500	467.374	439.730
26.0	420.444	446.561	486.982	449.293	421.327
26.5	403.970	430.489	470.347	432.256	403.729

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CANDELA TABULATION - (Cont.)

27.0	387.978	415.059	454.838	416.104	387.174
27.5	372.549	400.032	440.051	400.836	371.424
28.0	357.843	385.567	425.828	386.049	356.718
28.5	343.459	371.183	412.327	371.665	342.334
29.0	328.512	357.200	398.987	357.602	328.351
29.5	314.288	343.459	385.889	343.860	315.172
30.0	300.466	329.958	372.790	330.521	302.314
30.5	287.448	316.618	360.093	317.502	289.939
31.0	275.153	303.680	347.557	304.805	278.206
31.5	263.420	291.144	335.342	292.591	266.956
32.0	252.571	279.171	323.369	281.019	256.027
32.5	242.125	267.760	311.636	269.929	245.580
33.0	230.553	256.589	300.064	259.081	235.937
33.5	219.945	245.821	288.894	248.795	226.615
34.0	211.749	235.696	277.885	239.071	217.615
34.5	204.436	226.374	267.036	229.749	209.338
35.0	196.641	217.695	256.670	220.990	201.623
35.5	189.409	209.499	246.544	212.552	194.632
36.0	183.623	201.864	236.821	204.757	187.641
36.5	178.319	193.909	227.338	197.525	181.533
37.0	173.256	186.516	218.338	190.534	175.426
37.5	168.113	180.006	209.820	184.105	170.042
38.0	163.613	174.301	201.864	177.676	164.738
38.5	159.113	168.756	194.230	171.970	159.916
39.0	154.693	163.292	186.757	166.265	155.175
39.5	150.273	158.390	179.685	161.041	150.755
40.0	146.014	153.809	173.095	155.818	146.336
40.5	141.755	149.389	166.827	150.996	141.996
41.0	137.576	145.050	160.800	146.416	137.817
41.5	133.478	140.871	155.175	141.996	133.719
42.0	129.380	136.933	149.952	137.737	129.621
42.5	125.442	132.996	144.969	133.639	125.603
43.0	121.504	129.139	140.389	129.621	121.665
43.5	117.567	125.362	135.889	125.683	117.888
44.0	113.870	121.665	131.710	121.906	114.031
44.5	110.093	118.049	127.612	118.210	110.334
45.0	106.397	114.433	123.754	114.593	106.798
45.5	102.861	110.977	119.897	111.058	103.182
46.0	99.325	107.441	116.201	107.602	99.807
46.5	95.869	103.986	112.424	104.147	96.352
47.0	92.575	100.530	108.727	100.691	92.977
47.5	89.280	97.155	105.111	97.396	89.762
48.0	85.985	93.860	101.655	94.102	86.628
48.5	82.932	90.646	98.120	90.968	83.574
49.0	79.958	87.512	94.664	87.833	80.601
49.5	76.905	84.378	91.289	84.780	77.788
50.0	74.253	81.485	87.994	81.887	75.056
50.5	71.520	78.592	84.860	78.994	72.404
51.0	69.029	75.779	81.726	76.342	69.913
51.5	66.618	73.208	78.753	73.690	67.502
52.0	64.208	70.556	75.779	71.119	65.172
52.5	62.118	68.065	72.887	68.627	63.083
53.0	59.949	65.654	70.154	66.297	60.993
53.5	58.020	63.324	67.502	63.967	59.065
54.0	56.172	61.074	64.851	61.797	57.216
54.5	54.404	58.984	62.440	59.627	55.368

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CANDELA TABULATION - (Cont.)

55.0	52.877	56.895	60.029	57.618	53.761
55.5	51.270	54.966	57.779	55.609	52.234
56.0	49.823	53.118	55.609	53.841	50.627
56.5	48.377	51.350	53.439	51.993	49.180
57.0	47.091	49.662	51.430	50.305	47.814
57.5	45.886	48.136	49.502	48.618	46.528
58.0	44.680	46.609	47.653	47.091	45.243
58.5	43.635	45.162	45.886	45.564	43.957
59.0	42.430	43.716	44.118	44.118	42.752
59.5	41.385	42.350	42.510	42.671	41.546
60.0	40.421	41.144	40.903	41.385	40.421
60.5	39.376	39.859	39.376	40.019	39.376
61.0	38.412	38.653	37.930	38.814	38.251
61.5	37.287	37.448	36.483	37.528	37.126
62.0	36.242	36.323	35.198	36.323	36.082
62.5	35.198	35.198	33.832	35.117	35.037
63.0	34.153	34.073	32.626	33.912	33.992
63.5	33.108	32.948	31.340	32.787	32.867
64.0	32.064	31.823	30.135	31.662	31.823
64.5	31.099	30.778	28.930	30.537	30.778
65.0	30.055	29.653	27.805	29.492	29.814
65.5	29.010	28.608	26.760	28.367	28.769
66.0	27.965	27.644	25.635	27.322	27.724
66.5	27.001	26.519	24.590	26.278	26.760
67.0	25.956	25.554	23.545	25.233	25.715
67.5	24.992	24.510	22.581	24.269	24.751
68.0	24.028	23.545	21.617	23.224	23.787
68.5	22.983	22.501	20.653	22.260	22.822
69.0	22.019	21.536	19.769	21.295	21.778
69.5	21.054	20.572	18.804	20.251	20.894
70.0	20.090	19.608	17.920	19.367	19.849
70.5	19.126	18.644	17.036	18.402	18.965
71.0	18.161	17.679	16.152	17.438	17.920
71.5	17.197	16.795	15.349	16.554	17.036
72.0	16.233	15.911	14.465	15.590	16.152
72.5	15.349	14.947	13.661	14.706	15.188
73.0	14.384	14.063	12.858	13.822	14.224
73.5	13.500	13.179	11.974	12.938	13.259
74.0	12.536	12.295	11.250	12.054	12.375
74.5	11.572	11.491	10.527	11.250	11.411
75.0	10.608	10.608	9.724	10.286	10.366
75.5	9.482	9.643	9.081	9.482	9.322
76.0	8.357	8.759	8.357	8.599	8.197
76.5	7.072	7.875	7.634	7.634	7.313
77.0	5.786	7.072	6.991	6.911	6.670
77.5	5.063	6.268	6.429	6.107	5.947
78.0	4.741	5.545	5.866	5.545	5.143
78.5	4.420	4.741	5.304	4.982	4.581
79.0	4.179	4.339	4.741	4.581	4.339
79.5	3.938	4.018	4.339	4.179	4.018
80.0	3.697	3.777	4.018	3.857	3.857
80.5	3.455	3.536	3.616	3.536	3.616
81.0	3.295	3.295	3.295	3.375	3.375
81.5	3.054	3.134	3.134	3.134	3.134
82.0	2.813	2.893	2.893	2.893	2.893
82.5	2.572	2.652	2.652	2.652	2.652

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CANDELA TABULATION - (Cont.)

83.0	2.411	2.491	2.411	2.411	2.491
83.5	2.170	2.250	2.250	2.250	2.250
84.0	1.929	2.009	2.009	2.089	2.089
84.5	1.848	1.848	1.848	1.848	1.848
85.0	1.607	1.688	1.607	1.607	1.688
85.5	1.366	1.446	1.446	1.446	1.527
86.0	1.286	1.286	1.205	1.286	1.286
86.5	1.045	1.125	1.125	1.125	1.125
87.0	0.884	0.964	0.884	0.884	0.964
87.5	0.723	0.723	0.723	0.804	0.804
88.0	0.563	0.643	0.563	0.563	0.643
88.5	0.402	0.482	0.482	0.482	0.482
89.0	0.241	0.321	0.321	0.321	0.402
89.5	0.161	0.161	0.241	0.241	0.321
90.0	0.000	0.000	0.000	0.000	0.000
90.5	0.000	0.000	0.000	0.000	0.000
91.0	0.000	0.000	0.000	0.000	0.000
91.5	0.000	0.000	0.000	0.000	0.000
92.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
93.0	0.000	0.000	0.000	0.000	0.000
93.5	0.000	0.000	0.000	0.000	0.000
94.0	0.000	0.000	0.000	0.000	0.000
94.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
95.5	0.000	0.000	0.000	0.000	0.000
96.0	0.000	0.000	0.000	0.000	0.000
96.5	0.000	0.000	0.000	0.000	0.000
97.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
98.0	0.000	0.000	0.000	0.000	0.000
98.5	0.000	0.000	0.000	0.000	0.000
99.0	0.000	0.000	0.000	0.000	0.000
99.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
100.5	0.000	0.000	0.000	0.000	0.000
101.0	0.000	0.000	0.000	0.000	0.000
101.5	0.000	0.000	0.000	0.000	0.000
102.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
103.0	0.000	0.000	0.000	0.000	0.000
103.5	0.000	0.000	0.000	0.000	0.000
104.0	0.000	0.000	0.000	0.000	0.000
104.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
105.5	0.000	0.000	0.000	0.000	0.000
106.0	0.000	0.000	0.000	0.000	0.000
106.5	0.000	0.000	0.000	0.000	0.000
107.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
108.0	0.000	0.000	0.000	0.000	0.000
108.5	0.000	0.000	0.000	0.000	0.000
109.0	0.000	0.000	0.000	0.000	0.000
109.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
110.5	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000	0.000	0.000	0.000	0.000
111.5	0.000	0.000	0.000	0.000	0.000
112.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
113.0	0.000	0.000	0.000	0.000	0.000
113.5	0.000	0.000	0.000	0.000	0.000
114.0	0.000	0.000	0.000	0.000	0.000
114.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
115.5	0.000	0.000	0.000	0.000	0.000
116.0	0.000	0.000	0.000	0.000	0.000
116.5	0.000	0.000	0.000	0.000	0.000
117.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
118.0	0.000	0.000	0.000	0.000	0.000
118.5	0.000	0.000	0.000	0.000	0.000
119.0	0.000	0.000	0.000	0.000	0.000
119.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
120.5	0.000	0.000	0.000	0.000	0.000
121.0	0.000	0.000	0.000	0.000	0.000
121.5	0.000	0.000	0.000	0.000	0.000
122.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
123.0	0.000	0.000	0.000	0.000	0.000
123.5	0.000	0.000	0.000	0.000	0.000
124.0	0.000	0.000	0.000	0.000	0.000
124.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
125.5	0.000	0.000	0.000	0.000	0.000
126.0	0.000	0.000	0.000	0.000	0.000
126.5	0.000	0.000	0.000	0.000	0.000
127.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
128.0	0.000	0.000	0.000	0.000	0.000
128.5	0.000	0.000	0.000	0.000	0.000
129.0	0.000	0.000	0.000	0.000	0.000
129.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
130.5	0.000	0.000	0.000	0.000	0.000
131.0	0.000	0.000	0.000	0.000	0.000
131.5	0.000	0.000	0.000	0.000	0.000
132.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
133.0	0.000	0.000	0.000	0.000	0.000
133.5	0.000	0.000	0.000	0.000	0.000
134.0	0.000	0.000	0.000	0.000	0.000
134.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
135.5	0.000	0.000	0.000	0.000	0.000
136.0	0.000	0.000	0.000	0.000	0.000
136.5	0.000	0.000	0.000	0.000	0.000
137.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
138.0	0.000	0.000	0.000	0.000	0.000
138.5	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

139.0	0.000	0.000	0.000	0.000	0.000
139.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
140.5	0.000	0.000	0.000	0.000	0.000
141.0	0.000	0.000	0.000	0.000	0.000
141.5	0.000	0.000	0.000	0.000	0.000
142.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
143.0	0.000	0.000	0.000	0.000	0.000
143.5	0.000	0.000	0.000	0.000	0.000
144.0	0.000	0.000	0.000	0.000	0.000
144.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
145.5	0.000	0.000	0.000	0.000	0.000
146.0	0.000	0.000	0.000	0.000	0.000
146.5	0.000	0.000	0.000	0.000	0.000
147.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
148.0	0.000	0.000	0.000	0.000	0.000
148.5	0.000	0.000	0.000	0.000	0.000
149.0	0.000	0.000	0.000	0.000	0.000
149.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
150.5	0.000	0.000	0.000	0.000	0.000
151.0	0.000	0.000	0.000	0.000	0.000
151.5	0.000	0.000	0.000	0.000	0.000
152.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
153.0	0.000	0.000	0.000	0.000	0.000
153.5	0.000	0.000	0.000	0.000	0.000
154.0	0.000	0.000	0.000	0.000	0.000
154.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
155.5	0.000	0.000	0.000	0.000	0.000
156.0	0.000	0.000	0.000	0.000	0.000
156.5	0.000	0.000	0.000	0.000	0.000
157.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
158.0	0.000	0.000	0.000	0.000	0.000
158.5	0.000	0.000	0.000	0.000	0.000
159.0	0.000	0.000	0.000	0.000	0.000
159.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
160.5	0.000	0.000	0.000	0.000	0.000
161.0	0.000	0.000	0.000	0.000	0.000
161.5	0.000	0.000	0.000	0.000	0.000
162.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
163.0	0.000	0.000	0.000	0.000	0.000
163.5	0.000	0.000	0.000	0.000	0.000
164.0	0.000	0.000	0.000	0.000	0.000
164.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
165.5	0.000	0.000	0.000	0.000	0.000
166.0	0.000	0.000	0.000	0.000	0.000
166.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4CS-L15-935-XXX-DIM-UNV-RM-CS.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
168.0	0.000	0.000	0.000	0.000	0.000
168.5	0.000	0.000	0.000	0.000	0.000
169.0	0.000	0.000	0.000	0.000	0.000
169.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
170.5	0.000	0.000	0.000	0.000	0.000
171.0	0.000	0.000	0.000	0.000	0.000
171.5	0.000	0.000	0.000	0.000	0.000
172.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
173.0	0.000	0.000	0.000	0.000	0.000
173.5	0.000	0.000	0.000	0.000	0.000
174.0	0.000	0.000	0.000	0.000	0.000
174.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
175.5	0.000	0.000	0.000	0.000	0.000
176.0	0.000	0.000	0.000	0.000	0.000
176.5	0.000	0.000	0.000	0.000	0.000
177.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
178.0	0.000	0.000	0.000	0.000	0.000
178.5	0.000	0.000	0.000	0.000	0.000
179.0	0.000	0.000	0.000	0.000	0.000
179.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4CS-L15-935-XXX-DIM-UNV-RM-CS.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	712.79	N.A.	56.00
0-30	945.42	N.A.	74.30
0-40	1088.36	N.A.	85.60
0-60	1229.59	N.A.	96.70
0-80	1269.83	N.A.	99.90
0-90	1271.72	N.A.	100.00
10-90	999.28	N.A.	78.60
20-40	375.57	N.A.	29.50
20-50	464.75	N.A.	36.50
40-70	170.37	N.A.	13.40
60-80	40.25	N.A.	3.20
70-80	11.11	N.A.	0.90
80-90	1.89	N.A.	0.10
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1271.72	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	272.45
10-20	440.35
20-30	232.63
30-40	142.94
40-50	89.18
50-60	52.05
60-70	29.14
70-80	11.11
80-90	1.89
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT
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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	85	83	82
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	76	72	88	81	75	72	79	75	71	78	74	71	77	73	70	69
7	86	77	72	68	85	77	72	68	76	71	67	74	70	67	73	70	67	65
8	83	74	68	65	82	73	68	64	72	68	64	71	67	64	70	67	64	62
9	80	71	65	62	78	70	65	62	69	65	61	68	64	61	68	64	61	60
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4CS-L15-935-XXX-DIM-UNV-RM-CS.IES

UGR TABLE - CORRECTED

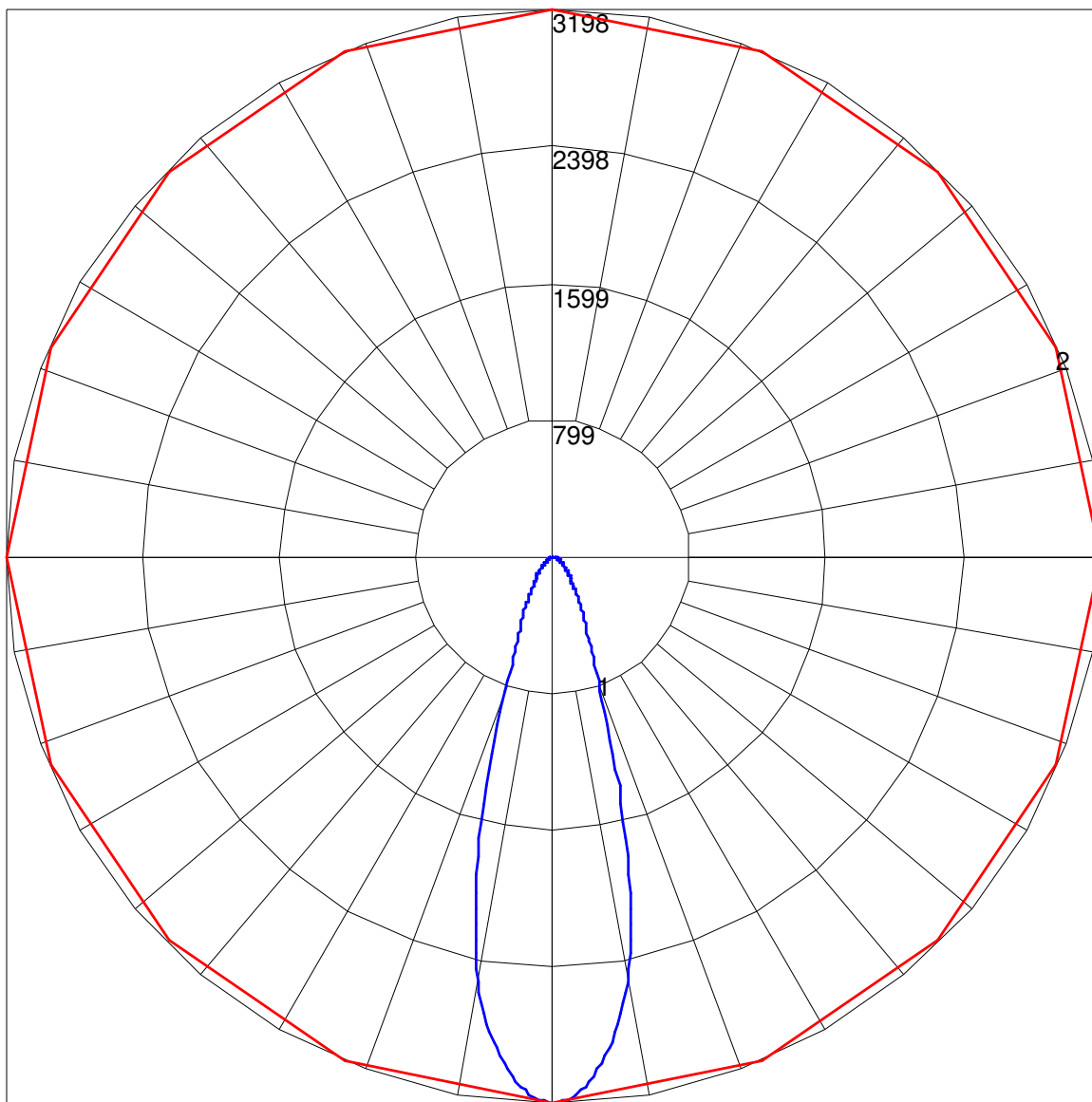
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.5	19.5	18.8	19.8	20.2	18.5	19.6	18.9	19.9	20.2
	3H	19.5	20.5	19.9	20.8	21.2	19.6	20.5	20.0	20.9	21.2
	4H	19.8	20.7	20.2	21.0	21.4	19.8	20.7	20.2	21.0	21.4
	6H	19.8	20.6	20.2	21.0	21.4	19.8	20.6	20.2	21.0	21.4
	8H	19.8	20.5	20.2	20.9	21.3	19.8	20.6	20.2	21.0	21.4
	12H	19.7	20.5	20.2	20.8	21.3	19.8	20.5	20.2	20.9	21.3
4H	2H	18.7	19.6	19.1	19.9	20.3	18.8	19.7	19.2	20.0	20.4
	3H	20.0	20.7	20.4	21.1	21.5	20.0	20.7	20.4	21.1	21.5
	4H	20.3	20.9	20.7	21.3	21.8	20.3	20.9	20.7	21.3	21.8
	6H	20.3	20.8	20.8	21.3	21.8	20.3	20.9	20.8	21.3	21.8
	8H	20.3	20.8	20.8	21.2	21.7	20.3	20.8	20.8	21.3	21.7
	12H	20.3	20.7	20.7	21.2	21.7	20.3	20.7	20.8	21.2	21.7
8H	4H	20.3	20.8	20.7	21.2	21.7	20.3	20.8	20.7	21.2	21.7
	6H	20.3	20.7	20.8	21.2	21.7	20.3	20.7	20.8	21.2	21.7
	8H	20.3	20.7	20.8	21.2	21.7	20.3	20.7	20.9	21.2	21.7
	12H	20.3	20.6	20.9	21.1	21.7	20.4	20.7	20.9	21.2	21.7
12H	4H	20.2	20.7	20.7	21.1	21.6	20.2	20.7	20.7	21.1	21.6
	6H	20.3	20.6	20.8	21.1	21.7	20.3	20.7	20.8	21.1	21.7
	8H	20.3	20.6	20.8	21.1	21.7	20.3	20.6	20.9	21.1	21.7

Maximum UGR = 21.8

POLAR GRAPH



Maximum Candela = 3197.524 Located At Horizontal Angle = 0, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)