



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CS-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 13257153.14
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 02/08/2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 4CS-L12-9DW-xxx-DIM-UNV-LW-WH (3000K)
 [LUMINAIRE] Square Aluminum housing, optics, and trim enclosure
 [LAMP] One white LED
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] INDOOR, DIRECT, DOWNLIGHT
 [_SEARCH_MOUNTING] SURFACE, SUSPENDED, WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1263
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	54
Total Luminaire Watts	23.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.88
Spacing Criterion (90-270)	0.86
Spacing Criterion (Diagonal)	0.84
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	30235	37219	30762
55	24463	26478	24872
65	21376	21701	21608
75	16808	16506	17414
85	10119	8770	10792

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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	1460.096	1460.096	1460.096	1460.096	1460.096
0.5	1490.055	1467.192	1454.578	1449.847	1449.059
1.0	1489.267	1467.192	1454.578	1449.847	1449.059
1.5	1488.478	1466.404	1454.578	1449.847	1448.271
2.0	1487.690	1465.615	1453.789	1449.059	1448.271
2.5	1486.113	1464.827	1452.213	1448.271	1446.694
3.0	1485.325	1462.462	1450.636	1446.694	1445.905
3.5	1482.960	1460.885	1448.271	1444.329	1443.540
4.0	1479.806	1458.520	1446.694	1442.752	1441.175
4.5	1476.653	1456.155	1443.540	1439.598	1438.810
5.0	1473.499	1452.213	1440.387	1436.445	1434.868
5.5	1469.557	1449.059	1437.233	1432.503	1432.503
6.0	1465.615	1445.117	1433.291	1428.561	1429.349
6.5	1460.885	1440.387	1428.561	1425.407	1426.196
7.0	1456.943	1435.656	1424.619	1421.465	1422.254
7.5	1452.213	1430.926	1420.677	1417.523	1419.100
8.0	1447.482	1426.196	1416.735	1413.582	1414.370
8.5	1442.752	1421.465	1412.005	1408.851	1409.640
9.0	1436.445	1415.947	1407.274	1404.121	1404.909
9.5	1431.714	1410.428	1401.756	1399.391	1399.391
10.0	1424.619	1404.121	1396.237	1393.872	1393.083
10.5	1418.312	1397.814	1389.930	1387.565	1386.776
11.0	1411.216	1390.718	1383.623	1381.258	1379.681
11.5	1402.544	1383.623	1376.527	1374.950	1373.374
12.0	1394.660	1375.739	1369.432	1367.067	1365.490
12.5	1385.988	1367.855	1361.548	1359.971	1357.606
13.0	1376.527	1359.183	1353.664	1352.087	1348.145
13.5	1367.067	1349.722	1344.992	1342.627	1339.473
14.0	1356.029	1338.685	1335.531	1333.166	1329.224
14.5	1344.992	1328.436	1325.282	1322.128	1317.398
15.0	1332.377	1316.610	1314.245	1311.091	1306.361
15.5	1319.763	1304.784	1302.419	1299.265	1293.746
16.0	1306.361	1291.381	1289.016	1285.863	1280.344
16.5	1291.381	1277.979	1275.613	1272.460	1265.364
17.0	1276.402	1262.999	1262.211	1258.269	1250.385
17.5	1260.634	1248.020	1247.231	1242.501	1233.829
18.0	1243.289	1231.464	1232.252	1226.733	1215.696
18.5	1224.368	1214.119	1215.696	1209.389	1196.775
19.0	1204.658	1195.986	1199.140	1191.256	1176.276
19.5	1182.584	1177.065	1181.795	1171.546	1154.202
20.0	1159.720	1156.567	1162.874	1151.836	1130.550
20.5	1135.280	1135.280	1143.164	1129.761	1105.321
21.0	1107.687	1112.417	1122.666	1106.110	1078.516
21.5	1079.305	1087.188	1101.379	1081.670	1050.134
22.0	1049.346	1061.172	1079.305	1055.653	1020.175
22.5	1017.022	1034.366	1055.653	1028.848	989.428
23.0	983.910	1005.196	1032.001	1000.466	957.104
23.5	949.220	975.237	1006.773	971.295	923.204
24.0	912.954	943.702	981.544	940.548	889.303
24.5	876.689	912.166	954.739	909.013	853.825
25.0	839.634	878.265	927.145	875.900	818.348
25.5	801.792	844.365	897.975	841.999	782.003
26.0	762.766	808.887	868.805	807.310	745.501
26.5	723.189	773.646	838.058	772.621	708.289

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27.0	683.533	737.617	807.310	737.696	671.392
27.5	644.350	701.351	775.775	702.218	636.545
28.0	607.060	665.243	743.687	666.898	599.806
28.5	568.744	629.450	711.048	632.919	563.935
29.0	532.951	594.524	678.488	599.097	530.270
29.5	496.370	559.993	645.769	565.511	496.054
30.0	461.208	526.329	613.603	532.793	463.179
30.5	427.701	492.980	582.541	500.942	431.485
31.0	396.087	460.656	550.532	469.565	401.211
31.5	365.970	429.672	519.470	439.369	372.908
32.0	338.298	400.344	489.038	410.672	346.024
32.5	312.833	372.671	459.552	383.472	321.190
33.0	288.787	346.497	431.249	357.771	298.248
33.5	266.791	321.978	403.813	333.489	276.646
34.0	247.160	299.115	377.954	310.941	257.094
34.5	228.790	277.828	353.356	289.733	238.882
35.0	212.313	258.355	330.335	270.102	222.562
35.5	197.649	240.459	308.733	251.969	207.662
36.0	184.325	224.060	288.314	235.334	194.180
36.5	172.421	209.238	269.393	219.882	181.960
37.0	161.856	195.599	251.811	205.691	170.923
37.5	152.317	183.222	235.413	192.682	160.910
38.0	143.881	172.026	220.197	181.014	151.923
38.5	136.312	162.014	206.321	170.292	143.802
39.0	129.690	152.869	193.550	160.674	136.549
39.5	123.619	144.748	181.960	151.923	130.005
40.0	118.337	137.337	171.317	144.039	124.092
40.5	113.607	130.636	161.541	136.943	118.731
41.0	109.192	124.723	152.790	130.557	113.765
41.5	105.329	119.362	144.827	124.881	109.350
42.0	101.781	114.632	137.574	119.677	105.329
42.5	98.627	110.296	130.873	114.868	101.702
43.0	95.632	106.354	124.960	110.611	98.312
43.5	92.951	102.885	119.441	106.590	95.237
44.0	90.507	99.652	114.474	102.964	92.320
44.5	88.221	96.735	109.980	99.652	89.876
45.0	86.013	93.976	105.881	96.578	87.511
45.5	83.963	91.532	102.096	93.739	85.146
46.0	81.992	89.088	98.627	91.059	83.017
46.5	80.100	86.802	95.316	88.536	80.968
47.0	78.287	84.594	92.320	86.250	79.075
47.5	76.474	82.544	89.482	83.963	77.262
48.0	74.818	80.573	86.959	81.835	75.607
48.5	73.241	78.760	84.436	79.864	73.872
49.0	71.665	76.947	82.150	77.893	72.295
49.5	70.088	75.212	79.864	76.080	70.718
50.0	68.669	73.557	77.814	74.345	69.378
50.5	67.250	71.980	75.764	72.768	68.038
51.0	65.909	70.403	73.872	71.192	66.777
51.5	64.648	68.905	72.059	69.694	65.515
52.0	63.308	67.486	70.245	68.274	64.175
52.5	62.046	66.067	68.590	66.934	62.992
53.0	60.864	64.806	67.013	65.594	61.810
53.5	59.681	63.386	65.436	64.254	60.706
54.0	58.577	62.204	63.938	62.992	59.602
54.5	57.474	60.864	62.440	61.810	58.420

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55.0	56.449	59.681	61.100	60.548	57.395
55.5	55.345	58.420	59.681	59.366	56.370
56.0	54.320	57.237	58.341	58.183	55.345
56.5	53.374	56.133	57.001	56.922	54.399
57.0	52.428	55.030	55.660	55.818	53.295
57.5	51.482	53.926	54.399	54.635	52.349
58.0	50.536	52.822	53.216	53.532	51.403
58.5	49.590	51.639	51.955	52.428	50.378
59.0	48.722	50.536	50.693	51.324	49.432
59.5	47.855	49.511	49.511	50.142	48.328
60.0	46.830	48.407	48.328	49.038	47.303
60.5	45.884	47.382	47.225	47.934	46.278
61.0	44.938	46.357	46.042	46.830	45.175
61.5	43.913	45.254	44.859	45.648	44.071
62.0	42.888	44.229	43.756	44.544	43.046
62.5	41.785	43.204	42.573	43.361	41.942
63.0	40.681	42.100	41.469	42.258	40.917
63.5	39.577	40.996	40.366	41.075	39.814
64.0	38.473	39.892	39.183	39.971	38.789
64.5	37.370	38.868	38.079	38.868	37.764
65.0	36.345	37.685	36.897	37.764	36.739
65.5	35.241	36.581	35.793	36.739	35.793
66.0	34.295	35.556	34.689	35.635	34.847
66.5	33.270	34.453	33.585	34.610	33.822
67.0	32.324	33.349	32.560	33.585	32.876
67.5	31.378	32.245	31.457	32.482	31.851
68.0	30.353	31.220	30.432	31.457	30.905
68.5	29.407	30.195	29.407	30.511	29.959
69.0	28.461	29.170	28.382	29.486	29.013
69.5	27.515	28.145	27.436	28.461	28.067
70.0	26.569	27.121	26.411	27.436	27.121
70.5	25.623	26.096	25.465	26.411	26.175
71.0	24.677	25.150	24.440	25.465	25.228
71.5	23.731	24.125	23.494	24.440	24.361
72.0	22.784	23.179	22.627	23.494	23.415
72.5	21.917	22.233	21.681	22.548	22.548
73.0	20.971	21.365	20.735	21.602	21.602
73.5	20.104	20.419	19.867	20.656	20.735
74.0	19.237	19.473	18.921	19.710	19.867
74.5	18.369	18.606	18.054	18.842	19.000
75.0	17.502	17.739	17.187	17.975	18.133
75.5	16.635	16.872	16.320	17.108	17.345
76.0	15.847	16.004	15.531	16.241	16.477
76.5	15.058	15.216	14.743	15.374	15.689
77.0	14.270	14.349	13.876	14.585	14.901
77.5	13.481	13.560	13.087	13.718	14.033
78.0	12.693	12.772	12.299	12.930	13.245
78.5	11.984	11.984	11.589	12.141	12.535
79.0	11.195	11.195	10.801	11.353	11.747
79.5	10.486	10.486	10.091	10.643	11.037
80.0	9.776	9.776	9.382	9.855	10.249
80.5	9.066	8.988	8.672	9.145	9.540
81.0	8.436	8.357	7.963	8.436	8.830
81.5	7.726	7.647	7.253	7.726	8.199
82.0	7.096	6.938	6.622	7.096	7.490
82.5	6.465	6.307	5.992	6.386	6.859

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CANDELA TABULATION - (Cont.)

83.0	5.834	5.676	5.361	5.755	6.228
83.5	5.203	5.046	4.730	5.125	5.598
84.0	4.651	4.494	4.178	4.573	4.967
84.5	4.100	3.942	3.627	3.942	4.415
85.0	3.548	3.311	3.075	3.390	3.784
85.5	2.996	2.759	2.523	2.759	3.232
86.0	2.444	2.286	2.050	2.207	2.602
86.5	1.813	1.734	1.498	1.656	1.892
87.0	0.946	1.104	1.025	1.025	1.025
87.5	0.552	0.710	0.710	0.552	0.552
88.0	0.394	0.473	0.473	0.394	0.394
88.5	0.315	0.315	0.315	0.315	0.315
89.0	0.237	0.237	0.237	0.237	0.237
89.5	0.079	0.158	0.158	0.158	0.158
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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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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4CS-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.IES****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-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.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-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	502.09	N.A.	39.80
0-30	893.46	N.A.	70.80
0-40	1072.58	N.A.	84.90
0-60	1202.77	N.A.	95.30
0-80	1258.6	N.A.	99.70
0-90	1262.7	N.A.	100.00
10-90	1126.14	N.A.	89.20
20-40	570.49	N.A.	45.20
20-50	647.07	N.A.	51.20
40-70	167.15	N.A.	13.20
60-80	55.83	N.A.	4.40
70-80	18.87	N.A.	1.50
80-90	4.10	N.A.	0.30
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	1262.7	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	136.56
10-20	365.53
20-30	391.38
30-40	179.12
40-50	76.58
50-60	53.61
60-70	36.96
70-80	18.87
80-90	4.10
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

PHOTOMETRIC FILENAME : 4CS-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.IES

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	113	110	107	105	110	108	105	103	103	102	100	100	98	97	96	95	94	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	96	87	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72
5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	72	68	64	63
7	82	72	66	62	80	71	66	61	70	65	61	69	64	61	68	64	60	59
8	78	68	62	58	77	67	62	58	66	61	57	65	61	57	64	60	57	55
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	49

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CS-L12-9DW-XXX-DIM-UNV-LW-WH_3000K.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

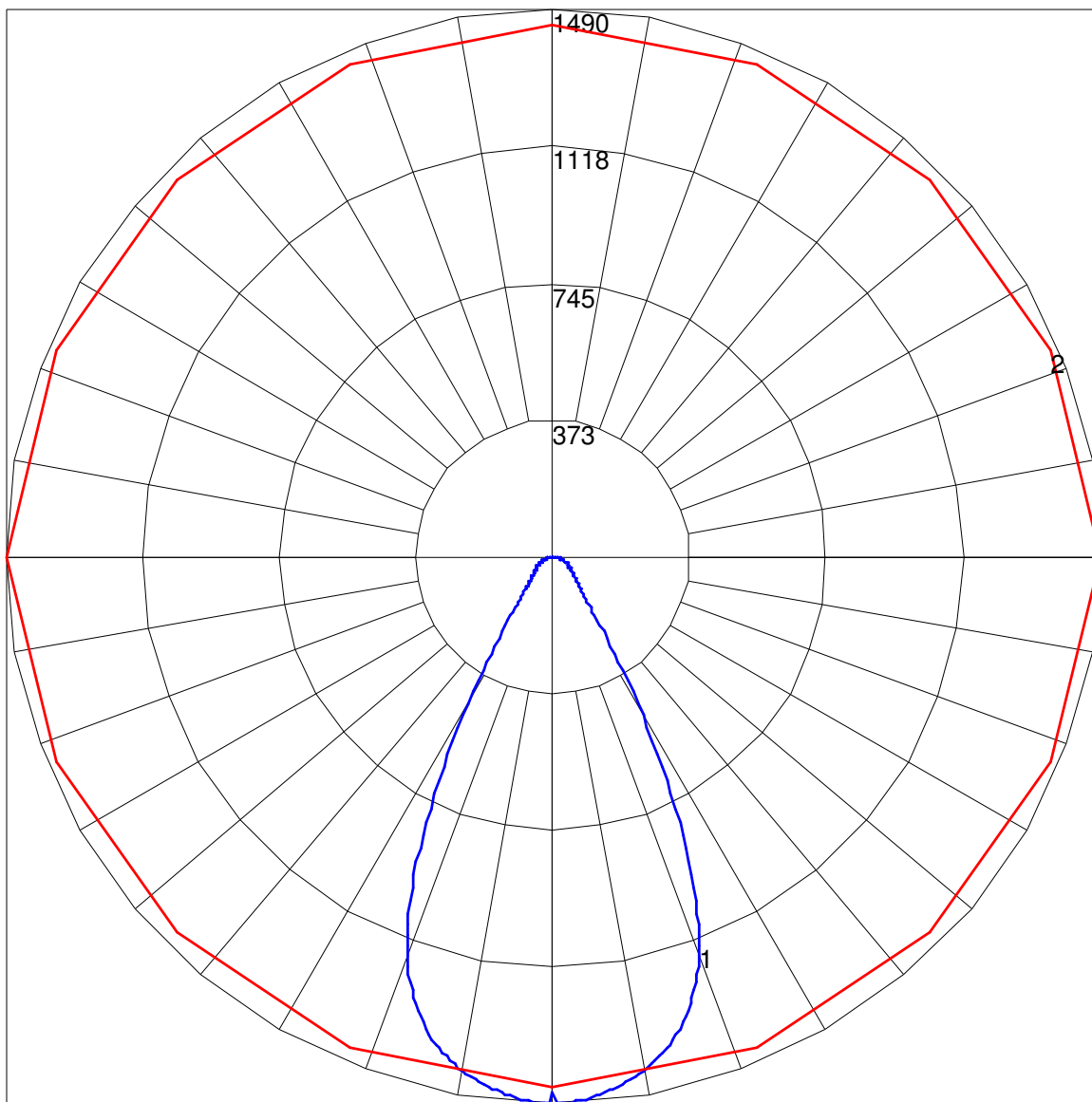
X=2H	Y=2H	19.2	20.3	19.6	20.6	21.0	19.3	20.4	19.7	20.7	21.1
	3H	20.7	21.7	21.1	22.0	22.4	20.8	21.8	21.2	22.1	22.5
	4H	21.2	22.1	21.6	22.4	22.8	21.3	22.2	21.7	22.5	22.9
	6H	21.5	22.3	21.9	22.7	23.1	21.6	22.4	22.0	22.8	23.2
	8H	21.5	22.3	22.0	22.7	23.1	21.7	22.5	22.1	22.8	23.3
	12H	21.6	22.3	22.0	22.7	23.1	21.7	22.4	22.1	22.8	23.3

UGR Viewed Endwise

4H	2H	19.7	20.6	20.1	20.9	21.3	19.8	20.7	20.2	21.0	21.4
	3H	21.3	22.1	21.8	22.5	22.9	21.4	22.2	21.8	22.6	23.0
	4H	21.9	22.6	22.4	23.0	23.4	22.0	22.7	22.5	23.1	23.5
	6H	22.3	22.9	22.8	23.3	23.8	22.4	23.0	22.9	23.4	23.9
	8H	22.4	22.9	22.9	23.4	23.9	22.5	23.1	23.0	23.5	24.0
	12H	22.5	22.9	22.9	23.4	23.9	22.6	23.0	23.1	23.5	24.0
8H	4H	22.1	22.6	22.5	23.0	23.5	22.2	22.7	22.6	23.1	23.6
	6H	22.6	23.0	23.1	23.5	24.0	22.7	23.1	23.2	23.6	24.1
	8H	22.7	23.1	23.3	23.6	24.1	22.8	23.2	23.4	23.7	24.2
	12H	22.8	23.1	23.3	23.6	24.2	22.9	23.2	23.4	23.7	24.3
12H	4H	22.0	22.5	22.5	23.0	23.5	22.1	22.6	22.6	23.1	23.6
	6H	22.6	22.9	23.1	23.4	24.0	22.7	23.0	23.2	23.5	24.1
	8H	22.7	23.1	23.3	23.6	24.2	22.9	23.2	23.4	23.7	24.3

Maximum UGR = 24.3

POLAR GRAPH



Maximum Candela = 1490.055 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.)