

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937672

Luminaire Tested: SQ4-FB-100U-100D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937672
REPORT IS A COMBINATION OF REPORTS P933583 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

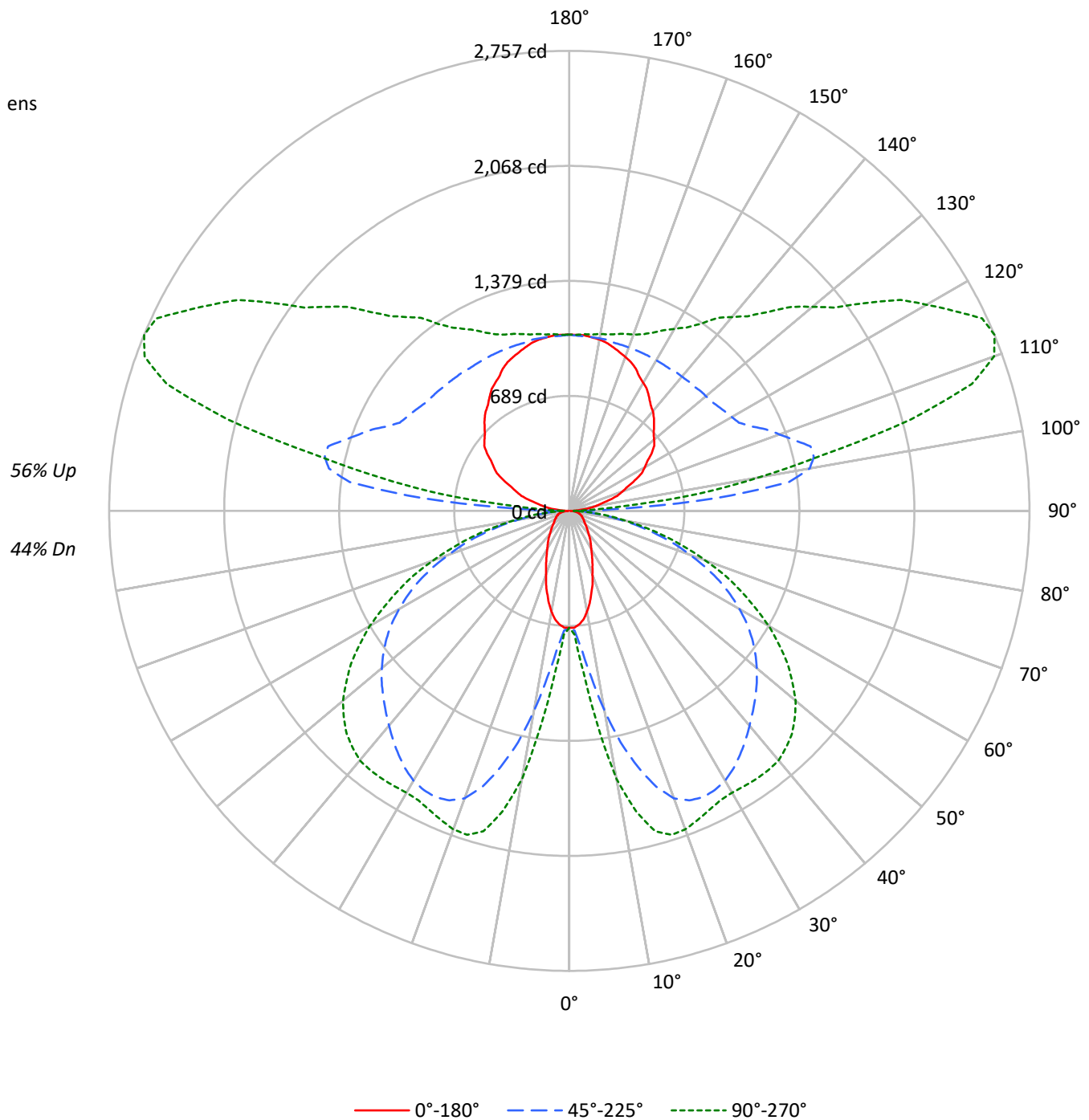
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12267.1 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 116
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	50	30	10	0
RCR																					
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44	44	44	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36	36	36	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30	30	30	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24	24	24	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20	20	20	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3174	3755	4367
10°	2879	5474	7240
15°	2447	7151	8742
20°	1992	8287	8909
25°	1662	8672	8728
30°	1401	8727	8712
35°	1239	8582	8937
40°	1079	8393	9170
45°	978	8256	9206
50°	897	8132	9053
55°	858	7950	8652
60°	879	7600	8018
65°	914	7070	7148
70°	974	6165	6038
75°	1079	5027	4713
80°	1180	3487	3176
85°	1048	1850	1626

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9206 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	0.7
10°-20°	401.4	3.3
20°-30°	702.2	5.7
30°-40°	903.9	7.4
40°-50°	1009.7	8.2
50°-60°	967.0	7.9
60°-70°	766.4	6.2
70°-80°	450.6	3.7
80°-90°	129.2	1.1
90°-100°	514.8	4.2
100°-110°	1353.4	11.0
110°-120°	1403.3	11.4
120°-130°	1125.6	9.2
130°-140°	883.2	7.2
140°-150°	677.9	5.5
150°-160°	488.2	4.0
160°-170°	298.7	2.4
170°-180°	100.9	0.8
0°-30°	1194.2	9.7
0°-40°	2098.1	17.1
0°-60°	4074.8	33.2
0°-90°	5421.0	44.2
90°-120°	3271.5	26.7
90°-150°	5958.2	48.6
90°-180°	6846.0	55.8
0°-180°	12267.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	682	732	824	932	966	63
15°	511	943	1590	1927	1988	142
25°	326	1070	1894	1977	1979	150
35°	221	1022	1783	1884	1959	138
45°	151	815	1576	1806	1887	117
55°	108	518	1337	1554	1596	98
65°	86	275	993	1117	1133	85
75°	63	169	545	599	601	66
85°	22	52	135	149	151	24
90°	7	20	54	27	27	7
95°	68	266	887	457	311	76
105°	244	369	1496	2272	2119	258
115°	433	526	1198	2391	2729	428
125°	602	676	1090	1842	2173	535
135°	718	790	1056	1487	1686	555
145°	833	886	1043	1269	1368	522
155°	941	967	1043	1145	1178	432
165°	1016	1029	1043	1084	1097	287
175°	1056	1056	1050	1063	1063	100
180°	1056	1056	1056	1056	1056	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3
2.5°	700.3	700.3	704.8	707.0	711.5	713.7	718.2	722.8	736.3	738.5	743.0
5°	682.2	691.2	720.5	731.8	763.3	806.1	824.1	853.4	914.1	932.2	943.4
7.5°	655.2	675.5	747.5	765.5	844.3	956.9	1004.2	1067.2	1164.1	1211.4	1249.6
10°	612.4	655.2	783.6	826.4	954.7	1125.7	1213.6	1301.4	1447.7	1513.1	1537.8
12.5°	565.1	634.9	821.8	880.4	1065.0	1314.9	1420.7	1517.6	1684.1	1772.0	1785.5
15°	511.1	605.7	857.9	943.4	1182.1	1472.5	1589.6	1708.9	1864.3	1927.3	1943.1
17.5°	463.8	583.2	891.6	981.7	1272.1	1614.4	1733.7	1832.7	1958.8	2001.6	2012.9
20°	405.3	547.2	914.1	1031.2	1366.7	1718.0	1832.7	1909.3	1994.9	2021.9	2026.4
22.5°	362.5	508.8	927.7	1049.2	1429.7	1781.0	1877.8	1938.6	1997.2	2006.1	2008.4
25°	326.5	466.0	925.4	1069.5	1483.8	1819.3	1893.6	1938.6	1972.4	1976.9	1976.9
27.5°	292.7	418.8	916.4	1074.0	1524.3	1828.3	1886.8	1918.4	1934.1	1943.1	1943.1
30°	263.4	373.8	893.8	1065.0	1542.3	1819.3	1866.6	1882.3	1898.1	1911.5	1918.4
32.5°	240.9	331.0	860.1	1046.9	1544.6	1796.8	1830.5	1839.6	1862.0	1893.6	1904.8
35°	220.7	288.2	821.8	1022.2	1531.0	1760.7	1783.2	1792.3	1837.3	1884.5	1900.3
37.5°	200.4	256.7	772.3	979.5	1510.8	1718.0	1733.7	1749.5	1819.3	1875.5	1893.6
40°	180.1	229.7	713.7	932.2	1479.2	1666.2	1679.6	1704.4	1796.8	1862.0	1880.0
42.5°	164.4	207.1	650.7	882.6	1438.8	1607.6	1627.9	1663.9	1769.7	1839.6	1859.8
45°	150.9	184.6	583.2	815.0	1387.0	1546.8	1576.1	1625.6	1738.2	1805.7	1823.8
47.5°	137.3	168.9	513.3	745.2	1330.7	1486.1	1524.3	1580.6	1695.4	1760.7	1776.5
50°	126.1	153.1	443.6	670.9	1269.9	1420.7	1465.8	1524.3	1641.4	1702.2	1722.4
52.5°	117.1	139.6	378.3	596.7	1200.0	1353.1	1404.9	1465.8	1576.1	1634.6	1648.1
55°	108.0	128.3	322.0	517.8	1128.0	1281.2	1337.4	1396.0	1504.0	1553.5	1562.6
57.5°	103.6	119.4	274.7	443.6	1051.5	1200.0	1263.1	1317.2	1418.5	1456.7	1465.8
60°	96.8	112.5	238.6	380.5	968.2	1123.5	1177.5	1231.6	1317.2	1348.7	1355.4
62.5°	90.1	108.0	211.6	319.8	882.6	1033.5	1087.5	1137.1	1209.1	1231.6	1240.6
65°	85.5	103.6	191.4	274.7	794.8	938.9	992.9	1035.7	1094.2	1116.8	1121.3
67.5°	81.0	99.1	175.6	236.4	707.0	844.3	884.9	925.4	970.4	992.9	995.2
70°	74.3	94.6	162.1	209.4	616.9	736.3	770.0	812.8	848.8	860.1	866.8
72.5°	69.8	87.8	153.1	189.1	524.6	632.7	664.2	689.0	720.5	731.8	731.8
75°	63.0	78.8	144.1	168.9	430.1	517.8	544.9	569.6	594.4	599.0	592.1
77.5°	56.3	69.8	123.8	141.9	335.5	409.8	432.3	445.8	466.0	470.6	472.9
80°	47.3	60.8	96.8	110.3	243.2	301.7	317.5	328.7	346.8	346.8	351.3
82.5°	36.0	47.3	69.8	78.8	164.4	207.1	220.7	227.4	238.6	238.6	238.6
85°	22.5	29.3	45.1	51.8	99.1	126.1	135.1	137.3	146.4	148.6	148.6
87.5°	11.2	15.8	29.3	31.5	51.8	65.3	65.3	69.8	69.8	67.6	65.3
90°	7.1	12.8	18.4	19.9	31.2	46.3	53.8	47.9	35.9	26.9	26.9
92.5°	28.4	76.6	124.8	136.8	192.3	266.3	303.3	265.8	190.9	134.7	129.3
95°	68.1	156.3	244.4	266.5	473.2	748.8	886.7	791.3	600.3	457.2	441.0
97.5°	117.7	195.4	273.3	292.7	637.5	1097.0	1326.8	1266.5	1145.9	1055.4	1024.5
100°	155.9	226.5	297.1	314.7	697.2	1207.2	1462.2	1466.6	1475.4	1482.1	1445.2
102.5°	188.5	254.3	320.2	336.6	724.5	1241.8	1500.5	1577.3	1731.1	1846.4	1814.8
105°	243.8	299.6	355.3	369.3	744.9	1245.8	1496.2	1668.5	2013.1	2271.6	2254.6
107.5°	300.5	352.5	404.4	417.5	748.7	1190.3	1411.2	1651.5	2132.2	2492.7	2496.8
110°	338.8	385.7	432.6	444.4	743.0	1141.2	1340.3	1609.0	2146.4	2549.4	2567.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	376.3	421.1	465.9	477.0	743.3	1098.3	1275.8	1550.8	2100.8	2513.3	2540.4
115°	433.1	474.3	515.6	525.9	750.1	1049.1	1198.5	1463.5	1993.3	2390.7	2428.3
117.5°	489.0	526.5	564.0	573.4	764.1	1018.2	1145.3	1384.4	1862.6	2221.2	2262.9
120°	521.7	557.0	592.2	601.0	775.4	1007.9	1124.1	1342.6	1779.5	2107.2	2147.6
122.5°	553.5	589.2	624.8	633.6	791.7	1002.4	1107.8	1304.5	1698.0	1993.1	2033.0
125°	602.4	634.9	667.4	675.5	813.7	997.9	1090.0	1257.2	1591.5	1842.1	1878.9
127.5°	642.2	674.9	707.7	715.9	835.6	995.4	1075.2	1218.7	1505.7	1720.9	1751.9
130°	663.4	698.6	733.9	742.8	851.7	996.9	1069.5	1197.2	1452.7	1644.4	1673.0
132.5°	685.3	720.6	755.9	764.8	864.7	997.9	1064.6	1178.9	1407.6	1579.1	1604.7
135°	718.0	750.1	782.3	790.3	878.9	997.0	1056.1	1151.8	1343.3	1487.0	1509.1
137.5°	751.3	783.1	814.9	822.9	900.1	1003.1	1054.6	1135.5	1297.5	1418.9	1437.1
140°	778.9	808.2	837.5	844.8	913.1	1004.2	1049.7	1119.6	1259.5	1364.4	1381.3
142.5°	800.2	827.3	854.4	861.1	924.0	1007.7	1049.7	1111.1	1234.0	1326.1	1340.7
145°	832.8	856.4	880.1	886.0	938.2	1007.8	1042.6	1092.9	1193.3	1268.7	1279.7
147.5°	865.4	888.4	911.4	917.2	959.0	1014.7	1042.6	1082.1	1161.2	1220.5	1229.6
150°	886.7	907.5	928.3	933.5	969.8	1018.3	1042.6	1076.0	1142.8	1192.9	1200.3
152.5°	908.7	924.4	940.2	944.1	976.9	1020.7	1042.6	1071.1	1128.1	1170.9	1176.5
155°	941.2	952.9	964.5	967.4	992.5	1025.9	1042.6	1065.3	1110.7	1144.7	1148.3
157.5°	965.3	976.6	988.1	990.9	1008.1	1031.1	1042.6	1060.2	1095.5	1122.0	1124.6
160°	981.7	990.5	999.3	1001.5	1015.2	1033.5	1042.6	1057.8	1088.0	1110.7	1112.2
162.5°	997.9	1004.6	1011.2	1012.9	1022.7	1035.9	1042.6	1055.4	1080.8	1100.0	1101.5
165°	1015.7	1021.6	1027.6	1029.1	1033.6	1039.6	1042.6	1051.7	1070.0	1083.7	1085.3
167.5°	1031.9	1034.8	1037.7	1038.3	1042.1	1047.1	1049.7	1055.6	1067.6	1076.6	1077.2
170°	1042.6	1045.4	1048.3	1049.0	1049.2	1049.5	1049.7	1055.6	1067.6	1076.6	1076.6
172.5°	1048.3	1048.9	1049.5	1049.7	1049.7	1049.7	1049.7	1054.4	1063.9	1071.0	1070.5
175°	1056.1	1056.1	1056.1	1056.1	1053.9	1051.1	1049.7	1052.6	1058.6	1063.1	1063.1
177.5°	1056.1	1056.1	1056.1	1056.1	1054.4	1052.2	1051.1	1053.5	1058.2	1061.8	1061.2
180°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	700.3	700.3
2.5°	747.5	743.0
5°	961.4	965.9
7.5°	1294.6	1292.4
10°	1609.9	1630.1
12.5°	1839.6	1844.1
15°	1979.1	1988.1
17.5°	2033.1	2035.4
20°	2035.4	2030.9
22.5°	2010.6	2006.1
25°	1981.4	1979.1
27.5°	1954.3	1956.6
30°	1943.1	1949.9
32.5°	1943.1	1954.3
35°	1947.6	1958.8
37.5°	1945.4	1958.8
40°	1936.3	1952.1
42.5°	1911.5	1922.8
45°	1873.3	1886.8
47.5°	1823.8	1832.7
50°	1760.7	1769.7
52.5°	1681.9	1684.1
55°	1587.4	1596.4
57.5°	1486.1	1488.3
60°	1373.4	1380.2
62.5°	1254.1	1254.1
65°	1128.0	1132.6
67.5°	997.4	1008.7
70°	864.6	866.8
72.5°	734.0	734.0
75°	599.0	601.2
77.5°	470.6	470.6
80°	349.0	351.3
82.5°	240.9	245.5
85°	150.9	150.9
87.5°	69.8	63.0
90°	26.9	26.9
92.5°	107.9	86.5
95°	376.1	311.2
97.5°	901.0	777.5
100°	1298.2	1151.1
102.5°	1688.8	1562.8
105°	2186.9	2119.2
107.5°	2513.2	2529.6
110°	2637.6	2708.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2648.7	2757.1
115°	2578.5	2728.8
117.5°	2429.6	2596.2
120°	2309.6	2471.5
122.5°	2192.7	2352.4
125°	2026.0	2173.1
127.5°	1876.0	2000.2
130°	1787.7	1902.3
132.5°	1707.5	1810.2
135°	1597.7	1686.2
137.5°	1509.5	1582.0
140°	1449.0	1516.7
142.5°	1399.0	1457.3
145°	1323.8	1367.9
147.5°	1266.2	1302.7
150°	1229.9	1259.5
152.5°	1198.8	1221.2
155°	1163.2	1178.0
157.5°	1134.9	1145.3
160°	1118.2	1124.1
162.5°	1107.1	1112.8
165°	1091.2	1097.2
167.5°	1079.7	1082.3
170°	1076.6	1076.6
172.5°	1068.2	1066.0
175°	1063.1	1063.1
177.5°	1058.6	1056.1
180°	1056.1	1056.1



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	4.55	5.39	5.54	6.40	7.75	17.72	18.57	18.72	19.58	20.93
	3H	5.25	6.01	6.26	7.03	8.40	19.56	20.32	20.57	21.34	22.71
	4H	5.55	6.27	6.57	7.29	8.67	20.21	20.92	21.23	21.95	23.33
	6H	5.80	6.46	6.83	7.49	8.88	20.64	21.30	21.67	22.33	23.72
	8H	5.86	6.50	6.90	7.54	8.93	20.76	21.39	21.79	22.43	23.82
	12H	5.88	6.48	6.92	7.52	8.93	20.82	21.42	21.87	22.47	23.88
4H	2H	11.76	12.48	12.78	13.50	14.88	18.00	18.71	19.02	19.74	21.12
	3H	13.32	13.93	14.36	14.98	16.37	20.04	20.64	21.08	21.70	23.09
	4H	13.42	13.97	14.46	15.02	16.43	20.81	21.36	21.85	22.40	23.82
	6H	13.43	13.90	14.48	14.97	16.38	21.34	21.82	22.40	22.89	24.30
	8H	13.40	13.85	14.46	14.91	16.33	21.51	21.95	22.56	23.01	24.44
	12H	13.36	13.76	14.43	14.84	16.27	21.60	22.00	22.67	23.08	24.51
8H	4H	14.86	15.31	15.92	16.37	17.79	20.86	21.31	21.92	22.37	23.79
	6H	15.10	15.47	16.18	16.57	18.00	21.49	21.86	22.57	22.96	24.39
	8H	15.12	15.44	16.21	16.53	17.97	21.71	22.04	22.80	23.12	24.56
	12H	15.09	15.37	16.18	16.46	17.94	21.86	22.14	22.95	23.22	24.70
12H	4H	15.00	15.41	16.08	16.48	17.91	20.82	21.22	21.89	22.29	23.72
	6H	15.36	15.69	16.45	16.77	18.21	21.48	21.80	22.56	22.89	24.33
	8H	15.43	15.71	16.52	16.80	18.28	21.71	21.99	22.80	23.07	24.55