

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: P937744

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937744
REPORT IS A COMBINATION OF REPORTS P933584 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

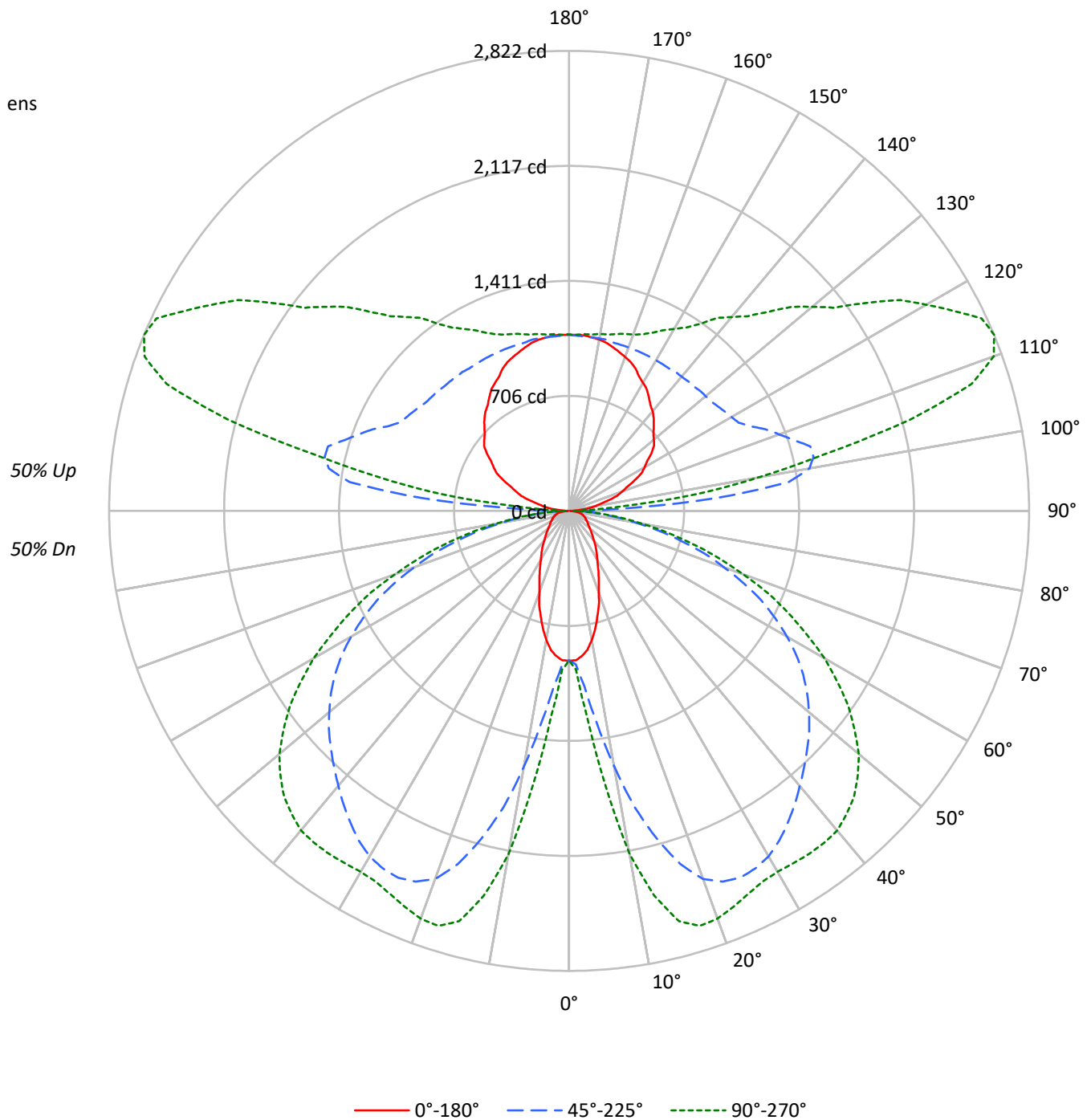
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14112.1 lumens
Efficiency: N/A
Efficacy: 102.6 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): 137.6
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P937744
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-8-3000K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4161	4923	5724
10°	3774	7175	9490
15°	3207	9374	11460
20°	2611	10863	11679
25°	2178	11368	11442
30°	1837	11440	11420
35°	1624	11250	11715
40°	1415	11003	12021
45°	1282	10822	12068
50°	1176	10659	11868
55°	1126	10421	11342
60°	1153	9963	10511
65°	1199	9268	9370
70°	1277	8082	7915
75°	1416	6590	6178
80°	1547	4570	4162
85°	1374	2425	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12068 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	0.8
10°-20°	526.2	3.7
20°-30°	920.5	6.5
30°-40°	1184.9	8.4
40°-50°	1323.5	9.4
50°-60°	1267.6	9.0
60°-70°	1004.6	7.1
70°-80°	590.7	4.2
80°-90°	168.2	1.2
90°-100°	526.9	3.7
100°-110°	1385.2	9.8
110°-120°	1436.3	10.2
120°-130°	1152.1	8.2
130°-140°	904.0	6.4
140°-150°	693.8	4.9
150°-160°	499.7	3.5
160°-170°	305.7	2.2
170°-180°	103.3	0.7
0°-30°	1565.5	11.1
0°-40°	2750.4	19.5
0°-60°	5341.5	37.9
0°-90°	7105.1	50.3
90°-120°	3348.4	23.7
90°-150°	6098.3	43.2
90°-180°	7007.0	49.7
0°-180°	14112.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	894	959	1080	1222	1266	83
15°	670	1237	2084	2526	2606	186
25°	428	1402	2482	2591	2594	197
35°	289	1340	2338	2470	2568	181
45°	198	1068	2066	2367	2473	153
55°	142	679	1753	2036	2093	129
65°	112	360	1302	1464	1485	111
75°	83	221	714	785	788	87
85°	30	68	177	195	198	31
90°	7	20	55	28	28	8
95°	70	273	908	468	318	77
105°	250	378	1531	2325	2169	265
115°	443	538	1227	2447	2793	438
125°	617	691	1116	1885	2224	547
135°	735	809	1081	1522	1726	569
145°	852	907	1067	1298	1400	534
155°	963	990	1067	1172	1206	443
165°	1040	1053	1067	1109	1123	293
175°	1081	1081	1074	1088	1088	103
180°	1081	1081	1081	1081	1081	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9
2.5°	917.9	917.9	923.8	926.8	932.6	935.6	941.5	947.5	965.2	968.1	974.0
5°	894.3	906.1	944.5	959.2	1000.6	1056.6	1080.3	1118.6	1198.3	1221.9	1236.6
7.5°	858.9	885.5	979.9	1003.5	1106.8	1254.4	1316.3	1399.0	1525.9	1587.9	1638.1
10°	802.8	858.9	1027.1	1083.2	1251.5	1475.7	1590.9	1706.0	1897.8	1983.4	2015.9
12.5°	740.8	832.4	1077.3	1154.0	1396.0	1723.7	1862.4	1989.3	2207.7	2322.8	2340.5
15°	670.0	794.0	1124.5	1236.6	1549.5	1930.2	2083.7	2240.2	2443.9	2526.5	2547.1
17.5°	608.0	764.4	1168.8	1286.9	1667.6	2116.3	2272.6	2402.5	2567.8	2623.9	2638.6
20°	531.2	717.2	1198.3	1351.7	1791.6	2252.0	2402.5	2502.8	2615.1	2650.5	2656.3
22.5°	475.2	667.0	1216.1	1375.4	1874.2	2334.6	2461.6	2541.2	2617.9	2629.8	2632.8
25°	428.0	610.9	1213.1	1402.0	1945.1	2384.8	2482.2	2541.2	2585.5	2591.4	2591.4
27.5°	383.7	548.9	1201.2	1407.9	1998.2	2396.6	2473.4	2514.7	2535.4	2547.1	2547.1
30°	345.3	489.9	1171.8	1396.0	2021.8	2384.8	2446.8	2467.4	2488.1	2505.8	2514.7
32.5°	315.9	433.8	1127.5	1372.4	2024.7	2355.3	2399.6	2411.3	2440.9	2482.2	2497.0
35°	289.3	377.8	1077.3	1340.0	2007.0	2308.1	2337.6	2349.3	2408.4	2470.4	2491.1
37.5°	262.7	336.4	1012.3	1283.9	1980.5	2252.0	2272.6	2293.3	2384.8	2458.6	2482.2
40°	236.1	301.0	935.6	1221.9	1939.1	2184.1	2201.8	2234.2	2355.3	2440.9	2464.5
42.5°	215.5	271.6	853.0	1157.0	1886.0	2107.4	2134.0	2181.1	2319.9	2411.3	2437.9
45°	197.8	242.0	764.4	1068.4	1818.1	2027.7	2066.0	2131.0	2278.5	2367.1	2390.7
47.5°	180.1	221.3	672.9	976.9	1744.3	1947.9	1998.2	2072.0	2222.5	2308.1	2328.8
50°	165.3	200.7	581.5	879.5	1664.6	1862.4	1921.4	1998.2	2151.7	2231.4	2257.9
52.5°	153.5	183.0	495.8	782.1	1573.1	1773.8	1841.7	1921.4	2066.0	2142.8	2160.5
55°	141.7	168.2	422.1	678.9	1478.7	1679.4	1753.2	1830.0	1971.6	2036.5	2048.3
57.5°	135.8	156.4	360.1	581.5	1378.3	1573.1	1655.8	1726.6	1859.4	1909.6	1921.4
60°	126.9	147.5	312.9	498.8	1269.2	1472.8	1543.6	1614.5	1726.6	1768.0	1776.8
62.5°	118.1	141.7	277.5	419.1	1157.0	1354.7	1425.6	1490.5	1584.9	1614.5	1626.3
65°	112.1	135.8	250.9	360.1	1041.9	1230.8	1301.6	1357.7	1434.4	1464.0	1469.8
67.5°	106.2	129.8	230.2	309.9	926.8	1106.8	1159.9	1213.1	1272.1	1301.6	1304.6
70°	97.4	124.0	212.5	274.5	808.7	965.2	1009.4	1065.5	1112.7	1127.5	1136.3
72.5°	91.5	115.1	200.7	247.9	687.7	829.4	870.7	903.2	944.5	959.2	959.2
75°	82.7	103.3	188.9	221.3	563.8	678.9	714.3	746.7	779.2	785.1	776.3
77.5°	73.8	91.5	162.4	185.9	439.8	537.2	566.6	584.4	610.9	616.9	619.8
80°	62.0	79.7	126.9	144.6	318.7	395.5	416.1	431.0	454.5	454.5	460.4
82.5°	47.3	62.0	91.5	103.3	215.5	271.6	289.3	298.1	312.9	312.9	312.9
85°	29.5	38.4	59.0	67.8	129.8	165.3	177.1	180.1	191.8	194.8	194.8
87.5°	14.7	20.7	38.4	41.3	67.8	85.6	85.6	91.5	91.5	88.5	85.6
90°	7.2	13.1	18.8	20.3	31.9	47.4	55.1	49.0	36.7	27.6	27.6
92.5°	29.0	78.4	127.8	140.0	196.8	272.6	310.4	272.1	195.4	137.9	132.4
95°	69.7	159.9	250.2	272.8	484.3	766.4	907.5	809.9	614.4	467.9	451.4
97.5°	120.4	200.0	279.7	299.6	652.5	1122.8	1358.0	1296.3	1172.8	1080.2	1048.6
100°	159.6	231.8	304.1	322.1	713.6	1235.6	1496.6	1501.1	1510.1	1516.9	1479.2
102.5°	193.0	260.3	327.7	344.5	741.6	1271.0	1535.7	1614.4	1771.8	1889.8	1857.5
105°	249.6	306.6	363.6	377.9	762.4	1275.1	1531.4	1707.7	2060.4	2325.0	2307.7
107.5°	307.6	360.8	414.0	427.3	766.3	1218.3	1444.3	1690.4	2182.4	2551.3	2555.5
110°	346.7	394.8	442.8	454.9	760.5	1168.0	1371.8	1646.8	2196.8	2609.4	2627.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	385.2	431.0	476.8	488.3	760.8	1124.1	1305.8	1587.3	2150.2	2572.4	2600.1
115°	443.3	485.5	527.8	538.3	767.7	1073.7	1226.7	1497.9	2040.2	2446.9	2485.4
117.5°	500.5	538.9	577.3	586.9	782.0	1042.2	1172.3	1417.0	1906.4	2273.5	2316.1
120°	533.9	570.0	606.2	615.1	793.6	1031.6	1150.6	1374.2	1821.3	2156.7	2198.1
122.5°	566.6	603.0	639.5	648.5	810.3	1025.9	1133.8	1335.2	1737.9	2039.9	2080.8
125°	616.6	649.8	683.1	691.3	832.8	1021.4	1115.7	1286.8	1628.9	1885.4	1923.1
127.5°	657.3	690.7	724.3	732.7	855.3	1018.8	1100.5	1247.4	1541.1	1761.3	1793.1
130°	679.0	715.1	751.2	760.2	871.7	1020.4	1094.7	1225.4	1486.9	1683.0	1712.3
132.5°	701.5	737.6	773.7	782.7	885.0	1021.4	1089.6	1206.6	1440.7	1616.2	1642.5
135°	734.9	767.7	800.7	808.9	899.6	1020.5	1080.9	1178.9	1374.9	1522.0	1544.6
137.5°	769.0	801.5	834.1	842.2	921.3	1026.7	1079.4	1162.2	1328.0	1452.3	1470.9
140°	797.2	827.2	857.2	864.7	934.6	1027.8	1074.3	1145.9	1289.1	1396.5	1413.8
142.5°	819.0	846.7	874.5	881.4	945.7	1031.4	1074.3	1137.2	1263.0	1357.3	1372.2
145°	852.4	876.6	900.8	906.8	960.3	1031.5	1067.1	1118.6	1221.4	1298.5	1309.8
147.5°	885.7	909.3	932.8	938.7	981.6	1038.6	1067.1	1107.6	1188.5	1249.2	1258.5
150°	907.5	928.8	950.1	955.4	992.6	1042.3	1067.1	1101.3	1169.7	1220.9	1228.5
152.5°	930.0	946.2	962.3	966.3	999.9	1044.7	1067.1	1096.3	1154.7	1198.4	1204.2
155°	963.3	975.3	987.2	990.2	1015.8	1050.0	1067.1	1090.3	1136.8	1171.6	1175.3
157.5°	988.0	999.6	1011.3	1014.2	1031.8	1055.3	1067.1	1085.2	1121.3	1148.4	1151.0
160°	1004.8	1013.8	1022.8	1025.1	1039.1	1057.8	1067.1	1082.6	1113.6	1136.8	1138.4
162.5°	1021.4	1028.2	1035.0	1036.7	1046.8	1060.3	1067.1	1080.2	1106.3	1125.9	1127.4
165°	1039.6	1045.7	1051.8	1053.3	1058.0	1064.1	1067.1	1076.4	1095.2	1109.2	1110.8
167.5°	1056.2	1059.1	1062.1	1062.7	1066.6	1071.7	1074.3	1080.5	1092.7	1101.9	1102.5
170°	1067.1	1070.0	1073.0	1073.6	1073.9	1074.2	1074.3	1080.5	1092.7	1101.9	1101.9
172.5°	1073.0	1073.6	1074.2	1074.3	1074.3	1074.3	1074.3	1079.2	1088.9	1096.1	1095.6
175°	1080.9	1080.9	1080.9	1080.9	1078.7	1075.8	1074.3	1077.4	1083.5	1088.1	1088.1
177.5°	1080.9	1080.9	1080.9	1080.9	1079.2	1077.0	1075.8	1078.3	1083.1	1086.7	1086.1
180°	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9	1080.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	917.9	917.9
2.5°	979.9	974.0
5°	1260.3	1266.2
7.5°	1697.1	1694.2
10°	2110.3	2136.9
12.5°	2411.3	2417.3
15°	2594.4	2606.2
17.5°	2665.2	2668.2
20°	2668.2	2662.2
22.5°	2635.7	2629.8
25°	2597.4	2594.4
27.5°	2561.9	2564.8
30°	2547.1	2556.0
32.5°	2547.1	2561.9
35°	2553.1	2567.8
37.5°	2550.1	2567.8
40°	2538.3	2559.0
42.5°	2505.8	2520.6
45°	2455.6	2473.4
47.5°	2390.7	2402.5
50°	2308.1	2319.9
52.5°	2204.8	2207.7
55°	2080.8	2092.6
57.5°	1947.9	1950.9
60°	1800.4	1809.3
62.5°	1644.0	1644.0
65°	1478.7	1484.6
67.5°	1307.5	1322.3
70°	1133.4	1136.3
72.5°	962.2	962.2
75°	785.1	788.1
77.5°	616.9	616.9
80°	457.5	460.4
82.5°	315.9	321.7
85°	197.8	197.8
87.5°	91.5	82.7
90°	27.6	27.6
92.5°	110.5	88.5
95°	384.9	318.5
97.5°	922.2	795.8
100°	1328.7	1178.1
102.5°	1728.5	1599.6
105°	2238.3	2169.0
107.5°	2572.3	2589.1
110°	2699.6	2771.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2711.0	2821.9
115°	2639.1	2793.0
117.5°	2486.7	2657.3
120°	2363.9	2529.6
122.5°	2244.3	2407.7
125°	2073.6	2224.2
127.5°	1920.1	2047.2
130°	1829.7	1947.1
132.5°	1747.6	1852.7
135°	1635.2	1725.8
137.5°	1545.0	1619.2
140°	1483.1	1552.4
142.5°	1431.9	1491.5
145°	1355.0	1400.1
147.5°	1295.9	1333.3
150°	1258.8	1289.1
152.5°	1227.0	1249.9
155°	1190.5	1205.7
157.5°	1161.6	1172.3
160°	1144.5	1150.6
162.5°	1133.1	1139.0
165°	1116.9	1123.0
167.5°	1105.1	1107.7
170°	1101.9	1101.9
172.5°	1093.4	1091.1
175°	1088.1	1088.1
177.5°	1083.5	1080.9
180°	1080.9	1080.9



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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	6.07	6.97	7.02	7.94	9.21	19.25	20.15	20.20	21.12	22.38
	3H	6.78	7.59	7.74	8.57	9.85	21.09	21.90	22.05	22.88	24.17
	4H	7.08	7.85	8.05	8.83	10.12	21.74	22.51	22.71	23.49	24.78
	6H	7.33	8.04	8.32	9.03	10.34	22.17	22.88	23.16	23.87	25.18
	8H	7.40	8.08	8.39	9.08	10.39	22.30	22.97	23.28	23.98	25.28
	12H	7.42	8.07	8.42	9.06	10.39	22.36	23.01	23.36	24.01	25.34
4H	2H	13.29	14.06	14.27	15.04	16.34	19.53	20.30	20.51	21.28	22.57
	3H	14.86	15.51	15.85	16.52	17.83	21.58	22.22	22.57	23.23	24.54
	4H	14.96	15.55	15.96	16.55	17.88	22.35	22.94	23.34	23.94	25.27
	6H	14.97	15.48	15.98	16.51	17.84	22.89	23.40	23.90	24.43	25.75
	8H	14.95	15.43	15.96	16.45	17.79	23.05	23.53	24.06	24.55	25.89
	12H	14.91	15.34	15.94	16.38	17.73	23.15	23.58	24.18	24.62	25.97
8H	4H	16.41	16.88	17.42	17.91	19.25	22.41	22.89	23.42	23.91	25.25
	6H	16.65	17.05	17.69	18.11	19.45	23.04	23.44	24.08	24.50	25.84
	8H	16.67	17.02	17.71	18.07	19.43	23.26	23.61	24.31	24.66	26.02
	12H	16.64	16.95	17.69	17.99	19.39	23.41	23.72	24.46	24.76	26.16
12H	4H	16.55	16.99	17.58	18.02	19.37	22.37	22.80	23.40	23.83	25.18
	6H	16.91	17.26	17.95	18.31	19.67	23.03	23.38	24.07	24.42	25.78
	8H	16.98	17.29	18.03	18.33	19.74	23.26	23.57	24.31	24.61	26.01