

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: P937772

Luminaire Tested: SQ4-FB-100U-125D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937772
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-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

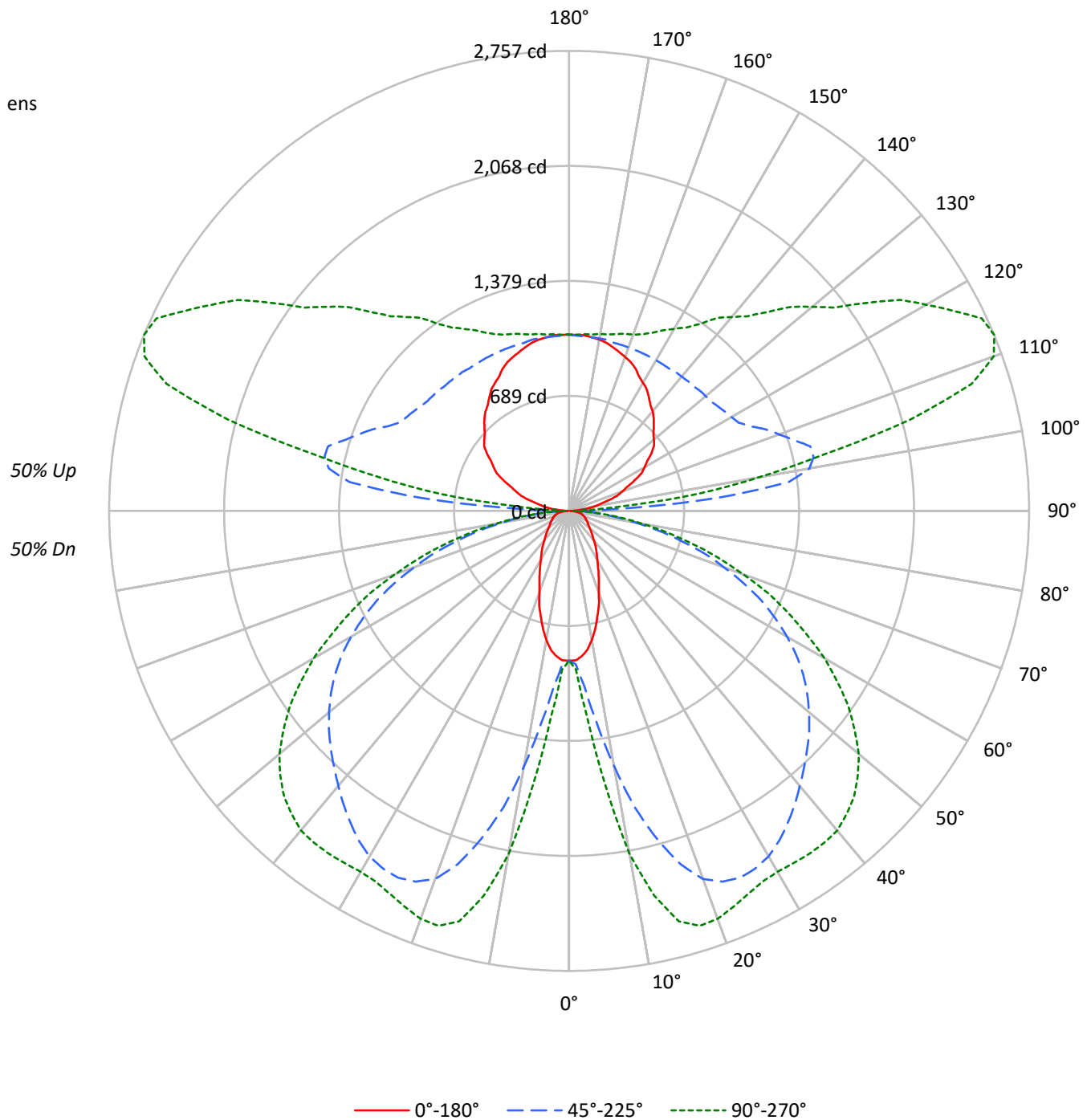
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13788.0 lumens
Efficiency: N/A
Efficacy: 100.2 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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4161	4161	4161
5°	4065	4810	5593
10°	3687	7010	9272
15°	3134	9159	11196
20°	2551	10613	11411
25°	2128	11107	11179
30°	1795	11176	11158
35°	1587	10991	11446
40°	1383	10750	11744
45°	1252	10573	11790
50°	1149	10414	11595
55°	1100	10182	11081
60°	1126	9734	10269
65°	1172	9055	9154
70°	1249	7896	7733
75°	1384	6439	6036
80°	1512	4465	4067
85°	1341	2369	2081

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11790 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	0.8
10°-20°	514.2	3.7
20°-30°	899.3	6.5
30°-40°	1157.7	8.4
40°-50°	1293.1	9.4
50°-60°	1238.5	9.0
60°-70°	981.5	7.1
70°-80°	577.2	4.2
80°-90°	164.4	1.2
90°-100°	514.8	3.7
100°-110°	1353.4	9.8
110°-120°	1403.3	10.2
120°-130°	1125.6	8.2
130°-140°	883.2	6.4
140°-150°	677.9	4.9
150°-160°	488.2	3.5
160°-170°	298.7	2.2
170°-180°	100.9	0.7
0°-30°	1529.5	11.1
0°-40°	2687.2	19.5
0°-60°	5218.8	37.9
0°-90°	6941.9	50.3
90°-120°	3271.5	23.7
90°-150°	5958.2	43.2
90°-180°	6846.0	49.7
0°-180°	13788.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	874	937	1056	1194	1237	81
15°	655	1208	2036	2468	2546	182
25°	418	1370	2425	2532	2535	193
35°	283	1309	2284	2414	2509	176
45°	193	1044	2019	2313	2416	149
55°	138	663	1713	1990	2044	126
65°	110	352	1272	1430	1450	109
75°	81	216	698	767	770	85
85°	29	66	173	190	193	31
90°	7	20	54	27	27	8
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°	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8
2.5°	896.8	896.8	902.6	905.5	911.2	914.1	919.9	925.7	943.0	945.9	951.6
5°	873.7	885.3	922.8	937.2	977.6	1032.4	1055.5	1092.9	1170.7	1193.8	1208.2
7.5°	839.1	865.1	957.4	980.5	1081.4	1225.6	1286.1	1366.9	1490.8	1551.4	1600.5
10°	784.4	839.1	1003.5	1058.3	1222.7	1441.8	1554.3	1666.8	1854.2	1937.9	1969.6
12.5°	723.8	813.2	1052.6	1127.5	1364.0	1684.1	1819.6	1943.6	2157.0	2269.5	2286.8
15°	654.6	775.7	1098.7	1208.2	1513.9	1885.9	2035.9	2188.7	2387.7	2468.4	2488.6
17.5°	594.0	746.9	1141.9	1257.3	1629.3	2067.6	2220.4	2347.3	2508.8	2563.6	2578.0
20°	519.0	700.8	1170.7	1320.7	1750.4	2200.3	2347.3	2445.3	2555.0	2589.6	2595.3
22.5°	464.3	651.7	1188.1	1343.8	1831.1	2281.0	2405.0	2482.8	2557.8	2569.4	2572.3
25°	418.2	596.9	1185.2	1369.8	1900.4	2330.0	2425.2	2482.8	2526.1	2531.9	2531.9
27.5°	374.9	536.3	1173.6	1375.6	1952.3	2341.6	2416.5	2456.9	2477.1	2488.6	2488.6
30°	337.4	478.7	1144.8	1364.0	1975.4	2330.0	2390.5	2410.7	2430.9	2448.2	2456.9
32.5°	308.6	423.9	1101.6	1340.9	1978.2	2301.2	2344.4	2356.0	2384.8	2425.2	2439.6
35°	282.6	369.1	1052.6	1309.2	1960.9	2255.1	2283.9	2295.4	2353.1	2413.6	2433.8
37.5°	256.6	328.7	989.1	1254.4	1935.0	2200.3	2220.4	2240.6	2330.0	2402.1	2425.2
40°	230.7	294.1	914.1	1193.8	1894.6	2133.9	2151.2	2182.9	2301.2	2384.8	2407.8
42.5°	210.5	265.3	833.4	1130.4	1842.7	2058.9	2084.9	2131.0	2266.6	2356.0	2381.9
45°	193.2	236.4	746.9	1043.9	1776.3	1981.1	2018.6	2082.0	2226.2	2312.8	2335.8
47.5°	175.9	216.2	657.5	954.5	1704.3	1903.2	1952.3	2024.4	2171.4	2255.1	2275.3
50°	161.5	196.1	568.1	859.3	1626.4	1819.6	1877.3	1952.3	2102.2	2180.1	2206.0
52.5°	150.0	178.7	484.4	764.2	1537.0	1733.1	1799.4	1877.3	2018.6	2093.5	2110.8
55°	138.4	164.4	412.4	663.3	1444.7	1640.8	1712.9	1787.9	1926.3	1989.8	2001.3
57.5°	132.7	152.8	351.8	568.1	1346.7	1537.0	1617.8	1687.0	1816.7	1865.7	1877.3
60°	124.0	144.2	305.7	487.3	1240.0	1438.9	1508.1	1577.4	1687.0	1727.3	1736.0
62.5°	115.4	138.4	271.1	409.5	1130.4	1323.6	1392.8	1456.2	1548.5	1577.4	1588.9
65°	109.6	132.7	245.1	351.8	1018.0	1202.5	1271.7	1326.5	1401.5	1430.3	1436.0
67.5°	103.8	126.9	224.9	302.8	905.5	1081.4	1133.2	1185.2	1242.9	1271.7	1274.6
70°	95.2	121.2	207.6	268.2	790.1	943.0	986.2	1041.0	1087.2	1101.6	1110.2
72.5°	89.4	112.5	196.1	242.2	671.9	810.3	850.7	882.4	922.8	937.2	937.2
75°	80.8	101.0	184.5	216.2	550.8	663.3	697.9	729.6	761.3	767.1	758.5
77.5°	72.1	89.4	158.6	181.6	429.7	524.8	553.6	571.0	596.9	602.7	605.6
80°	60.6	77.9	124.0	141.3	311.4	386.4	406.6	421.1	444.1	444.1	449.9
82.5°	46.2	60.6	89.4	101.0	210.5	265.3	282.6	291.2	305.7	305.7	305.7
85°	28.8	37.5	57.7	66.3	126.9	161.5	173.0	175.9	187.4	190.3	190.3
87.5°	14.4	20.2	37.5	40.4	66.3	83.7	83.7	89.4	89.4	86.5	83.7
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°	896.8	896.8
2.5°	957.4	951.6
5°	1231.3	1237.1
7.5°	1658.1	1655.3
10°	2061.8	2087.8
12.5°	2356.0	2361.7
15°	2534.8	2546.3
17.5°	2604.0	2606.9
20°	2606.9	2601.1
22.5°	2575.2	2569.4
25°	2537.7	2534.8
27.5°	2503.0	2505.9
30°	2488.6	2497.3
32.5°	2488.6	2503.0
35°	2494.4	2508.8
37.5°	2491.5	2508.8
40°	2480.0	2500.2
42.5°	2448.2	2462.7
45°	2399.2	2416.5
47.5°	2335.8	2347.3
50°	2255.1	2266.6
52.5°	2154.1	2157.0
55°	2033.0	2044.5
57.5°	1903.2	1906.1
60°	1759.0	1767.7
62.5°	1606.2	1606.2
65°	1444.7	1450.5
67.5°	1277.5	1291.9
70°	1107.3	1110.2
72.5°	940.1	940.1
75°	767.1	770.0
77.5°	602.7	602.7
80°	447.0	449.9
82.5°	308.6	314.3
85°	193.2	193.2
87.5°	89.4	80.8
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	5.99	6.89	6.94	7.86	9.12	19.17	20.07	20.12	21.04	22.30
	3H	6.70	7.51	7.66	8.49	9.77	21.01	21.82	21.97	22.80	24.09
	4H	7.00	7.77	7.97	8.75	10.04	21.66	22.43	22.63	23.41	24.70
	6H	7.25	7.96	8.24	8.95	10.26	22.09	22.80	23.07	23.79	25.10
	8H	7.32	8.00	8.31	9.00	10.31	22.21	22.89	23.20	23.89	25.20
	12H	7.34	7.99	8.34	8.98	10.31	22.28	22.93	23.28	23.93	25.26
4H	2H	13.21	13.98	14.19	14.96	16.26	19.45	20.22	20.43	21.20	22.49
	3H	14.78	15.43	15.77	16.44	17.75	21.50	22.14	22.49	23.15	24.46
	4H	14.88	15.47	15.88	16.47	17.80	22.27	22.86	23.26	23.86	25.19
	6H	14.89	15.40	15.90	16.43	17.76	22.81	23.32	23.82	24.35	25.67
	8H	14.87	15.35	15.88	16.37	17.71	22.97	23.45	23.98	24.47	25.81
	12H	14.83	15.26	15.86	16.30	17.65	23.07	23.50	24.10	24.53	25.88
8H	4H	16.33	16.80	17.34	17.82	19.17	22.33	22.81	23.34	23.83	25.17
	6H	16.57	16.97	17.61	18.03	19.37	22.96	23.36	24.00	24.42	25.76
	8H	16.59	16.94	17.63	17.99	19.35	23.18	23.53	24.23	24.58	25.94
	12H	16.56	16.87	17.61	17.91	19.31	23.33	23.64	24.38	24.68	26.08
12H	4H	16.47	16.90	17.50	17.94	19.29	22.29	22.72	23.31	23.75	25.10
	6H	16.83	17.18	17.87	18.23	19.59	22.95	23.30	23.99	24.34	25.70
	8H	16.90	17.21	17.95	18.25	19.66	23.18	23.49	24.23	24.53	25.93