

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: P938571

Luminaire Tested: SQ4-FB-150U-125D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938571
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

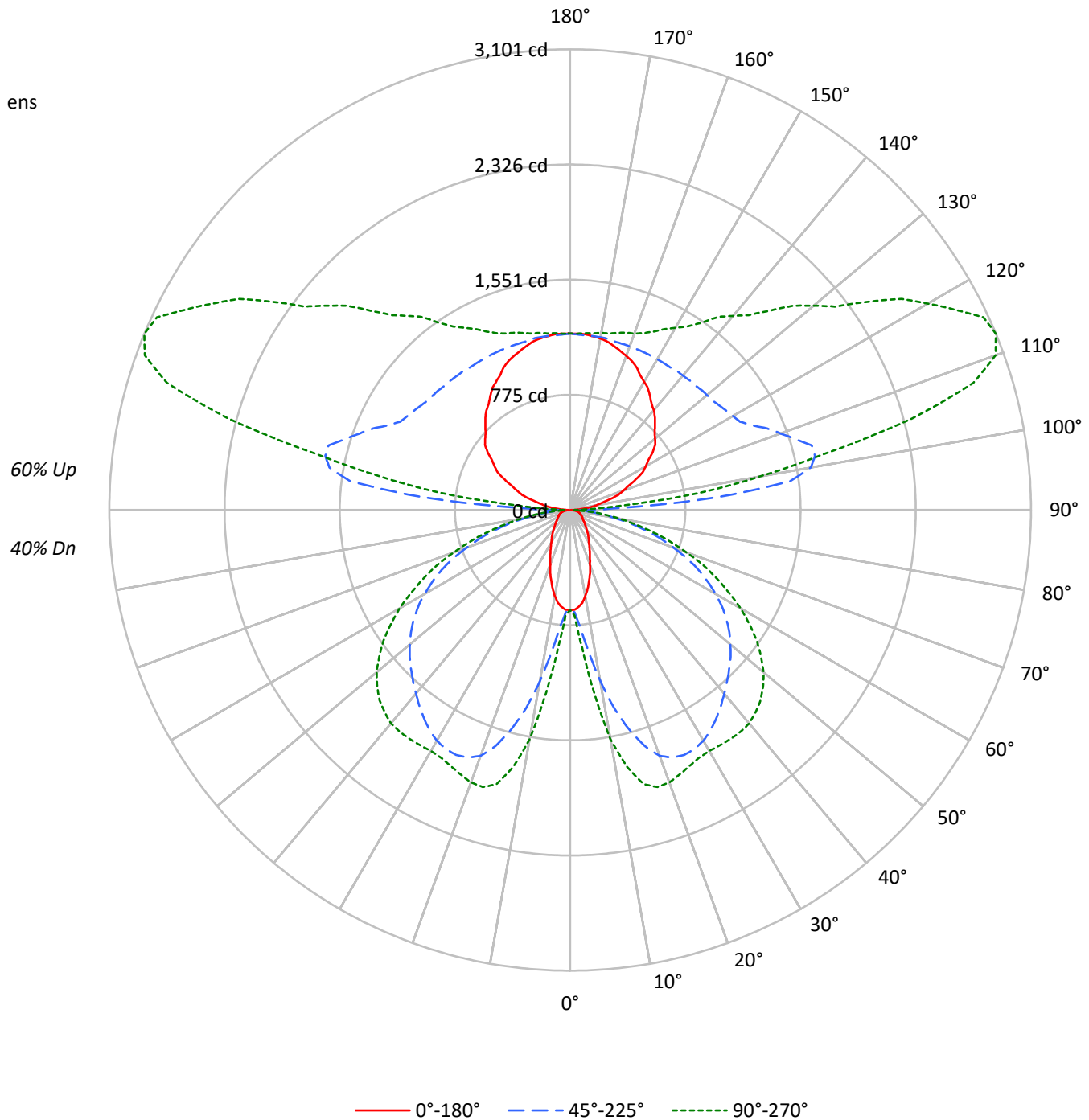
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12907.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124.8
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4161	4161	4161
5°	4063	4808	5593
10°	3684	7007	9272
15°	3130	9152	11196
20°	2547	10603	11410
25°	2124	11092	11178
30°	1790	11160	11157
35°	1583	10972	11446
40°	1378	10727	11744
45°	1247	10547	11790
50°	1143	10386	11594
55°	1093	10150	11080
60°	1118	9700	10269
65°	1162	9017	9154
70°	1235	7858	7734
75°	1364	6402	6035
80°	1478	4434	4067
85°	1288	2349	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°	87.0	0.7
10°-20°	385.6	3.0
20°-30°	674.5	5.2
30°-40°	868.2	6.7
40°-50°	969.8	7.5
50°-60°	928.8	7.2
60°-70°	736.1	5.7
70°-80°	432.8	3.4
80°-90°	124.8	1.0
90°-100°	578.9	4.5
100°-110°	1522.0	11.8
110°-120°	1578.2	12.2
120°-130°	1265.9	9.8
130°-140°	993.3	7.7
140°-150°	762.4	5.9
150°-160°	549.0	4.3
160°-170°	335.9	2.6
170°-180°	113.5	0.9
0°-30°	1147.1	8.9
0°-40°	2015.3	15.6
0°-60°	3914.0	30.3
0°-90°	5207.7	40.3
90°-120°	3679.2	28.5
90°-150°	6700.8	51.9
90°-180°	7699.0	59.7
0°-180°	12907.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	655	703	792	895	928	60
15°	491	906	1527	1851	1910	137
25°	314	1027	1819	1899	1901	144
35°	212	982	1713	1810	1882	132
45°	145	783	1514	1734	1812	112
55°	104	497	1285	1492	1533	95
65°	82	264	954	1073	1088	81
75°	61	162	523	575	577	63
85°	22	50	130	143	145	23
90°	8	22	61	30	30	8
95°	76	300	997	514	350	85
105°	274	415	1683	2555	2383	291
115°	487	592	1348	2689	3069	481
125°	678	760	1226	2072	2444	602
135°	807	889	1188	1672	1896	625
145°	937	996	1172	1427	1538	587
155°	1058	1088	1172	1287	1325	486
165°	1142	1157	1172	1219	1234	322
175°	1188	1188	1180	1196	1196	113
180°	1188	1188	1188	1188	1188	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6
2.5°	672.6	672.6	676.9	679.0	683.4	685.6	689.9	694.2	707.2	709.4	713.7
5°	655.3	664.0	692.1	702.9	733.1	774.2	791.5	819.6	878.1	895.4	906.2
7.5°	629.4	648.8	718.0	735.3	811.0	919.1	964.5	1025.1	1118.1	1163.5	1200.3
10°	588.2	629.4	752.6	793.7	917.0	1081.4	1165.7	1250.1	1390.6	1453.3	1477.1
12.5°	542.8	609.9	789.4	845.6	1022.9	1263.0	1364.6	1457.6	1617.7	1702.0	1715.0
15°	490.9	581.7	824.0	906.2	1135.4	1414.4	1526.9	1641.5	1790.7	1851.2	1866.4
17.5°	445.5	560.1	856.4	942.9	1221.9	1550.6	1665.2	1760.4	1881.6	1922.6	1933.4
20°	389.3	525.5	878.1	990.5	1312.8	1650.2	1760.4	1833.9	1916.1	1942.0	1946.4
22.5°	348.2	488.8	891.0	1007.8	1373.3	1710.6	1803.7	1862.0	1918.3	1927.0	1929.1
25°	313.6	447.6	888.9	1027.3	1425.2	1747.5	1818.8	1862.0	1894.5	1898.9	1898.9
27.5°	281.2	402.2	880.2	1031.6	1464.2	1756.1	1812.3	1842.6	1857.7	1866.4	1866.4
30°	253.0	359.0	858.6	1022.9	1481.5	1747.5	1792.9	1808.0	1823.1	1836.1	1842.6
32.5°	231.4	317.9	826.1	1005.6	1483.6	1725.8	1758.3	1766.9	1788.5	1818.8	1829.6
35°	212.0	276.8	789.4	981.8	1470.6	1691.2	1712.9	1721.5	1764.7	1810.2	1825.3
37.5°	192.5	246.6	741.8	940.8	1451.1	1650.2	1665.2	1680.4	1747.5	1801.5	1818.8
40°	173.0	220.6	685.6	895.4	1420.9	1600.4	1613.3	1637.1	1725.8	1788.5	1805.8
42.5°	157.9	198.9	625.0	847.7	1381.9	1544.2	1563.6	1598.2	1699.8	1766.9	1786.4
45°	144.9	177.3	560.1	782.9	1332.2	1485.7	1513.8	1561.5	1669.6	1734.5	1751.8
47.5°	131.9	162.2	493.1	715.9	1278.2	1427.4	1464.2	1518.2	1628.5	1691.2	1706.4
50°	121.1	147.1	426.1	644.5	1219.7	1364.6	1407.9	1464.2	1576.6	1635.0	1654.4
52.5°	112.5	134.1	363.3	573.1	1152.7	1299.7	1349.5	1407.9	1513.8	1570.1	1583.1
55°	103.8	123.3	309.3	497.4	1083.5	1230.5	1284.6	1340.9	1444.7	1492.3	1500.9
57.5°	99.5	114.6	263.9	426.1	1010.0	1152.7	1213.2	1265.1	1362.5	1399.2	1407.9
60°	93.0	108.1	229.3	365.5	930.0	1079.1	1131.1	1183.0	1265.1	1295.5	1301.9
62.5°	86.5	103.8	203.3	307.1	847.7	992.7	1044.6	1092.2	1161.4	1183.0	1191.6
65°	82.2	99.5	183.9	263.9	763.4	901.8	953.7	994.8	1051.0	1072.7	1077.0
67.5°	77.9	95.2	168.7	227.1	679.0	811.0	850.0	888.9	932.1	953.7	955.9
70°	71.4	90.8	155.7	201.2	592.6	707.2	739.6	780.7	815.4	826.1	832.7
72.5°	67.1	84.3	147.1	181.6	503.9	607.7	638.0	661.7	692.1	702.9	702.9
75°	60.6	75.7	138.4	162.2	413.0	497.4	523.4	547.2	570.9	575.3	568.8
77.5°	54.1	67.1	118.9	136.2	322.2	393.6	415.3	428.2	447.6	452.0	454.2
80°	45.4	58.4	93.0	106.0	233.5	289.8	304.9	315.8	333.0	333.0	337.4
82.5°	34.6	45.4	67.1	75.7	157.9	198.9	212.0	218.5	229.3	229.3	229.3
85°	21.6	28.1	43.3	49.8	95.2	121.1	129.8	131.9	140.6	142.7	142.7
87.5°	10.8	15.2	28.1	30.2	49.8	62.7	62.7	67.1	67.1	64.9	62.7
90°	8.0	14.4	20.7	22.3	35.1	52.1	60.6	53.8	40.4	30.3	30.3
92.5°	31.9	86.1	140.3	153.9	216.3	299.6	341.1	299.0	214.7	151.5	145.4
95°	76.5	175.7	274.9	299.7	532.2	842.2	997.2	889.8	675.1	514.1	495.9
97.5°	132.3	219.8	307.3	329.2	716.9	1233.8	1492.2	1424.4	1288.6	1186.9	1152.2
100°	175.3	254.7	334.1	353.9	784.1	1357.7	1644.4	1649.4	1659.4	1666.8	1625.4
102.5°	212.1	286.1	360.1	378.6	814.9	1396.6	1687.5	1773.9	1946.7	2076.4	2041.0
105°	274.2	336.9	399.6	415.3	837.8	1401.0	1682.7	1876.4	2264.0	2554.7	2535.6
107.5°	338.0	396.4	454.9	469.5	841.9	1338.7	1587.0	1857.4	2398.0	2803.4	2808.0
110°	381.0	433.8	486.6	499.8	835.6	1283.4	1507.3	1809.5	2413.9	2867.2	2887.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	423.3	473.5	523.8	536.4	835.9	1235.1	1434.8	1744.0	2362.6	2826.5	2857.0
115°	487.0	533.4	579.9	591.5	843.6	1179.8	1347.9	1645.8	2241.7	2688.6	2730.8
117.5°	550.0	592.1	634.3	644.9	859.3	1145.2	1288.1	1557.0	2094.7	2498.1	2544.9
120°	586.7	626.4	666.1	676.0	872.0	1133.5	1264.2	1509.9	2001.3	2369.8	2415.2
122.5°	622.6	662.6	702.6	712.6	890.3	1127.4	1245.9	1467.1	1909.6	2241.4	2286.3
125°	677.5	714.0	750.5	759.6	915.0	1122.3	1225.9	1413.9	1789.7	2071.6	2113.0
127.5°	722.2	759.0	795.9	805.1	939.8	1119.4	1209.2	1370.5	1693.3	1935.3	1970.2
130°	746.1	785.8	825.5	835.4	957.9	1121.2	1202.9	1346.5	1633.8	1849.3	1881.5
132.5°	770.8	810.5	850.2	860.1	972.5	1122.3	1197.2	1325.8	1583.0	1775.9	1804.8
135°	807.4	843.6	879.8	888.8	988.4	1121.2	1187.7	1295.4	1510.8	1672.3	1697.2
137.5°	844.9	880.7	916.5	925.4	1012.3	1128.1	1186.1	1277.1	1459.2	1595.8	1616.2
140°	876.0	909.0	941.9	950.2	1026.9	1129.3	1180.5	1259.2	1416.4	1534.5	1553.5
142.5°	899.9	930.4	960.9	968.5	1039.2	1133.4	1180.5	1249.6	1387.7	1491.3	1507.7
145°	936.6	963.2	989.8	996.4	1055.1	1133.4	1172.5	1229.0	1342.1	1426.8	1439.2
147.5°	973.2	999.1	1025.0	1031.4	1078.5	1141.2	1172.5	1217.0	1305.9	1372.6	1382.9
150°	997.2	1020.5	1043.9	1049.7	1090.6	1145.3	1172.5	1210.1	1285.2	1341.5	1349.8
152.5°	1021.9	1039.6	1057.3	1061.8	1098.7	1147.9	1172.5	1204.6	1268.7	1316.8	1323.1
155°	1058.5	1071.6	1084.8	1088.0	1116.2	1153.8	1172.5	1198.0	1249.0	1287.3	1291.5
157.5°	1085.6	1098.4	1111.2	1114.3	1133.8	1159.6	1172.5	1192.4	1232.1	1261.8	1264.7
160°	1104.0	1113.9	1123.8	1126.3	1141.7	1162.2	1172.5	1189.6	1223.6	1249.0	1250.7
162.5°	1122.3	1129.8	1137.2	1139.0	1150.2	1165.1	1172.5	1186.8	1215.5	1237.1	1238.7
165°	1142.3	1149.0	1155.7	1157.4	1162.4	1169.1	1172.5	1182.8	1203.4	1218.8	1220.5
167.5°	1160.6	1163.7	1167.0	1167.8	1172.0	1177.7	1180.5	1187.3	1200.7	1210.8	1211.5
170°	1172.5	1175.7	1178.9	1179.7	1179.9	1180.4	1180.5	1187.3	1200.7	1210.8	1210.8
172.5°	1178.9	1179.6	1180.4	1180.5	1180.5	1180.5	1180.5	1185.8	1196.5	1204.4	1203.8
175°	1187.7	1187.7	1187.7	1187.7	1185.3	1182.1	1180.5	1183.9	1190.6	1195.6	1195.6
177.5°	1187.7	1187.7	1187.7	1187.7	1185.8	1183.3	1182.1	1184.7	1190.1	1194.1	1193.4
180°	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	672.6	672.6
2.5°	718.0	713.7
5°	923.5	927.8
7.5°	1243.6	1241.4
10°	1546.3	1565.8
12.5°	1766.9	1771.2
15°	1901.0	1909.7
17.5°	1952.9	1955.1
20°	1955.1	1950.7
22.5°	1931.2	1927.0
25°	1903.1	1901.0
27.5°	1877.2	1879.3
30°	1866.4	1872.9
32.5°	1866.4	1877.2
35°	1870.7	1881.6
37.5°	1868.5	1881.6
40°	1859.9	1875.0
42.5°	1836.1	1847.0
45°	1799.3	1812.3
47.5°	1751.8	1760.4
50°	1691.2	1699.8
52.5°	1615.5	1617.7
55°	1524.7	1533.3
57.5°	1427.4	1429.5
60°	1319.2	1325.7
62.5°	1204.6	1204.6
65°	1083.5	1087.8
67.5°	958.1	968.9
70°	830.4	832.7
72.5°	705.0	705.0
75°	575.3	577.4
77.5°	452.0	452.0
80°	335.2	337.4
82.5°	231.4	235.7
85°	144.9	144.9
87.5°	67.1	60.6
90°	30.3	30.3
92.5°	121.3	97.2
95°	422.8	349.9
97.5°	1013.3	874.4
100°	1460.0	1294.5
102.5°	1899.3	1757.6
105°	2459.5	2383.3
107.5°	2826.4	2844.8
110°	2966.3	3045.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2978.8	3100.7
115°	2899.8	3068.8
117.5°	2732.4	2919.8
120°	2597.4	2779.5
122.5°	2465.9	2645.5
125°	2278.4	2443.9
127.5°	2109.8	2249.5
130°	2010.5	2139.4
132.5°	1920.2	2035.8
135°	1796.8	1896.3
137.5°	1697.7	1779.1
140°	1629.6	1705.8
142.5°	1573.3	1638.8
145°	1488.8	1538.4
147.5°	1423.9	1465.1
150°	1383.1	1416.4
152.5°	1348.2	1373.4
155°	1308.1	1324.8
157.5°	1276.5	1288.1
160°	1257.5	1264.2
162.5°	1245.0	1251.4
165°	1227.1	1233.9
167.5°	1214.4	1217.2
170°	1210.8	1210.8
172.5°	1201.3	1198.8
175°	1195.6	1195.6
177.5°	1190.5	1187.7
180°	1187.7	1187.7



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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	5.00	5.81	6.03	6.85	8.25	18.17	18.98	19.20	20.02	21.42
	3H	5.71	6.43	6.74	7.48	8.90	20.00	20.72	21.04	21.77	23.19
	4H	6.00	6.69	7.05	7.74	9.17	20.64	21.33	21.69	22.38	23.80
	6H	6.25	6.89	7.31	7.94	9.38	21.06	21.70	22.12	22.75	24.19
	8H	6.32	6.92	7.38	7.99	9.43	21.18	21.78	22.24	22.86	24.29
	12H	6.33	6.91	7.40	7.97	9.43	21.24	21.82	22.31	22.88	24.34
4H	2H	12.20	12.89	13.26	13.94	15.37	18.44	19.13	19.49	20.18	21.60
	3H	13.77	14.34	14.83	15.42	16.86	20.47	21.05	21.54	22.13	23.57
	4H	13.86	14.39	14.93	15.46	16.92	21.23	21.76	22.30	22.83	24.29
	6H	13.87	14.32	14.95	15.42	16.87	21.76	22.22	22.85	23.31	24.77
	8H	13.84	14.27	14.92	15.35	16.83	21.92	22.35	23.00	23.44	24.91
	12H	13.80	14.18	14.90	15.28	16.76	22.01	22.40	23.11	23.50	24.97
8H	4H	15.30	15.72	16.38	16.81	18.28	21.29	21.72	22.37	22.80	24.27
	6H	15.54	15.89	16.64	17.02	18.48	21.91	22.26	23.02	23.39	24.86
	8H	15.55	15.86	16.66	16.97	18.46	22.13	22.44	23.24	23.55	25.04
	12H	15.52	15.79	16.63	16.90	18.42	22.27	22.54	23.38	23.65	25.17
12H	4H	15.44	15.82	16.54	16.92	18.40	21.24	21.63	22.34	22.72	24.20
	6H	15.79	16.10	16.90	17.21	18.70	21.89	22.20	23.00	23.31	24.80
	8H	15.86	16.13	16.97	17.24	18.76	22.12	22.39	23.23	23.50	25.02