

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: P938088

Luminaire Tested: SQ4-FB-125U-100D-B2750-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

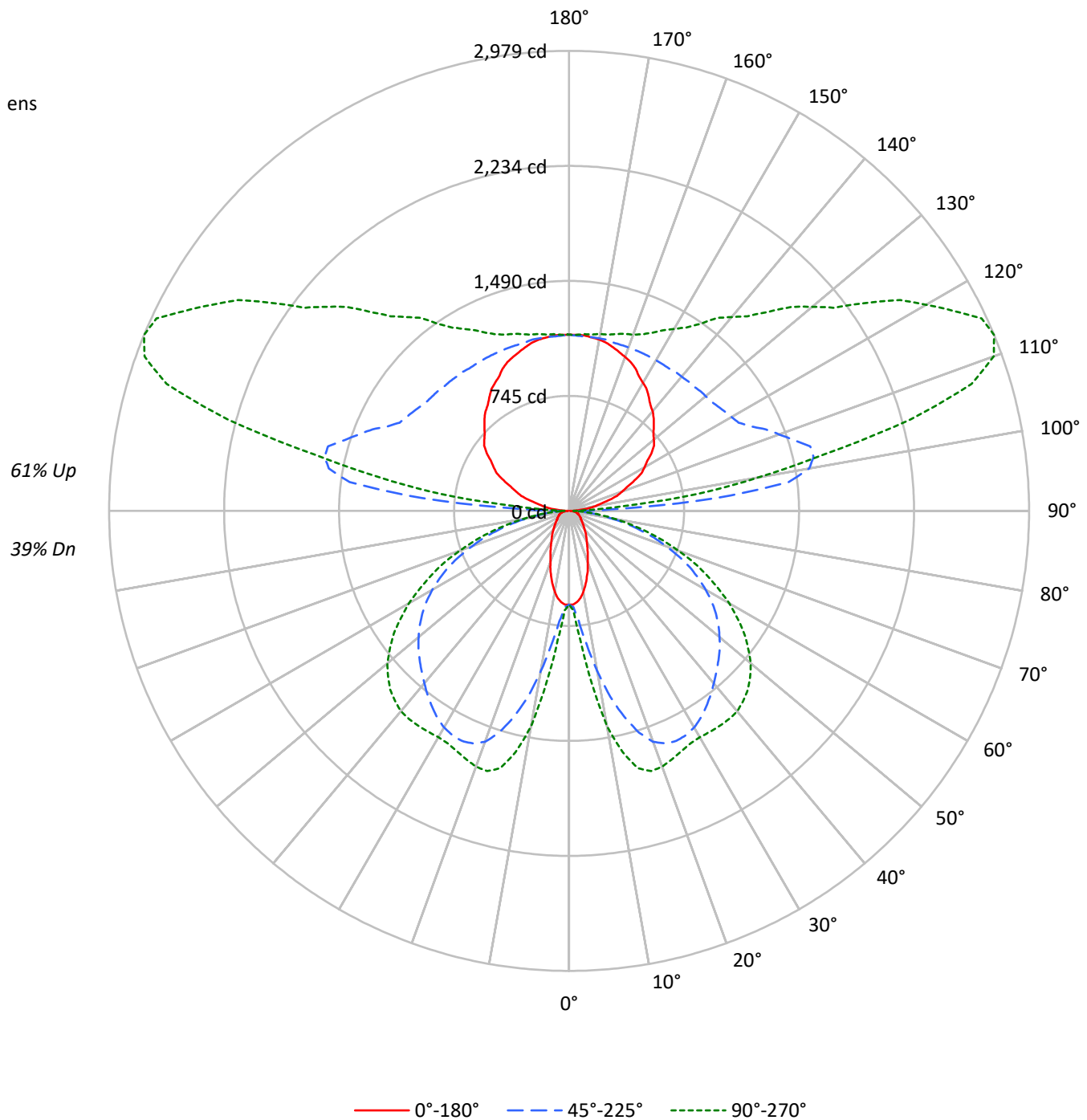
Test Method: LM-79-2019  
Report Number: P938088  
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-100D-B2750-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12102.1 lumens  
Efficiency: N/A  
Efficacy: 125.3 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: Semi-Indirect  
  
Input Watts (W): 96.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P938088  
CATALOG NUMBER: SQ4-FB-125U-100D-B2750-1D-UNV-STD-W-6-3000K

### 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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3759	3759	3759
5°	3671	4343	5053
10°	3329	6330	8377
15°	2828	8269	10115
20°	2301	9580	10310
25°	1919	10023	10100
30°	1618	10083	10081
35°	1430	9913	10342
40°	1245	9693	10611
45°	1126	9531	10652
50°	1032	9384	10476
55°	988	9171	10012
60°	1010	8764	9278
65°	1049	8148	8270
70°	1116	7101	6987
75°	1231	5785	5453
80°	1334	4007	3675
85°	1163	2121	1880

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10652 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.6	0.6
10°-20°	348.4	2.9
20°-30°	609.4	5.0
30°-40°	784.5	6.5
40°-50°	876.2	7.2
50°-60°	839.2	6.9
60°-70°	665.1	5.5
70°-80°	391.1	3.2
80°-90°	113.0	0.9
90°-100°	556.2	4.6
100°-110°	1462.2	12.1
110°-120°	1516.1	12.5
120°-130°	1216.1	10.0
130°-140°	954.2	7.9
140°-150°	732.4	6.1
150°-160°	527.5	4.4
160°-170°	322.7	2.7
170°-180°	109.0	0.9
0°-30°	1036.4	8.6
0°-40°	1820.9	15.0
0°-60°	3536.4	29.2
0°-90°	4705.6	38.9
90°-120°	3534.5	29.2
90°-150°	6437.3	53.2
90°-180°	7397.0	61.1
0°-180°	12102.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	592	635	715	809	838	55
15°	444	819	1380	1673	1725	123
25°	283	928	1643	1716	1718	131
35°	192	887	1548	1636	1700	120
45°	131	707	1368	1567	1638	101
55°	94	449	1161	1348	1385	85
65°	74	238	862	969	983	74
75°	55	146	473	520	522	57
85°	20	45	117	129	131	21
90°	8	21	58	29	29	8
95°	74	288	958	494	336	82
105°	264	399	1616	2454	2290	279
115°	468	568	1295	2583	2948	462
125°	651	730	1178	1990	2348	578
135°	776	854	1141	1607	1822	600
145°	900	957	1126	1371	1478	564
155°	1017	1045	1126	1237	1273	467
165°	1097	1112	1126	1171	1185	310
175°	1141	1141	1134	1149	1149	108
180°	1141	1141	1141	1141	1141	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7
2.5°	607.7	607.7	611.6	613.6	617.4	619.4	623.3	627.3	638.9	640.9	644.8
5°	592.1	599.9	625.3	635.1	662.4	699.6	715.1	740.6	793.3	809.0	818.8
7.5°	568.6	586.2	648.8	664.4	732.8	830.5	871.5	926.2	1010.3	1051.3	1084.5
10°	531.5	568.6	680.0	717.1	828.5	977.0	1053.2	1129.5	1256.5	1313.2	1334.6
12.5°	490.4	551.1	713.3	764.1	924.3	1141.2	1233.0	1317.0	1461.6	1537.9	1549.6
15°	443.6	525.6	744.5	818.8	1025.8	1278.0	1379.6	1483.1	1617.9	1672.7	1686.4
17.5°	402.6	506.1	773.8	852.0	1104.0	1401.1	1504.6	1590.6	1700.1	1737.1	1746.9
20°	351.7	474.9	793.3	895.0	1186.2	1490.9	1590.6	1657.1	1731.3	1754.8	1758.6
22.5°	314.6	441.6	805.1	910.6	1240.8	1545.7	1629.7	1682.4	1733.3	1741.1	1743.1
25°	283.4	404.5	803.1	928.2	1287.7	1578.9	1643.4	1682.4	1711.8	1715.6	1715.6
27.5°	254.0	363.4	795.3	932.1	1322.9	1586.7	1637.5	1664.9	1678.6	1686.4	1686.4
30°	228.7	324.4	775.8	924.3	1338.5	1578.9	1619.9	1633.6	1647.3	1658.9	1664.9
32.5°	209.1	287.2	746.4	908.6	1340.5	1559.4	1588.6	1596.4	1616.0	1643.4	1653.1
35°	191.5	250.1	713.3	887.1	1328.7	1528.1	1547.6	1555.4	1594.5	1635.6	1649.2
37.5°	173.9	222.7	670.3	850.0	1311.2	1490.9	1504.6	1518.3	1578.9	1627.7	1643.4
40°	156.3	199.3	619.4	809.0	1283.8	1446.0	1457.7	1479.2	1559.4	1616.0	1631.6
42.5°	142.7	179.7	564.7	766.0	1248.7	1395.2	1412.7	1444.0	1535.9	1596.4	1614.1
45°	130.9	160.2	506.1	707.4	1203.7	1342.4	1367.9	1410.9	1508.5	1567.1	1582.8
47.5°	119.2	146.5	445.6	646.8	1154.8	1289.7	1322.9	1371.7	1471.4	1528.1	1541.7
50°	109.4	132.9	384.9	582.3	1102.1	1233.0	1272.1	1322.9	1424.5	1477.2	1494.9
52.5°	101.7	121.2	328.2	517.8	1041.5	1174.4	1219.3	1272.1	1367.9	1418.7	1430.4
55°	93.8	111.4	279.4	449.4	979.0	1111.8	1160.7	1211.5	1305.3	1348.3	1356.1
57.5°	89.9	103.5	238.4	384.9	912.5	1041.5	1096.2	1143.2	1231.0	1264.2	1272.1
60°	84.0	97.7	207.2	330.2	840.3	975.1	1022.0	1068.8	1143.2	1170.5	1176.3
62.5°	78.2	93.8	183.7	277.5	766.0	896.9	943.8	986.8	1049.3	1068.8	1076.7
65°	74.2	89.9	166.1	238.4	689.8	814.8	861.8	898.8	949.7	969.2	973.1
67.5°	70.3	86.0	152.4	205.2	613.6	732.8	767.9	803.1	842.2	861.8	863.7
70°	64.5	82.0	140.7	181.7	535.4	638.9	668.3	705.4	736.6	746.4	752.3
72.5°	60.5	76.2	132.9	164.2	455.3	549.1	576.4	597.9	625.3	635.1	635.1
75°	54.7	68.4	125.0	146.5	373.2	449.4	472.9	494.4	515.9	519.8	513.9
77.5°	48.8	60.5	107.5	123.2	291.2	355.7	375.2	386.9	404.5	408.4	410.4
80°	41.0	52.8	84.0	95.7	211.0	261.9	275.5	285.2	300.9	300.9	304.9
82.5°	31.3	41.0	60.5	68.4	142.7	179.7	191.5	197.4	207.2	207.2	207.2
85°	19.5	25.4	39.0	45.0	86.0	109.4	117.2	119.2	127.0	129.0	129.0
87.5°	9.8	13.7	25.4	27.3	45.0	56.7	56.7	60.5	60.5	58.7	56.7
90°	7.7	13.8	19.9	21.4	33.6	50.0	58.2	51.7	38.7	29.1	29.1
92.5°	30.7	82.7	134.8	147.8	207.8	287.7	327.7	287.2	206.3	145.5	139.7
95°	73.6	168.8	264.1	287.9	511.2	809.1	958.0	854.9	648.6	493.9	476.3
97.5°	127.1	211.1	295.2	316.2	688.6	1185.3	1433.5	1368.4	1238.0	1140.2	1106.9
100°	168.5	244.7	320.9	340.0	753.2	1304.3	1579.8	1584.5	1594.1	1601.2	1561.4
102.5°	203.7	274.8	346.0	363.7	782.9	1341.7	1621.1	1704.1	1870.2	1994.8	1960.8
105°	263.5	323.7	383.8	398.9	804.8	1346.0	1616.5	1802.7	2175.0	2454.3	2435.9
107.5°	324.7	380.8	437.0	451.0	808.9	1286.0	1524.7	1784.4	2303.7	2693.2	2697.6
110°	366.0	416.7	467.4	480.1	802.7	1232.9	1448.0	1738.3	2319.0	2754.5	2773.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	406.6	454.9	503.3	515.4	803.0	1186.6	1378.3	1675.4	2269.7	2715.3	2744.6
115°	467.9	512.4	557.1	568.2	810.5	1133.4	1294.9	1581.1	2153.6	2582.9	2623.5
117.5°	528.4	568.9	609.3	619.5	825.5	1100.1	1237.4	1495.8	2012.4	2399.9	2444.9
120°	563.6	601.8	639.8	649.4	837.7	1088.8	1214.5	1450.5	1922.5	2276.6	2320.4
122.5°	598.1	636.6	675.0	684.6	855.4	1083.0	1196.9	1409.5	1834.6	2153.3	2196.4
125°	650.9	686.0	721.0	729.7	879.1	1078.2	1177.8	1358.3	1719.4	1990.2	2030.0
127.5°	693.7	729.1	764.5	773.4	902.9	1075.4	1161.7	1316.7	1626.8	1859.3	1892.8
130°	716.7	754.9	792.9	802.5	920.1	1077.0	1155.5	1293.5	1569.5	1776.6	1807.5
132.5°	740.5	778.6	816.7	826.3	934.2	1078.2	1150.2	1273.7	1520.8	1706.1	1733.8
135°	775.7	810.4	845.1	853.8	949.5	1077.2	1141.0	1244.4	1451.4	1606.6	1630.4
137.5°	811.7	846.1	880.5	889.1	972.5	1083.8	1139.4	1226.9	1401.8	1533.0	1552.6
140°	841.6	873.2	904.9	912.7	986.5	1084.9	1134.1	1209.6	1360.8	1474.1	1492.4
142.5°	864.5	893.8	923.1	930.4	998.3	1088.8	1134.1	1200.5	1333.2	1432.8	1448.5
145°	899.7	925.3	950.8	957.2	1013.6	1088.8	1126.4	1180.7	1289.3	1370.7	1382.7
147.5°	935.0	959.9	984.7	990.9	1036.1	1096.3	1126.4	1169.1	1254.6	1318.7	1328.5
150°	958.0	980.5	1002.9	1008.5	1047.8	1100.2	1126.4	1162.5	1234.7	1288.8	1296.8
152.5°	981.7	998.7	1015.8	1020.0	1055.5	1102.7	1126.4	1157.2	1218.8	1265.0	1271.1
155°	1017.0	1029.6	1042.1	1045.3	1072.3	1108.4	1126.4	1151.0	1200.0	1236.7	1240.8
157.5°	1043.0	1055.2	1067.4	1070.5	1089.1	1114.0	1126.4	1145.4	1183.6	1212.2	1214.9
160°	1060.5	1070.1	1079.7	1082.0	1096.8	1116.5	1126.4	1142.8	1175.4	1200.0	1201.5
162.5°	1078.2	1085.3	1092.5	1094.3	1105.0	1119.3	1126.4	1140.2	1167.7	1188.4	1190.0
165°	1097.3	1103.8	1110.3	1111.9	1116.7	1123.2	1126.4	1136.3	1156.1	1170.9	1172.5
167.5°	1115.0	1118.0	1121.1	1121.9	1125.9	1131.3	1134.1	1140.6	1153.5	1163.2	1163.9
170°	1126.4	1129.5	1132.5	1133.3	1133.6	1133.9	1134.1	1140.6	1153.5	1163.2	1163.2
172.5°	1132.5	1133.2	1133.9	1134.1	1134.1	1134.1	1134.1	1139.2	1149.4	1157.1	1156.5
175°	1141.0	1141.0	1141.0	1141.0	1138.7	1135.7	1134.1	1137.4	1143.9	1148.7	1148.7
177.5°	1141.0	1141.0	1141.0	1141.0	1139.2	1136.8	1135.6	1138.1	1143.3	1147.1	1146.4
180°	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0	1141.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	607.7	607.7
2.5°	648.8	644.8
5°	834.4	838.3
7.5°	1123.5	1121.7
10°	1397.2	1414.7
12.5°	1596.4	1600.4
15°	1717.6	1725.4
17.5°	1764.5	1766.4
20°	1766.4	1762.6
22.5°	1744.9	1741.1
25°	1719.6	1717.6
27.5°	1696.1	1698.1
30°	1686.4	1692.2
32.5°	1686.4	1696.1
35°	1690.3	1700.1
37.5°	1688.3	1700.1
40°	1680.4	1694.1
42.5°	1658.9	1668.8
45°	1625.8	1637.5
47.5°	1582.8	1590.6
50°	1528.1	1535.9
52.5°	1459.7	1461.6
55°	1377.6	1385.4
57.5°	1289.7	1291.7
60°	1192.0	1197.8
62.5°	1088.4	1088.4
65°	979.0	982.8
67.5°	865.6	875.4
70°	750.3	752.3
72.5°	637.1	637.1
75°	519.8	521.7
77.5°	408.4	408.4
80°	302.9	304.9
82.5°	209.1	213.0
85°	130.9	130.9
87.5°	60.5	54.7
90°	29.1	29.1
92.5°	116.5	93.4
95°	406.2	336.1
97.5°	973.5	840.1
100°	1402.6	1243.6
102.5°	1824.6	1688.5
105°	2362.8	2289.6
107.5°	2715.2	2733.0
110°	2849.7	2926.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2861.7	2978.8
115°	2785.8	2948.1
117.5°	2624.9	2805.0
120°	2495.3	2670.2
122.5°	2369.0	2541.5
125°	2188.9	2347.9
127.5°	2026.9	2161.0
130°	1931.5	2055.3
132.5°	1844.8	1955.7
135°	1726.1	1821.7
137.5°	1630.8	1709.1
140°	1565.6	1638.7
142.5°	1511.4	1574.4
145°	1430.3	1477.9
147.5°	1368.1	1407.5
150°	1328.8	1360.8
152.5°	1295.2	1319.4
155°	1256.8	1272.7
157.5°	1226.2	1237.4
160°	1208.0	1214.5
162.5°	1196.1	1202.2
165°	1179.0	1185.4
167.5°	1166.5	1169.3
170°	1163.2	1163.2
172.5°	1154.1	1151.7
175°	1148.7	1148.7
177.5°	1143.8	1141.0
180°	1141.0	1141.0



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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	4.49	5.29	5.53	6.34	7.76	17.66	18.45	18.70	19.50	20.92
	3H	5.19	5.91	6.24	6.97	8.40	19.49	20.20	20.53	21.26	22.70
	4H	5.49	6.17	6.55	7.23	8.67	20.12	20.80	21.19	21.86	23.31
	6H	5.73	6.36	6.80	7.42	8.88	20.55	21.17	21.62	22.24	23.70
	8H	5.80	6.40	6.88	7.48	8.93	20.66	21.26	21.74	22.34	23.79
	12H	5.81	6.38	6.90	7.46	8.93	20.73	21.29	21.81	22.37	23.85
4H	2H	11.69	12.37	12.76	13.43	14.88	17.92	18.60	18.99	19.66	21.11
	3H	13.25	13.82	14.33	14.91	16.37	19.96	20.53	21.03	21.61	23.07
	4H	13.34	13.87	14.43	14.95	16.42	20.72	21.24	21.80	22.32	23.80
	6H	13.35	13.80	14.44	14.90	16.38	21.25	21.70	22.34	22.80	24.27
	8H	13.33	13.75	14.42	14.84	16.33	21.41	21.83	22.50	22.92	24.41
	12H	13.28	13.66	14.39	14.77	16.26	21.49	21.87	22.60	22.98	24.48
8H	4H	14.78	15.20	15.87	16.29	17.78	20.77	21.19	21.86	22.29	23.78
	6H	15.02	15.37	16.13	16.50	17.99	21.39	21.74	22.51	22.88	24.36
	8H	15.04	15.34	16.16	16.46	17.96	21.61	21.92	22.73	23.03	24.54
	12H	15.00	15.27	16.13	16.38	17.93	21.75	22.02	22.87	23.13	24.68
12H	4H	14.92	15.30	16.03	16.41	17.90	20.72	21.10	21.83	22.21	23.70
	6H	15.28	15.58	16.40	16.70	18.20	21.38	21.68	22.50	22.80	24.31
	8H	15.34	15.61	16.47	16.72	18.27	21.60	21.87	22.73	22.98	24.53