

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: P938175

Luminaire Tested: SQ4-FB-125U-125D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

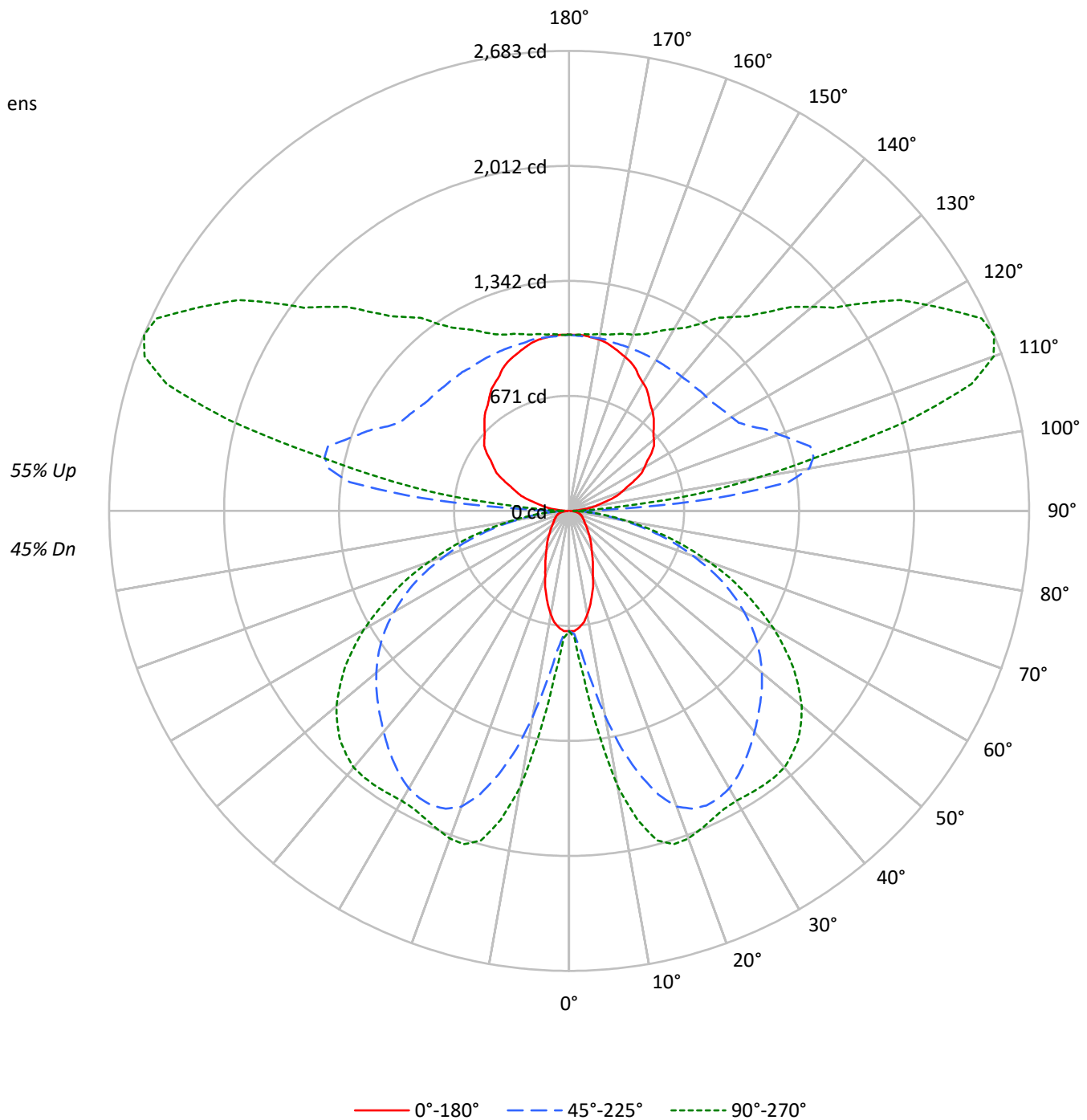
Test Method: LM-79-2019  
Report Number: P938175  
REPORT IS A COMBINATION OF REPORTS P933608 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-125D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12088.3 lumens  
Efficiency: N/A  
Efficacy: 107.2 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): 112.8  
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

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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	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

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

	0°	45°	90°
0°	4336	4336	4336
5°	4235	5011	5829
10°	3840	7303	9664
15°	3263	9539	11669
20°	2655	11051	11892
25°	2214	11561	11650
30°	1866	11631	11628
35°	1649	11435	11930
40°	1437	11181	12240
45°	1299	10993	12288
50°	1191	10825	12084
55°	1140	10579	11549
60°	1165	10110	10703
65°	1211	9398	9541
70°	1287	8191	8060
75°	1420	6673	6290
80°	1540	4622	4238
85°	1347	2447	2169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12288 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.7	0.8
10°-20°	401.9	3.3
20°-30°	703.0	5.8
30°-40°	904.9	7.5
40°-50°	1010.8	8.4
50°-60°	968.1	8.0
60°-70°	767.2	6.3
70°-80°	451.1	3.7
80°-90°	129.3	1.1
90°-100°	500.9	4.1
100°-110°	1316.9	10.9
110°-120°	1365.4	11.3
120°-130°	1095.3	9.1
130°-140°	859.4	7.1
140°-150°	659.6	5.5
150°-160°	475.0	3.9
160°-170°	290.7	2.4
170°-180°	98.2	0.8
0°-30°	1195.5	9.9
0°-40°	2100.5	17.4
0°-60°	4079.3	33.7
0°-90°	5426.9	44.9
90°-120°	3183.2	26.3
90°-150°	5797.5	48.0
90°-180°	6661.0	55.1
0°-180°	12088.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	683	733	825	933	967	63
15°	512	944	1591	1929	1990	142
25°	327	1071	1896	1979	1981	151
35°	221	1023	1785	1887	1961	138
45°	151	816	1578	1808	1889	117
55°	108	518	1339	1555	1598	99
65°	86	275	994	1118	1134	85
75°	63	169	546	600	602	66
85°	23	52	135	149	151	24
90°	7	19	52	26	26	7
95°	66	259	863	445	303	74
105°	237	359	1456	2210	2062	252
115°	421	512	1166	2326	2655	416
125°	586	657	1061	1792	2114	520
135°	699	769	1028	1447	1641	541
145°	810	862	1014	1234	1331	508
155°	916	941	1014	1114	1146	421
165°	988	1001	1014	1054	1068	279
175°	1028	1028	1021	1034	1034	98
180°	1028	1028	1028	1028	1028	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	701.0	701.0	705.5	707.7	712.3	714.6	719.0	723.5	737.0	739.3	743.9
5°	683.0	692.0	721.3	732.6	764.1	806.9	825.0	854.3	915.2	933.2	944.5
7.5°	656.0	676.2	748.3	766.3	845.3	958.0	1005.3	1068.4	1165.3	1212.7	1251.0
10°	613.1	656.0	784.4	827.3	955.8	1127.0	1215.0	1302.9	1449.4	1514.8	1539.5
12.5°	565.7	635.6	822.7	881.3	1066.1	1316.4	1422.3	1519.2	1686.0	1774.0	1787.5
15°	511.7	606.3	858.8	944.5	1183.3	1474.2	1591.4	1710.8	1866.4	1929.4	1945.3
17.5°	464.3	583.8	892.6	982.7	1273.6	1616.2	1735.6	1834.8	1961.1	2003.9	2015.1
20°	405.7	547.7	915.2	1032.4	1368.2	1719.9	1834.8	1911.4	1997.1	2024.1	2028.6
22.5°	362.9	509.4	928.7	1050.4	1431.4	1782.9	1879.9	1940.7	1999.3	2008.4	2010.6
25°	326.9	466.6	926.5	1070.7	1485.4	1821.3	1895.7	1940.7	1974.6	1979.1	1979.1
27.5°	293.0	419.2	917.4	1075.2	1526.0	1830.3	1888.9	1920.5	1936.2	1945.3	1945.3
30°	263.7	374.2	894.8	1066.1	1544.1	1821.3	1868.6	1884.4	1900.1	1913.7	1920.5
32.5°	241.2	331.3	861.0	1048.1	1546.3	1798.7	1832.6	1841.5	1864.1	1895.7	1906.9
35°	220.9	288.5	822.7	1023.3	1532.8	1762.7	1785.2	1794.2	1839.3	1886.6	1902.5
37.5°	200.6	257.0	773.2	980.5	1512.4	1719.9	1735.6	1751.4	1821.3	1877.6	1895.7
40°	180.4	229.9	714.6	933.2	1480.9	1668.0	1681.5	1706.3	1798.7	1864.1	1882.1
42.5°	164.5	207.3	651.4	883.6	1440.3	1609.4	1629.7	1665.7	1771.6	1841.5	1861.9
45°	151.0	184.8	583.8	816.0	1388.5	1548.5	1577.8	1627.4	1740.1	1807.8	1825.8
47.5°	137.5	169.1	513.9	746.1	1332.2	1487.7	1526.0	1582.3	1697.3	1762.7	1778.5
50°	126.2	153.3	444.1	671.7	1271.3	1422.3	1467.4	1526.0	1643.2	1704.1	1724.3
52.5°	117.2	139.8	378.6	597.4	1201.4	1354.6	1406.5	1467.4	1577.8	1636.4	1650.0
55°	108.2	128.5	322.3	518.4	1129.3	1282.5	1338.9	1397.5	1505.7	1555.3	1564.3
57.5°	103.7	119.4	275.0	444.1	1052.6	1201.4	1264.5	1318.6	1420.1	1458.4	1467.4
60°	96.9	112.7	239.0	381.0	969.3	1124.7	1178.9	1233.0	1318.6	1350.2	1357.0
62.5°	90.1	108.2	211.9	320.0	883.6	1034.6	1088.7	1138.3	1210.4	1233.0	1242.0
65°	85.7	103.7	191.6	275.0	795.6	939.9	994.0	1036.8	1095.4	1118.0	1122.5
67.5°	81.2	99.2	175.8	236.7	707.7	845.3	885.9	926.5	971.5	994.0	996.3
70°	74.4	94.7	162.3	209.7	617.6	737.0	770.9	813.7	849.8	861.0	867.8
72.5°	69.9	87.9	153.3	189.3	525.2	633.4	664.9	689.7	721.3	732.6	732.6
75°	63.1	78.9	144.3	169.1	430.5	518.4	545.5	570.3	595.0	599.6	592.8
77.5°	56.4	69.9	124.0	142.0	335.8	410.3	432.8	446.3	466.6	471.1	473.4
80°	47.3	60.8	96.9	110.5	243.4	302.0	317.8	329.1	347.1	347.1	351.6
82.5°	36.1	47.3	69.9	78.9	164.5	207.3	220.9	227.7	239.0	239.0	239.0
85°	22.6	29.3	45.1	51.9	99.2	126.2	135.2	137.5	146.5	148.7	148.7
87.5°	11.3	15.8	29.3	31.5	51.9	65.4	65.4	69.9	69.9	67.7	65.4
90°	6.9	12.4	17.9	19.3	30.3	45.0	52.4	46.5	34.9	26.2	26.2
92.5°	27.6	74.5	121.4	133.1	187.1	259.1	295.2	258.7	185.8	131.1	125.8
95°	66.2	152.0	237.8	259.3	460.4	728.7	862.8	769.9	584.1	444.8	429.0
97.5°	114.5	190.1	265.9	284.8	620.2	1067.5	1291.1	1232.4	1115.0	1026.9	996.9
100°	151.8	220.4	289.0	306.2	678.3	1174.6	1422.8	1427.0	1435.6	1442.0	1406.2
102.5°	183.5	247.5	311.6	327.6	705.1	1208.3	1460.0	1534.7	1684.4	1796.5	1765.9
105°	237.3	291.5	345.7	359.3	724.8	1212.2	1455.9	1623.5	1958.8	2210.3	2193.8
107.5°	292.4	342.9	393.6	406.2	728.5	1158.2	1373.1	1607.0	2074.7	2425.5	2429.5
110°	329.6	375.3	420.9	432.4	722.9	1110.4	1304.1	1565.5	2088.5	2480.7	2497.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	366.2	409.7	453.2	464.2	723.2	1068.6	1241.3	1508.9	2044.1	2445.5	2471.8
115°	421.4	461.5	501.7	511.8	729.9	1020.8	1166.2	1424.0	1939.6	2326.2	2362.8
117.5°	475.9	512.4	548.8	557.9	743.4	990.7	1114.4	1347.1	1812.4	2161.4	2201.9
120°	507.6	541.9	576.2	584.8	754.4	980.6	1093.7	1306.3	1731.4	2050.3	2089.7
122.5°	538.7	573.3	607.9	616.5	770.3	975.4	1077.9	1269.4	1652.2	1939.3	1978.1
125°	586.2	617.8	649.3	657.2	791.7	971.0	1060.7	1223.3	1548.5	1792.4	1828.2
127.5°	624.8	656.7	688.6	696.5	813.1	968.5	1046.2	1185.8	1465.1	1674.5	1704.7
130°	645.5	679.9	714.1	722.7	828.7	970.0	1040.6	1165.0	1413.5	1600.0	1627.9
132.5°	666.9	701.3	735.5	744.1	841.4	971.0	1035.9	1147.1	1369.7	1536.5	1561.5
135°	698.6	729.8	761.1	768.9	855.1	970.1	1027.6	1120.7	1307.1	1446.9	1468.4
137.5°	731.0	762.0	793.0	800.7	875.8	976.1	1026.2	1104.9	1262.5	1380.7	1398.2
140°	757.9	786.4	814.9	822.0	888.4	977.1	1021.4	1089.4	1225.5	1327.6	1344.1
142.5°	778.6	805.0	831.3	837.9	899.1	980.6	1021.4	1081.1	1200.7	1290.4	1304.6
145°	810.3	833.3	856.3	862.1	912.9	980.6	1014.5	1063.4	1161.1	1234.5	1245.2
147.5°	842.1	864.5	886.8	892.4	933.1	987.4	1014.5	1052.9	1129.9	1187.6	1196.5
150°	862.8	883.0	903.2	908.2	943.7	990.8	1014.5	1047.0	1112.0	1160.7	1167.9
152.5°	884.1	899.5	914.8	918.6	950.6	993.1	1014.5	1042.2	1097.7	1139.3	1144.7
155°	915.9	927.2	938.5	941.4	965.7	998.2	1014.5	1036.6	1080.7	1113.8	1117.5
157.5°	939.3	950.3	961.3	964.1	980.9	1003.3	1014.5	1031.6	1066.0	1091.7	1094.2
160°	955.1	963.7	972.4	974.5	987.8	1005.6	1014.5	1029.2	1058.6	1080.7	1082.1
162.5°	971.0	977.4	983.9	985.5	995.2	1008.1	1014.5	1026.9	1051.7	1070.3	1071.7
165°	988.3	994.1	1000.0	1001.4	1005.7	1011.5	1014.5	1023.3	1041.2	1054.5	1055.9
167.5°	1004.2	1006.9	1009.7	1010.4	1014.0	1018.9	1021.4	1027.2	1038.9	1047.6	1048.2
170°	1014.5	1017.2	1020.0	1020.7	1020.9	1021.2	1021.4	1027.2	1038.9	1047.6	1047.6
172.5°	1020.0	1020.6	1021.2	1021.4	1021.4	1021.4	1021.4	1026.0	1035.1	1042.1	1041.5
175°	1027.6	1027.6	1027.6	1027.6	1025.6	1022.8	1021.4	1024.3	1030.2	1034.5	1034.5
177.5°	1027.6	1027.6	1027.6	1027.6	1026.0	1023.8	1022.7	1025.0	1029.6	1033.1	1032.5
180°	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6	1027.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	701.0	701.0
2.5°	748.3	743.9
5°	962.5	967.0
7.5°	1296.1	1293.8
10°	1611.6	1632.0
12.5°	1841.5	1846.1
15°	1981.3	1990.4
17.5°	2035.4	2037.7
20°	2037.7	2033.2
22.5°	2012.8	2008.4
25°	1983.5	1981.3
27.5°	1956.5	1958.8
30°	1945.3	1952.0
32.5°	1945.3	1956.5
35°	1949.8	1961.1
37.5°	1947.5	1961.1
40°	1938.5	1954.2
42.5°	1913.7	1925.0
45°	1875.4	1888.9
47.5°	1825.8	1834.8
50°	1762.7	1771.6
52.5°	1683.7	1686.0
55°	1589.1	1598.1
57.5°	1487.7	1489.9
60°	1375.0	1381.7
62.5°	1255.5	1255.5
65°	1129.3	1133.8
67.5°	998.6	1009.8
70°	865.5	867.8
72.5°	734.8	734.8
75°	599.6	601.8
77.5°	471.1	471.1
80°	349.3	351.6
82.5°	241.2	245.7
85°	151.0	151.0
87.5°	69.9	63.1
90°	26.2	26.2
92.5°	105.0	84.1
95°	365.9	302.7
97.5°	876.7	756.6
100°	1263.2	1120.0
102.5°	1643.2	1520.7
105°	2127.9	2062.0
107.5°	2445.4	2461.4
110°	2566.5	2635.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2577.2	2682.7
115°	2509.0	2655.1
117.5°	2364.0	2526.2
120°	2247.3	2404.8
122.5°	2133.5	2288.9
125°	1971.4	2114.5
127.5°	1825.5	1946.2
130°	1739.5	1851.0
132.5°	1661.4	1761.3
135°	1554.5	1640.7
137.5°	1468.8	1539.3
140°	1410.0	1475.9
142.5°	1361.2	1418.0
145°	1288.1	1331.0
147.5°	1232.1	1267.6
150°	1196.8	1225.5
152.5°	1166.5	1188.2
155°	1131.8	1146.2
157.5°	1104.3	1114.4
160°	1088.0	1093.7
162.5°	1077.2	1082.7
165°	1061.8	1067.6
167.5°	1050.6	1053.1
170°	1047.6	1047.6
172.5°	1039.4	1037.3
175°	1034.5	1034.5
177.5°	1030.1	1027.6
180°	1027.6	1027.6



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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	5.61	6.46	6.60	7.47	8.81	18.78	19.63	19.77	20.64	21.98
	3H	6.32	7.08	7.32	8.10	9.46	20.61	21.38	21.61	22.39	23.75
	4H	6.62	7.34	7.63	8.36	9.73	21.25	21.98	22.27	23.00	24.37
	6H	6.87	7.53	7.89	8.56	9.94	21.68	22.35	22.70	23.37	24.75
	8H	6.93	7.57	7.97	8.61	9.99	21.80	22.43	22.83	23.48	24.85
	12H	6.95	7.56	7.99	8.59	9.99	21.86	22.47	22.90	23.50	24.91
4H	2H	12.82	13.54	13.84	14.56	15.93	19.05	19.78	20.07	20.80	22.16
	3H	14.39	14.99	15.42	16.04	17.42	21.09	21.70	22.12	22.75	24.13
	4H	14.48	15.04	15.52	16.08	17.48	21.85	22.41	22.89	23.45	24.85
	6H	14.49	14.97	15.54	16.03	17.43	22.39	22.87	23.44	23.93	25.33
	8H	14.47	14.92	15.52	15.97	17.39	22.55	23.00	23.60	24.05	25.47
	12H	14.42	14.83	15.49	15.90	17.32	22.64	23.04	23.71	24.12	25.54
8H	4H	15.92	16.37	16.97	17.43	18.84	21.91	22.36	22.96	23.42	24.83
	6H	16.16	16.53	17.24	17.63	19.04	22.54	22.91	23.61	24.01	25.42
	8H	16.18	16.51	17.26	17.59	19.02	22.76	23.08	23.84	24.16	25.60
	12H	16.15	16.44	17.23	17.51	18.99	22.90	23.18	23.98	24.26	25.73
12H	4H	16.06	16.47	17.13	17.54	18.96	21.87	22.27	22.93	23.34	24.76
	6H	16.42	16.75	17.50	17.83	19.26	22.52	22.85	23.60	23.93	25.36
	8H	16.49	16.78	17.57	17.85	19.33	22.75	23.04	23.83	24.11	25.59