

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: P937055

Luminaire Tested: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-12-4000K

Issue Date: 12/17/2024

**Test Information**

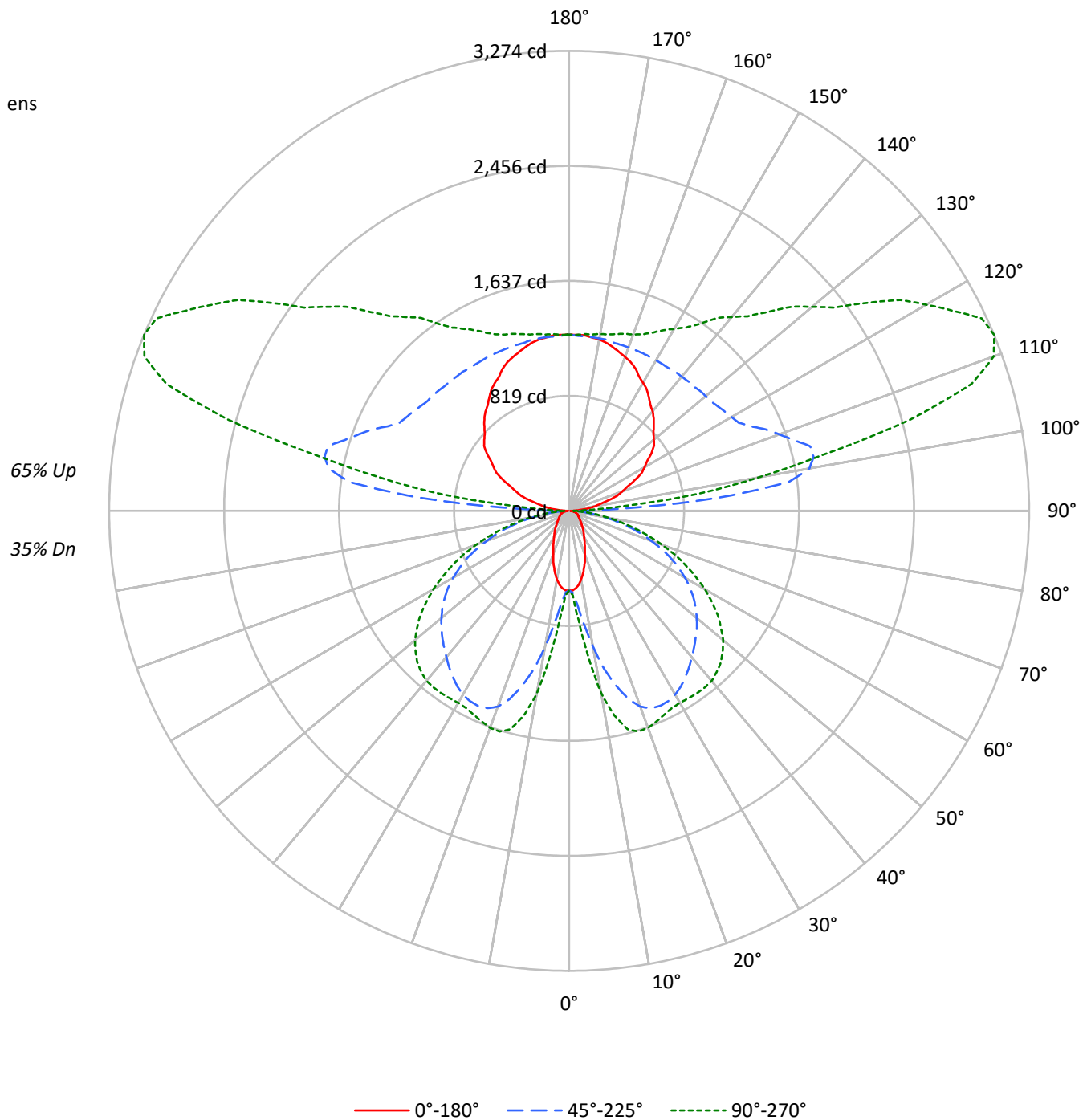
Test Method: LM-79-2019  
Report Number: P937055  
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-12-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12517.5 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 103.2  
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: P937055  
CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-12-4000K

### 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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29		
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23		
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16		
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8		
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7		

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

	0°	45°	90°
0°	1752	1752	1752
5°	1712	2025	2355
10°	1554	2953	3904
15°	1321	3859	4714
20°	1076	4474	4805
25°	898	4682	4707
30°	757	4713	4698
35°	670	4636	4820
40°	584	4536	4945
45°	529	4462	4965
50°	486	4397	4882
55°	466	4300	4666
60°	477	4114	4324
65°	498	3828	3854
70°	531	3341	3256
75°	591	2726	2541
80°	651	1893	1712
85°	590	1006	876

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4965 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	0.6
10°-20°	324.7	2.6
20°-30°	568.0	4.5
30°-40°	731.2	5.8
40°-50°	816.7	6.5
50°-60°	782.2	6.2
60°-70°	619.9	5.0
70°-80°	364.5	2.9
80°-90°	106.1	0.8
90°-100°	611.4	4.9
100°-110°	1607.4	12.8
110°-120°	1666.7	13.3
120°-130°	1336.9	10.7
130°-140°	1049.0	8.4
140°-150°	805.1	6.4
150°-160°	579.8	4.6
160°-170°	354.8	2.8
170°-180°	119.9	1.0
0°-30°	966.0	7.7
0°-40°	1697.2	13.6
0°-60°	3296.2	26.3
0°-90°	4386.7	35.0
90°-120°	3885.4	31.0
90°-150°	7076.4	56.5
90°-180°	8131.0	65.0
0°-180°	12517.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	552	592	667	754	781	51
15°	414	763	1286	1559	1608	115
25°	264	865	1532	1599	1601	122
35°	178	827	1442	1524	1585	111
45°	122	659	1275	1461	1526	94
55°	87	419	1082	1257	1291	80
65°	69	222	803	903	916	69
75°	51	137	441	484	486	53
85°	18	42	109	120	122	19
90°	8	24	64	32	32	8
95°	81	316	1053	543	370	90
105°	290	439	1777	2698	2517	307
115°	514	625	1424	2839	3241	508
125°	716	802	1295	2188	2581	635
135°	853	939	1254	1766	2003	660
145°	989	1052	1238	1507	1625	620
155°	1118	1149	1238	1360	1399	514
165°	1206	1222	1238	1287	1303	340
175°	1254	1254	1247	1263	1263	119
180°	1254	1254	1254	1254	1254	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	566.4	566.4	566.4	566.4	566.4	566.4	566.4	566.4	566.4	566.4	566.4
2.5°	566.4	566.4	570.1	571.9	575.5	577.3	581.0	584.6	595.6	597.4	601.0
5°	551.9	559.1	582.8	591.9	617.4	652.0	666.6	690.3	739.4	754.0	763.1
7.5°	530.0	546.4	604.6	619.2	683.0	774.1	812.3	863.3	941.6	979.8	1010.8
10°	495.4	530.0	633.8	668.5	772.2	910.7	981.6	1052.7	1171.1	1224.0	1244.0
12.5°	457.1	513.6	664.8	712.1	861.4	1063.7	1149.3	1227.6	1362.4	1433.4	1444.3
15°	413.5	490.0	693.9	763.1	956.2	1191.1	1285.9	1382.4	1508.1	1559.0	1571.8
17.5°	375.2	471.7	721.2	794.1	1029.1	1305.9	1402.4	1482.6	1584.6	1619.2	1628.3
20°	327.8	442.6	739.4	834.2	1105.6	1389.7	1482.6	1544.5	1613.7	1635.5	1639.2
22.5°	293.3	411.6	750.4	848.8	1156.5	1440.7	1519.0	1568.2	1615.5	1622.8	1624.6
25°	264.1	377.0	748.6	865.2	1200.2	1471.6	1531.7	1568.2	1595.4	1599.1	1599.1
27.5°	236.8	338.8	741.2	868.8	1233.0	1478.9	1526.3	1551.7	1564.5	1571.8	1571.8
30°	213.1	302.3	723.0	861.4	1247.6	1471.6	1509.9	1522.7	1535.3	1546.3	1551.7
32.5°	194.9	267.7	695.7	846.9	1249.4	1453.4	1480.8	1488.0	1506.2	1531.7	1540.9
35°	178.5	233.2	664.8	826.9	1238.5	1424.3	1442.5	1449.8	1486.2	1524.5	1537.1
37.5°	162.1	207.6	624.7	792.3	1222.1	1389.7	1402.4	1415.1	1471.6	1517.1	1531.7
40°	145.7	185.7	577.3	754.0	1196.6	1347.8	1358.7	1378.7	1453.4	1506.2	1520.8
42.5°	133.0	167.5	526.4	714.0	1163.9	1300.4	1316.8	1346.0	1431.5	1488.0	1504.4
45°	122.0	149.4	471.7	659.3	1121.9	1251.2	1274.9	1315.0	1406.1	1460.7	1475.2
47.5°	111.1	136.6	415.3	602.8	1076.4	1202.1	1233.0	1278.5	1371.4	1424.3	1437.0
50°	102.0	123.8	358.8	542.7	1027.2	1149.3	1185.7	1233.0	1327.8	1376.9	1393.3
52.5°	94.7	113.0	305.9	482.6	970.8	1094.6	1136.5	1185.7	1274.9	1322.3	1333.2
55°	87.4	103.8	260.4	418.9	912.5	1036.3	1081.8	1129.2	1216.6	1256.7	1264.0
57.5°	83.8	96.5	222.2	358.8	850.6	970.8	1021.7	1065.5	1147.4	1178.4	1185.7
60°	78.3	91.1	193.1	307.8	783.1	908.9	952.6	996.2	1065.5	1091.0	1096.4
62.5°	72.9	87.4	171.2	258.6	714.0	836.0	879.7	919.7	978.0	996.2	1003.6
65°	69.2	83.8	154.8	222.2	642.9	759.5	803.2	837.8	885.2	903.4	907.0
67.5°	65.5	80.1	142.0	191.3	571.9	683.0	715.8	748.6	785.0	803.2	805.1
70°	60.1	76.5	131.2	169.4	499.0	595.6	622.9	657.5	686.7	695.7	701.2
72.5°	56.5	71.1	123.8	153.0	424.3	511.8	537.3	557.3	582.8	591.9	591.9
75°	51.0	63.7	116.6	136.6	347.9	418.9	440.7	460.8	480.8	484.4	479.0
77.5°	45.5	56.5	100.2	114.8	271.4	331.5	349.7	360.6	377.0	380.6	382.4
80°	38.3	49.2	78.3	89.2	196.7	244.0	256.8	265.9	280.5	280.5	284.1
82.5°	29.1	38.3	56.5	63.7	133.0	167.5	178.5	183.9	193.1	193.1	193.1
85°	18.2	23.7	36.4	41.9	80.1	102.0	109.3	111.1	118.4	120.2	120.2
87.5°	9.1	12.8	23.7	25.5	41.9	52.9	52.9	56.5	56.5	54.7	52.9
90°	8.4	15.1	21.8	23.5	37.0	55.0	64.0	56.8	42.6	32.0	32.0
92.5°	33.7	90.9	148.2	162.5	228.4	316.3	360.3	315.7	226.7	159.9	153.6
95°	80.8	185.6	290.4	316.5	562.0	889.4	1053.1	939.7	713.0	542.9	523.6
97.5°	139.8	232.2	324.6	347.7	757.1	1302.9	1575.8	1504.1	1360.8	1253.4	1216.7
100°	185.2	269.0	352.8	373.7	828.0	1433.7	1736.6	1741.8	1752.3	1760.2	1716.5
102.5°	223.9	302.1	380.3	399.8	860.5	1474.9	1782.1	1873.3	2055.9	2192.8	2155.5
105°	289.6	355.8	422.0	438.6	884.7	1479.6	1777.0	1981.7	2391.0	2697.9	2677.8
107.5°	356.9	418.6	480.4	495.8	889.2	1413.8	1676.0	1961.5	2532.4	2960.5	2965.4
110°	402.3	458.1	513.9	527.8	882.4	1355.4	1591.8	1911.0	2549.2	3027.9	3048.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	447.0	500.1	553.2	566.5	882.8	1304.4	1515.2	1841.8	2495.1	2984.9	3017.1
115°	514.3	563.3	612.3	624.6	890.9	1246.0	1423.5	1738.1	2367.4	2839.3	2883.9
117.5°	580.8	625.4	669.8	681.0	907.4	1209.3	1360.3	1644.2	2212.1	2638.1	2687.6
120°	619.6	661.5	703.3	713.8	920.9	1197.0	1335.0	1594.4	2113.4	2502.6	2550.7
122.5°	657.4	699.7	742.0	752.6	940.3	1190.6	1315.7	1549.3	2016.6	2367.1	2414.5
125°	715.5	754.1	792.6	802.2	966.3	1185.2	1294.7	1493.2	1890.1	2187.8	2231.5
127.5°	762.7	801.6	840.5	850.2	992.5	1182.1	1277.0	1447.4	1788.2	2043.9	2080.7
130°	787.9	829.9	871.7	882.2	1011.5	1184.0	1270.2	1421.9	1725.3	1952.9	1986.9
132.5°	814.0	855.9	897.7	908.2	1026.9	1185.2	1264.3	1400.1	1671.7	1875.5	1906.0
135°	852.8	890.9	929.1	938.6	1043.8	1184.1	1254.3	1368.0	1595.4	1766.1	1792.3
137.5°	892.3	930.1	967.9	977.3	1069.1	1191.4	1252.6	1348.7	1541.0	1685.2	1706.8
140°	925.1	959.8	994.7	1003.4	1084.5	1192.6	1246.7	1329.8	1495.9	1620.4	1640.5
142.5°	950.3	982.6	1014.7	1022.7	1097.4	1196.9	1246.7	1319.6	1465.5	1575.0	1592.3
145°	989.1	1017.1	1045.2	1052.2	1114.3	1196.9	1238.3	1297.9	1417.3	1506.8	1519.9
147.5°	1027.8	1055.1	1082.5	1089.3	1139.0	1205.1	1238.3	1285.2	1379.1	1449.5	1460.4
150°	1053.1	1077.8	1102.5	1108.6	1151.8	1209.5	1238.3	1277.9	1357.2	1416.7	1425.4
152.5°	1079.1	1097.9	1116.5	1121.2	1160.2	1212.3	1238.3	1272.1	1339.8	1390.6	1397.2
155°	1117.9	1131.7	1145.6	1149.0	1178.8	1218.4	1238.3	1265.2	1319.1	1359.5	1363.9
157.5°	1146.5	1160.0	1173.5	1176.8	1197.3	1224.6	1238.3	1259.2	1301.1	1332.5	1335.6
160°	1165.8	1176.3	1186.8	1189.5	1205.8	1227.4	1238.3	1256.2	1292.1	1319.1	1320.9
162.5°	1185.2	1193.1	1200.9	1202.9	1214.6	1230.4	1238.3	1253.4	1283.7	1306.4	1308.1
165°	1206.3	1213.4	1220.4	1222.2	1227.6	1234.7	1238.3	1249.1	1270.8	1287.0	1288.9
167.5°	1225.6	1228.9	1232.4	1233.2	1237.7	1243.7	1246.7	1253.7	1267.9	1278.6	1279.4
170°	1238.3	1241.6	1245.0	1245.9	1246.1	1246.5	1246.7	1253.7	1267.9	1278.6	1278.6
172.5°	1245.0	1245.7	1246.5	1246.7	1246.7	1246.7	1246.7	1252.3	1263.5	1271.9	1271.3
175°	1254.3	1254.3	1254.3	1254.3	1251.7	1248.4	1246.7	1250.2	1257.4	1262.7	1262.7
177.5°	1254.3	1254.3	1254.3	1254.3	1252.3	1249.7	1248.4	1251.2	1256.8	1261.0	1260.3
180°	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3	1254.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	566.4	566.4
2.5°	604.6	601.0
5°	777.7	781.3
7.5°	1047.3	1045.5
10°	1302.3	1318.6
12.5°	1488.0	1491.6
15°	1601.0	1608.2
17.5°	1644.7	1646.5
20°	1646.5	1642.9
22.5°	1626.4	1622.8
25°	1602.8	1601.0
27.5°	1580.9	1582.8
30°	1571.8	1577.2
32.5°	1571.8	1580.9
35°	1575.4	1584.6
37.5°	1573.6	1584.6
40°	1566.3	1579.1
42.5°	1546.3	1555.4
45°	1515.3	1526.3
47.5°	1475.2	1482.6
50°	1424.3	1431.5
52.5°	1360.5	1362.4
55°	1284.1	1291.3
57.5°	1202.1	1203.9
60°	1111.0	1116.4
62.5°	1014.5	1014.5
65°	912.5	916.1
67.5°	806.9	815.9
70°	699.4	701.2
72.5°	593.8	593.8
75°	484.4	486.3
77.5°	380.6	380.6
80°	282.3	284.1
82.5°	194.9	198.5
85°	122.0	122.0
87.5°	56.5	51.0
90°	32.0	32.0
92.5°	128.2	102.7
95°	446.6	369.6
97.5°	1070.1	923.4
100°	1541.8	1367.1
102.5°	2005.7	1856.1
105°	2597.4	2516.9
107.5°	2984.9	3004.3
110°	3132.6	3216.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3145.8	3274.5
115°	3062.3	3240.8
117.5°	2885.5	3083.4
120°	2743.0	2935.3
122.5°	2604.1	2793.9
125°	2406.2	2580.9
127.5°	2228.1	2375.5
130°	2123.1	2259.4
132.5°	2027.9	2149.9
135°	1897.5	2002.6
137.5°	1792.8	1878.8
140°	1721.0	1801.4
142.5°	1661.5	1730.7
145°	1572.3	1624.6
147.5°	1503.7	1547.2
150°	1460.7	1495.9
152.5°	1423.8	1450.3
155°	1381.5	1399.0
157.5°	1348.0	1360.3
160°	1328.0	1335.0
162.5°	1314.8	1321.6
165°	1295.9	1303.1
167.5°	1282.4	1285.4
170°	1278.6	1278.6
172.5°	1268.7	1266.0
175°	1262.7	1262.7
177.5°	1257.3	1254.3
180°	1254.3	1254.3



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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	1.41	2.17	2.48	3.25	4.72	14.60	15.37	15.67	16.44	17.91
	3H	2.11	2.79	3.18	3.88	5.36	16.44	17.12	17.52	18.21	19.69
	4H	2.40	3.05	3.49	4.14	5.63	17.08	17.73	18.17	18.82	20.31
	6H	2.64	3.25	3.74	4.33	5.84	17.51	18.11	18.61	19.20	20.70
	8H	2.71	3.28	3.81	4.39	5.88	17.63	18.20	18.73	19.31	20.81
	12H	2.72	3.27	3.83	4.37	5.89	17.70	18.24	18.81	19.34	20.86
4H	2H	8.62	9.27	9.72	10.36	11.85	14.86	15.51	15.96	16.60	18.09
	3H	10.18	10.72	11.28	11.84	13.34	16.90	17.45	18.01	18.56	20.07
	4H	10.27	10.77	11.38	11.87	13.40	17.67	18.17	18.78	19.27	20.80
	6H	10.27	10.70	11.39	11.83	13.35	18.21	18.64	19.32	19.76	21.28
	8H	10.25	10.65	11.36	11.77	13.30	18.37	18.77	19.49	19.89	21.42
	12H	10.20	10.56	11.33	11.69	13.23	18.46	18.83	19.60	19.96	21.50
8H	4H	11.71	12.11	12.82	13.23	14.76	17.72	18.12	18.84	19.24	20.78
	6H	11.94	12.28	13.08	13.44	14.97	18.35	18.68	19.49	19.84	21.37
	8H	11.96	12.25	13.11	13.39	14.94	18.57	18.86	19.72	20.00	21.55
	12H	11.93	12.18	13.07	13.32	14.90	18.71	18.97	19.86	20.11	21.69
12H	4H	11.85	12.21	12.98	13.34	14.88	17.67	18.03	18.80	19.16	20.70
	6H	12.20	12.50	13.35	13.64	15.19	18.33	18.62	19.48	19.76	21.31
	8H	12.27	12.53	13.42	13.66	15.25	18.56	18.82	19.71	19.95	21.54