

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: P937153

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

**Test Information**

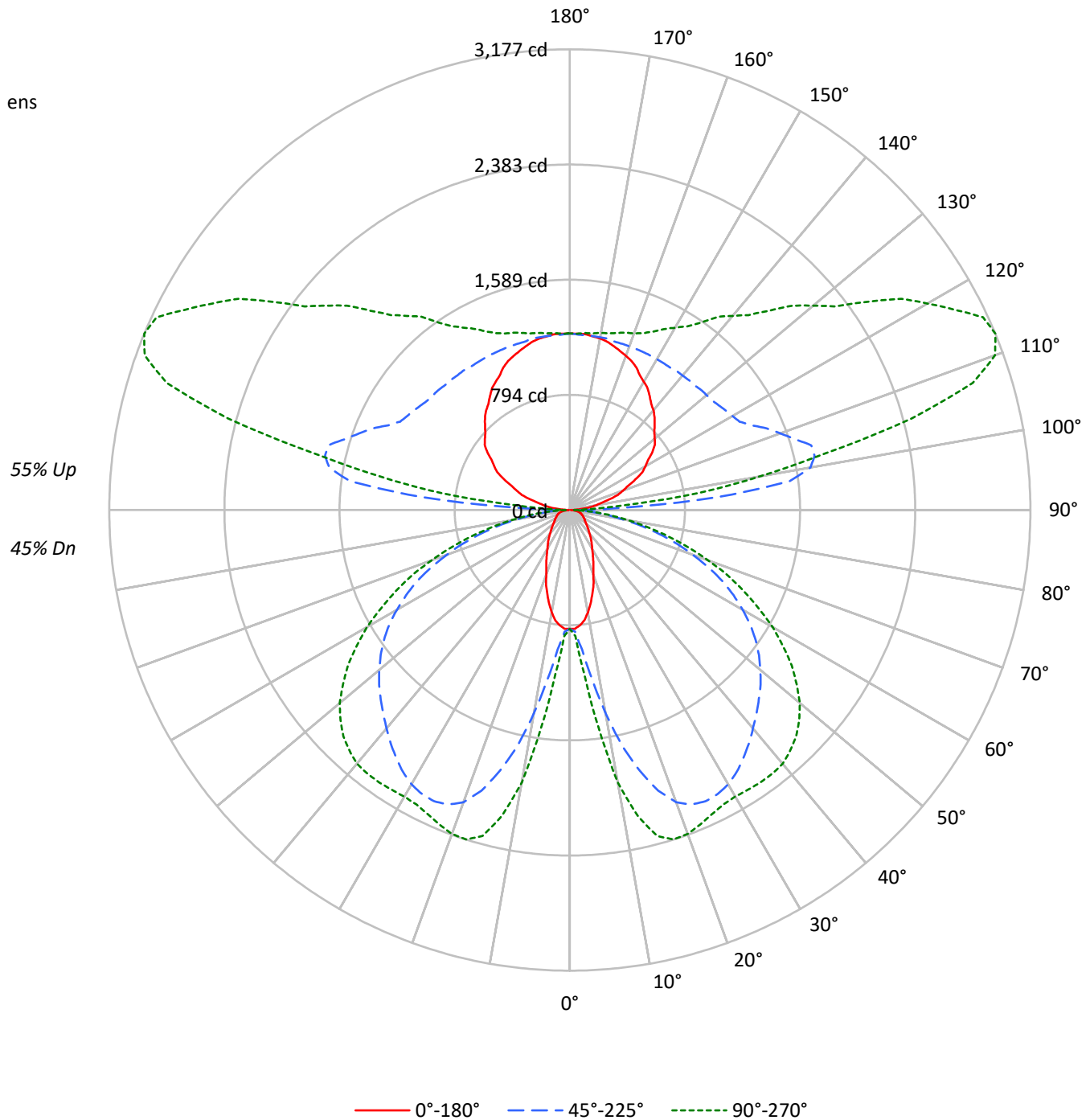
Test Method: LM-79-2019  
Report Number: P937153  
REPORT IS A COMBINATION OF REPORTS P933494 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-12-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14233.7 lumens  
Efficiency: N/A  
Efficacy: 111.9 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: General Diffuse  
  
Input Watts (W): 127.2  
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

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### 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	2535	2535	2535
5°	2477	2930	3407
10°	2248	4273	5649
15°	1911	5583	6820
20°	1556	6472	6951
25°	1299	6774	6810
30°	1096	6819	6797
35°	969	6707	6973
40°	845	6562	7154
45°	766	6456	7182
50°	703	6361	7063
55°	674	6222	6750
60°	691	5951	6256
65°	720	5539	5577
70°	769	4833	4711
75°	855	3944	3676
80°	941	2739	2477
85°	852	1456	1268

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7182 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	0.7
10°-20°	469.8	3.3
20°-30°	821.8	5.8
30°-40°	1057.9	7.4
40°-50°	1181.6	8.3
50°-60°	1131.7	8.0
60°-70°	896.9	6.3
70°-80°	527.4	3.7
80°-90°	151.1	1.1
90°-100°	593.2	4.2
100°-110°	1559.7	11.0
110°-120°	1617.2	11.4
120°-130°	1297.2	9.1
130°-140°	1017.8	7.2
140°-150°	781.2	5.5
150°-160°	562.6	4.0
160°-170°	344.2	2.4
170°-180°	116.3	0.8
0°-30°	1397.6	9.8
0°-40°	2455.5	17.3
0°-60°	4768.8	33.5
0°-90°	6344.2	44.6
90°-120°	3770.1	26.5
90°-150°	6866.4	48.2
90°-180°	7890.0	55.4
0°-180°	14233.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	798	856	964	1091	1130	74
15°	598	1104	1860	2256	2327	166
25°	382	1252	2216	2314	2316	176
35°	258	1196	2087	2206	2292	161
45°	176	954	1844	2113	2208	137
55°	126	606	1565	1818	1868	115
65°	100	322	1162	1307	1325	99
75°	74	198	638	701	704	77
85°	26	61	158	174	176	28
90°	8	23	62	31	31	9
95°	78	307	1022	527	359	87
105°	281	426	1724	2618	2442	298
115°	499	606	1381	2755	3145	493
125°	694	778	1256	2123	2504	616
135°	827	911	1217	1714	1943	640
145°	960	1021	1202	1462	1576	601
155°	1085	1115	1202	1319	1358	498
165°	1170	1186	1202	1249	1264	330
175°	1217	1217	1210	1225	1225	116
180°	1217	1217	1217	1217	1217	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5
2.5°	819.5	819.5	824.7	827.4	832.6	835.3	840.5	845.8	861.6	864.2	869.5
5°	798.4	808.9	843.2	856.3	893.2	943.3	964.4	998.7	1069.9	1090.9	1104.1
7.5°	766.8	790.5	874.8	895.9	988.1	1119.9	1175.3	1249.0	1362.3	1417.7	1462.5
10°	716.7	766.8	916.9	967.0	1117.3	1317.5	1420.3	1523.1	1694.3	1770.7	1799.7
12.5°	661.4	743.0	961.7	1030.3	1246.4	1538.9	1662.7	1776.0	1971.0	2073.8	2089.6
15°	598.1	708.8	1004.0	1104.1	1383.4	1723.3	1860.3	2000.0	2181.8	2255.6	2274.0
17.5°	542.8	682.4	1043.5	1148.9	1488.8	1889.3	2029.0	2144.9	2292.5	2342.5	2355.7
20°	474.3	640.3	1069.9	1206.9	1599.5	2010.5	2144.9	2234.5	2334.6	2366.2	2371.5
22.5°	424.2	595.5	1085.7	1228.0	1673.3	2084.3	2197.6	2268.7	2337.2	2347.8	2350.4
25°	382.1	545.4	1083.0	1251.7	1736.5	2129.1	2216.0	2268.7	2308.3	2313.5	2313.5
27.5°	342.5	490.1	1072.5	1256.9	1783.9	2139.6	2208.1	2245.0	2263.5	2274.0	2274.0
30°	308.3	437.4	1046.1	1246.4	1805.0	2129.1	2184.4	2202.9	2221.3	2237.1	2245.0
32.5°	281.9	387.3	1006.6	1225.3	1807.6	2102.7	2142.3	2152.8	2179.2	2216.0	2229.2
35°	258.2	337.3	961.7	1196.3	1791.8	2060.6	2086.9	2097.5	2150.2	2205.5	2223.9
37.5°	234.5	300.4	903.8	1146.3	1768.1	2010.5	2029.0	2047.4	2129.1	2195.0	2216.0
40°	210.8	268.8	835.3	1090.9	1731.2	1949.9	1965.7	1994.7	2102.7	2179.2	2200.2
42.5°	192.3	242.4	761.5	1033.0	1683.8	1881.4	1905.1	1947.3	2071.1	2152.8	2176.5
45°	176.5	216.1	682.4	953.8	1623.2	1810.3	1844.5	1902.5	2034.2	2113.3	2134.4
47.5°	160.7	197.6	600.8	872.2	1557.3	1739.1	1783.9	1849.8	1984.2	2060.6	2079.0
50°	147.6	179.2	519.1	785.2	1486.2	1662.7	1715.4	1783.9	1920.9	1992.1	2015.8
52.5°	137.0	163.4	442.7	698.2	1404.5	1583.7	1644.3	1715.4	1844.5	1913.0	1928.8
55°	126.5	150.2	376.8	606.0	1320.2	1499.3	1565.2	1633.7	1760.2	1818.2	1828.7
57.5°	121.2	139.6	321.5	519.1	1230.6	1404.5	1478.3	1541.5	1660.1	1704.9	1715.4
60°	113.3	131.7	279.3	445.3	1133.1	1314.9	1378.1	1441.4	1541.5	1578.4	1586.3
62.5°	105.4	126.5	247.7	374.2	1033.0	1209.5	1272.7	1330.7	1415.0	1441.4	1451.9
65°	100.1	121.2	224.0	321.5	930.1	1098.8	1162.1	1212.1	1280.7	1307.0	1312.3
67.5°	94.9	115.9	205.5	276.7	827.4	988.1	1035.6	1083.0	1135.7	1162.1	1164.7
70°	87.0	110.7	189.7	245.0	722.0	861.6	901.1	951.2	993.4	1006.6	1014.5
72.5°	81.7	102.8	179.2	221.3	613.9	740.4	777.3	806.3	843.2	856.3	856.3
75°	73.8	92.2	168.6	197.6	503.3	606.0	637.6	666.6	695.6	700.9	693.0
77.5°	65.9	81.7	144.9	166.0	392.6	479.6	505.9	521.7	545.4	550.7	553.3
80°	55.3	71.1	113.3	129.1	284.6	353.1	371.5	384.7	405.8	405.8	411.0
82.5°	42.2	55.3	81.7	92.2	192.3	242.4	258.2	266.1	279.3	279.3	279.3
85°	26.3	34.3	52.7	60.6	115.9	147.6	158.1	160.7	171.3	173.9	173.9
87.5°	13.2	18.4	34.3	36.9	60.6	76.4	76.4	81.7	81.7	79.0	76.4
90°	8.2	14.7	21.2	22.8	35.9	53.4	62.1	55.2	41.4	31.0	31.0
92.5°	32.7	88.2	143.8	157.7	221.6	306.9	349.6	306.4	220.0	155.2	149.0
95°	78.4	180.1	281.8	307.1	545.3	863.0	1021.8	911.9	691.8	526.8	508.1
97.5°	135.6	225.3	315.0	337.4	734.6	1264.2	1529.0	1459.5	1320.4	1216.2	1180.6
100°	179.7	261.0	342.4	362.7	803.5	1391.1	1685.0	1690.1	1700.3	1707.9	1665.5
102.5°	217.3	293.2	369.0	387.9	835.0	1431.1	1729.2	1817.7	1994.9	2127.8	2091.5
105°	281.0	345.3	409.5	425.5	858.5	1435.7	1724.3	1922.9	2320.0	2617.9	2598.4
107.5°	346.3	406.2	466.1	481.1	862.8	1371.8	1626.3	1903.3	2457.2	2872.7	2877.4
110°	390.4	444.5	498.6	512.1	856.3	1315.2	1544.6	1854.3	2473.6	2938.0	2958.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	433.7	485.3	536.8	549.7	856.6	1265.7	1470.3	1787.2	2421.0	2896.4	2927.6
115°	499.1	546.6	594.2	606.0	864.4	1209.0	1381.2	1686.5	2297.1	2755.1	2798.4
117.5°	563.6	606.8	649.9	660.7	880.5	1173.4	1319.9	1595.4	2146.5	2559.8	2607.9
120°	601.2	641.9	682.4	692.6	893.6	1161.5	1295.4	1547.1	2050.7	2428.3	2475.0
122.5°	637.9	678.9	719.9	730.2	912.4	1155.2	1276.6	1503.3	1956.8	2296.8	2342.9
125°	694.3	731.7	769.1	778.4	937.7	1150.0	1256.2	1448.8	1834.0	2122.9	2165.3
127.5°	740.1	777.8	815.6	825.0	963.1	1147.1	1239.1	1404.5	1735.2	1983.2	2019.0
130°	764.6	805.2	845.8	856.0	981.5	1148.8	1232.5	1379.7	1674.1	1894.9	1928.0
132.5°	789.9	830.5	871.1	881.3	996.4	1150.0	1226.8	1358.6	1622.1	1819.8	1849.4
135°	827.4	864.4	901.5	910.7	1012.9	1149.0	1217.1	1327.4	1548.1	1713.7	1739.1
137.5°	865.8	902.5	939.2	948.3	1037.4	1156.0	1215.4	1308.7	1495.3	1635.2	1656.1
140°	897.6	931.4	965.2	973.6	1052.3	1157.2	1209.7	1290.3	1451.5	1572.3	1591.8
142.5°	922.1	953.4	984.6	992.4	1064.9	1161.4	1209.7	1280.5	1422.1	1528.2	1545.0
145°	959.7	986.9	1014.2	1021.0	1081.2	1161.4	1201.5	1259.4	1375.2	1462.1	1474.8
147.5°	997.3	1023.8	1050.4	1056.9	1105.2	1169.4	1201.5	1247.1	1338.2	1406.5	1417.1
150°	1021.8	1045.8	1069.8	1075.7	1117.6	1173.6	1201.5	1240.0	1316.9	1374.6	1383.1
152.5°	1047.1	1065.3	1083.4	1088.0	1125.8	1176.3	1201.5	1234.4	1300.1	1349.3	1355.7
155°	1084.7	1098.1	1111.6	1114.9	1143.8	1182.3	1201.5	1227.7	1279.9	1319.1	1323.4
157.5°	1112.5	1125.5	1138.6	1141.9	1161.7	1188.3	1201.5	1221.8	1262.5	1292.9	1295.9
160°	1131.3	1141.4	1151.6	1154.2	1170.0	1191.0	1201.5	1218.9	1253.8	1279.9	1281.7
162.5°	1150.0	1157.7	1165.2	1167.2	1178.6	1193.9	1201.5	1216.2	1245.6	1267.7	1269.3
165°	1170.5	1177.4	1184.2	1186.0	1191.2	1198.1	1201.5	1212.1	1233.0	1248.9	1250.6
167.5°	1189.2	1192.5	1195.8	1196.6	1201.0	1206.8	1209.7	1216.5	1230.3	1240.7	1241.4
170°	1201.5	1204.8	1208.1	1208.9	1209.2	1209.5	1209.7	1216.5	1230.3	1240.7	1240.7
172.5°	1208.0	1208.7	1209.5	1209.7	1209.7	1209.7	1209.7	1215.1	1226.0	1234.2	1233.6
175°	1217.1	1217.1	1217.1	1217.1	1214.6	1211.4	1209.7	1213.1	1220.0	1225.2	1225.2
177.5°	1217.1	1217.1	1217.1	1217.1	1215.1	1212.6	1211.4	1214.1	1219.5	1223.6	1222.9
180°	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	819.5	819.5
2.5°	874.8	869.5
5°	1125.2	1130.5
7.5°	1515.2	1512.5
10°	1884.0	1907.8
12.5°	2152.8	2158.1
15°	2316.2	2326.7
17.5°	2379.4	2382.0
20°	2382.0	2376.8
22.5°	2353.1	2347.8
25°	2318.8	2316.2
27.5°	2287.2	2289.8
30°	2274.0	2281.9
32.5°	2274.0	2287.2
35°	2279.3	2292.5
37.5°	2276.6	2292.5
40°	2266.1	2284.5
42.5°	2237.1	2250.3
45°	2192.3	2208.1
47.5°	2134.4	2144.9
50°	2060.6	2071.1
52.5°	1968.4	1971.0
55°	1857.7	1868.2
57.5°	1739.1	1741.8
60°	1607.4	1615.3
62.5°	1467.7	1467.7
65°	1320.2	1325.4
67.5°	1167.3	1180.5
70°	1011.9	1014.5
72.5°	859.0	859.0
75°	700.9	703.5
77.5°	550.7	550.7
80°	408.4	411.0
82.5°	281.9	287.2
85°	176.5	176.5
87.5°	81.7	73.8
90°	31.0	31.0
92.5°	124.4	99.7
95°	433.4	358.6
97.5°	1038.3	896.0
100°	1496.0	1326.5
102.5°	1946.2	1801.0
105°	2520.3	2442.2
107.5°	2896.3	2915.2
110°	3039.6	3121.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3052.4	3177.3
115°	2971.5	3144.7
117.5°	2799.8	2991.9
120°	2661.6	2848.2
122.5°	2526.9	2711.0
125°	2334.8	2504.3
127.5°	2162.0	2305.0
130°	2060.1	2192.3
132.5°	1967.7	2086.1
135°	1841.2	1943.2
137.5°	1739.6	1823.1
140°	1669.9	1747.9
142.5°	1612.2	1679.3
145°	1525.6	1576.4
147.5°	1459.1	1501.3
150°	1417.3	1451.5
152.5°	1381.6	1407.3
155°	1340.5	1357.5
157.5°	1308.0	1319.9
160°	1288.6	1295.4
162.5°	1275.8	1282.4
165°	1257.5	1264.4
167.5°	1244.4	1247.3
170°	1240.7	1240.7
172.5°	1231.0	1228.5
175°	1225.2	1225.2
177.5°	1220.0	1217.1
180°	1217.1	1217.1



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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	3.73	4.57	4.72	5.58	6.93	16.92	17.76	17.91	18.78	20.12
	3H	4.43	5.19	5.43	6.21	7.57	18.76	19.52	19.77	20.54	21.91
	4H	4.73	5.45	5.74	6.47	7.84	19.41	20.13	20.43	21.15	22.53
	6H	4.98	5.64	6.00	6.67	8.05	19.84	20.51	20.87	21.54	22.92
	8H	5.04	5.68	6.08	6.72	8.10	19.97	20.60	21.00	21.64	23.03
	12H	5.06	5.66	6.10	6.70	8.11	20.04	20.64	21.08	21.68	23.08
4H	2H	10.95	11.67	11.97	12.69	14.06	17.19	17.91	18.21	18.93	20.31
	3H	12.51	13.12	13.55	14.17	15.55	19.24	19.84	20.27	20.89	22.28
	4H	12.61	13.16	13.65	14.20	15.61	20.01	20.56	21.05	21.61	23.01
	6H	12.62	13.09	13.67	14.16	15.56	20.55	21.03	21.60	22.10	23.50
	8H	12.59	13.04	13.64	14.10	15.52	20.72	21.16	21.77	22.22	23.64
	12H	12.55	12.95	13.62	14.03	15.45	20.81	21.22	21.88	22.29	23.71
8H	4H	14.05	14.50	15.11	15.56	16.98	20.07	20.51	21.12	21.57	22.99
	6H	14.29	14.66	15.37	15.77	17.18	20.70	21.07	21.78	22.17	23.59
	8H	14.31	14.64	15.40	15.72	17.16	20.92	21.25	22.01	22.33	23.77
	12H	14.28	14.57	15.37	15.65	17.12	21.07	21.36	22.16	22.44	23.91
12H	4H	14.20	14.60	15.27	15.67	17.10	20.02	20.42	21.09	21.50	22.92
	6H	14.55	14.88	15.64	15.96	17.40	20.68	21.01	21.77	22.09	23.53
	8H	14.62	14.91	15.71	15.99	17.47	20.92	21.20	22.00	22.28	23.76