

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: P937154

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937154  
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-12-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

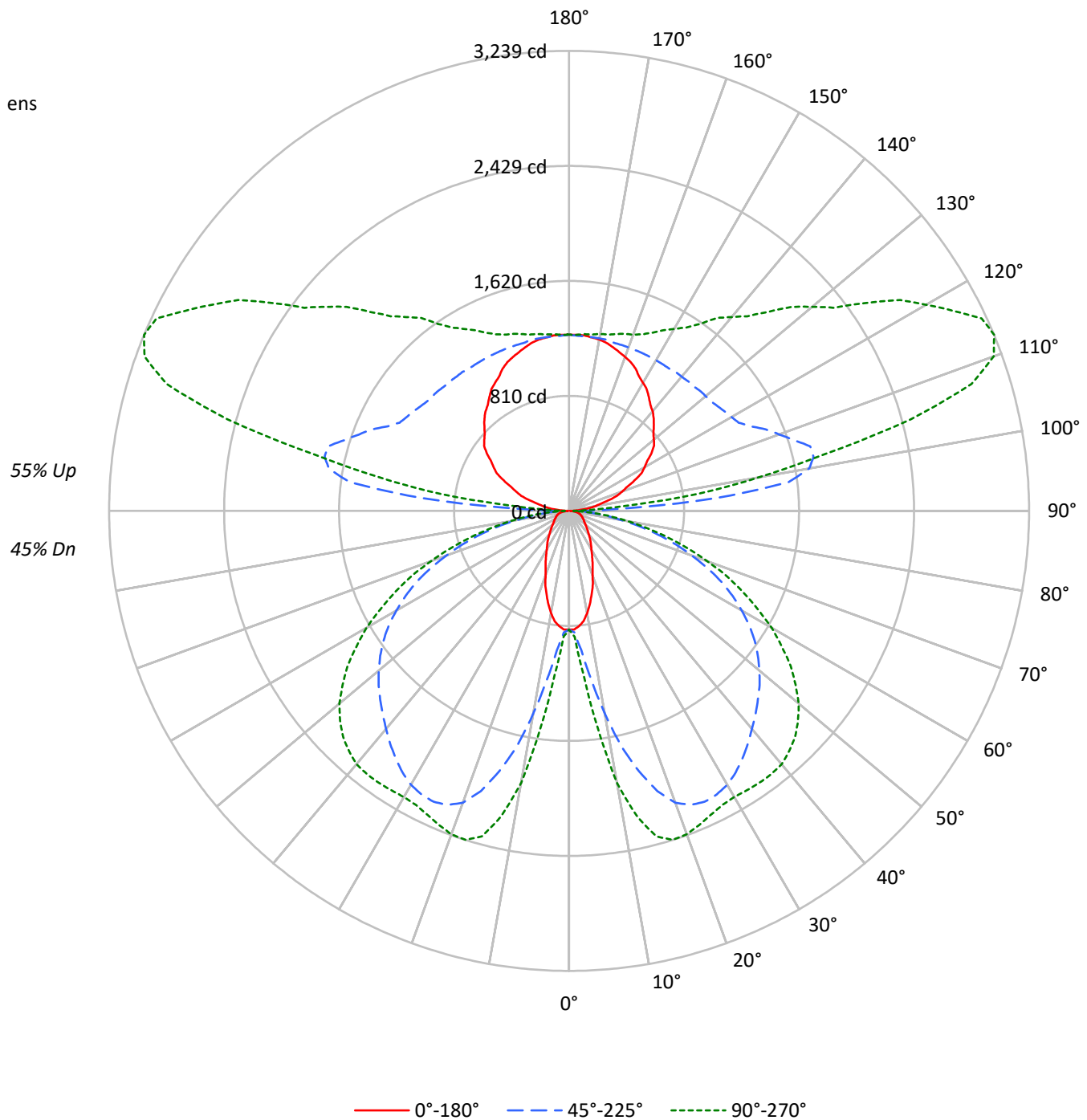
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14509.4 lumens  
Efficiency: N/A  
Efficacy: 114.1 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 (Ain): 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	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
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37				37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30				30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25				25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21				21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17				17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15				15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13				13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11				11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10				10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9				9

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

	0°	45°	90°
0°	2584	2584	2584
5°	2525	2987	3473
10°	2291	4355	5758
15°	1948	5692	6953
20°	1587	6597	7086
25°	1324	6905	6942
30°	1117	6951	6928
35°	988	6837	7108
40°	862	6689	7293
45°	781	6581	7321
50°	717	6484	7200
55°	687	6342	6881
60°	704	6066	6377
65°	734	5646	5685
70°	783	4927	4803
75°	872	4021	3747
80°	959	2792	2525
85°	872	1484	1293

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7321 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	0.7
10°-20°	478.9	3.3
20°-30°	837.7	5.8
30°-40°	1078.4	7.4
40°-50°	1204.5	8.3
50°-60°	1153.6	8.0
60°-70°	914.3	6.3
70°-80°	537.6	3.7
80°-90°	154.1	1.1
90°-100°	604.7	4.2
100°-110°	1589.9	11.0
110°-120°	1648.5	11.4
120°-130°	1322.3	9.1
130°-140°	1037.6	7.2
140°-150°	796.4	5.5
150°-160°	573.5	4.0
160°-170°	350.9	2.4
170°-180°	118.6	0.8
0°-30°	1424.7	9.8
0°-40°	2503.0	17.3
0°-60°	4861.1	33.5
0°-90°	6467.1	44.6
90°-120°	3843.1	26.5
90°-150°	6999.4	48.2
90°-180°	8042.0	55.4
0°-180°	14509.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	814	873	983	1112	1152	75
15°	610	1126	1896	2299	2372	170
25°	390	1276	2259	2358	2361	179
35°	263	1220	2127	2248	2337	164
45°	180	972	1880	2154	2251	139
55°	129	618	1596	1853	1904	117
65°	102	328	1185	1332	1351	101
75°	75	201	650	714	717	79
85°	27	62	161	177	180	29
90°	8	23	63	32	32	9
95°	80	313	1042	537	366	89
105°	286	434	1758	2669	2490	304
115°	509	618	1408	2808	3206	502
125°	708	794	1281	2164	2553	628
135°	844	928	1241	1747	1981	653
145°	978	1041	1225	1490	1607	613
155°	1106	1136	1225	1345	1384	508
165°	1193	1209	1225	1273	1289	337
175°	1241	1241	1233	1249	1249	118
180°	1241	1241	1241	1241	1241	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3	835.3
2.5°	835.3	835.3	840.7	843.4	848.8	851.4	856.8	862.2	878.3	881.0	886.4
5°	813.8	824.6	859.5	872.9	910.5	961.6	983.1	1018.1	1090.6	1112.1	1125.5
7.5°	781.6	805.8	891.7	913.2	1007.2	1141.6	1198.0	1273.2	1388.7	1445.1	1490.8
10°	730.6	781.6	934.7	985.7	1138.9	1343.1	1447.8	1552.6	1727.1	1805.0	1834.6
12.5°	674.2	757.4	980.4	1050.3	1270.5	1568.7	1694.9	1810.4	2009.2	2113.9	2130.0
15°	609.7	722.5	1023.4	1125.5	1410.2	1756.7	1896.4	2038.7	2224.0	2299.3	2318.1
17.5°	553.3	695.7	1063.7	1171.2	1517.6	1925.9	2068.3	2186.4	2336.9	2387.9	2401.3
20°	483.5	652.7	1090.6	1230.2	1630.5	2049.5	2186.4	2277.8	2379.8	2412.1	2417.4
22.5°	432.4	607.0	1106.7	1251.7	1705.7	2124.7	2240.2	2312.7	2382.5	2393.3	2395.9
25°	389.5	556.0	1104.0	1275.9	1770.1	2170.3	2259.0	2312.7	2353.0	2358.3	2358.3
27.5°	349.2	499.6	1093.3	1281.3	1818.5	2181.1	2250.9	2288.5	2307.3	2318.1	2318.1
30°	314.3	445.9	1066.4	1270.5	1840.0	2170.3	2226.7	2245.5	2264.3	2280.4	2288.5
32.5°	287.4	394.8	1026.1	1249.0	1842.6	2143.5	2183.8	2194.5	2221.4	2259.0	2272.4
35°	263.2	343.8	980.4	1219.5	1826.5	2100.5	2127.4	2138.1	2191.8	2248.2	2267.0
37.5°	239.0	306.2	921.3	1168.5	1802.4	2049.5	2068.3	2087.1	2170.3	2237.5	2259.0
40°	214.9	274.0	851.4	1112.1	1764.7	1987.7	2003.8	2033.3	2143.5	2221.4	2242.8
42.5°	196.1	247.1	776.2	1053.0	1716.4	1917.8	1942.0	1985.0	2111.2	2194.5	2218.7
45°	180.0	220.2	695.7	972.3	1654.6	1845.3	1880.2	1939.3	2073.6	2154.2	2175.7
47.5°	163.8	201.4	612.4	889.0	1587.5	1772.8	1818.5	1885.6	2022.6	2100.5	2119.3
50°	150.4	182.6	529.1	800.4	1515.0	1694.9	1748.6	1818.5	1958.1	2030.7	2054.8
52.5°	139.7	166.5	451.2	711.8	1431.7	1614.3	1676.1	1748.6	1880.2	1950.1	1966.2
55°	128.9	153.1	384.1	617.8	1345.7	1528.4	1595.5	1665.4	1794.3	1853.4	1864.1
57.5°	123.6	142.4	327.7	529.1	1254.4	1431.7	1506.9	1571.4	1692.2	1737.9	1748.6
60°	115.5	134.3	284.7	453.9	1155.0	1340.4	1404.8	1469.3	1571.4	1609.0	1617.0
62.5°	107.4	128.9	252.5	381.4	1053.0	1232.9	1297.4	1356.5	1442.4	1469.3	1480.0
65°	102.1	123.6	228.3	327.7	948.1	1120.1	1184.6	1235.6	1305.5	1332.3	1337.7
67.5°	96.7	118.2	209.5	282.0	843.4	1007.2	1055.7	1104.0	1157.7	1184.6	1187.3
70°	88.6	112.8	193.4	249.8	735.9	878.3	918.6	969.6	1012.6	1026.1	1034.2
72.5°	83.3	104.8	182.6	225.6	625.8	754.7	792.4	821.9	859.5	872.9	872.9
75°	75.2	94.0	171.9	201.4	513.0	617.8	650.0	679.5	709.1	714.5	706.4
77.5°	67.1	83.3	147.7	169.2	400.2	488.8	515.7	531.8	556.0	561.4	564.0
80°	56.4	72.5	115.5	131.6	290.1	359.9	378.7	392.1	413.6	413.6	419.0
82.5°	43.0	56.4	83.3	94.0	196.1	247.1	263.2	271.3	284.7	284.7	284.7
85°	26.9	34.9	53.7	61.8	118.2	150.4	161.2	163.8	174.6	177.3	177.3
87.5°	13.4	18.8	34.9	37.6	61.8	77.9	77.9	83.3	83.3	80.6	77.9
90°	8.3	15.0	21.6	23.3	36.6	54.4	63.3	56.2	42.2	31.6	31.6
92.5°	33.3	89.9	146.6	160.7	225.9	312.8	356.3	312.3	224.3	158.2	151.9
95°	80.0	183.5	287.2	313.1	555.9	879.7	1041.6	929.5	705.2	537.0	517.9
97.5°	138.2	229.6	321.1	343.9	748.8	1288.7	1558.6	1487.7	1346.0	1239.7	1203.5
100°	183.2	266.1	349.0	369.7	819.0	1418.1	1717.7	1722.8	1733.2	1741.0	1697.8
102.5°	221.5	298.9	376.1	395.5	851.2	1458.8	1762.7	1852.9	2033.5	2169.0	2132.0
105°	286.4	351.9	417.4	433.8	875.1	1463.5	1757.7	1960.1	2365.0	2668.6	2648.7
107.5°	353.0	414.1	475.1	490.5	879.6	1398.4	1657.8	1940.1	2504.8	2928.3	2933.1
110°	398.0	453.1	508.3	522.1	872.8	1340.6	1574.5	1890.2	2521.5	2994.9	3015.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	442.1	494.7	547.2	560.4	873.2	1290.2	1498.8	1821.8	2467.9	2952.5	2984.3
115°	508.7	557.2	605.7	617.8	881.2	1232.4	1408.0	1719.2	2341.6	2808.4	2852.6
117.5°	574.5	618.6	662.5	673.5	897.6	1196.1	1345.5	1626.3	2188.1	2609.4	2658.4
120°	612.8	654.3	695.7	706.0	910.9	1184.0	1320.5	1577.1	2090.4	2475.4	2522.9
122.5°	650.3	692.1	733.9	744.4	930.1	1177.6	1301.3	1532.4	1994.7	2341.3	2388.2
125°	707.7	745.9	784.0	793.5	955.8	1172.3	1280.6	1476.9	1869.5	2164.0	2207.2
127.5°	754.4	792.9	831.4	841.0	981.7	1169.3	1263.1	1431.7	1768.8	2021.6	2058.1
130°	779.4	820.8	862.2	872.6	1000.5	1171.1	1256.4	1406.4	1706.6	1931.6	1965.3
132.5°	805.2	846.6	888.0	898.4	1015.7	1172.3	1250.6	1384.9	1653.6	1855.1	1885.3
135°	843.5	881.2	918.9	928.3	1032.5	1171.2	1240.6	1353.1	1578.1	1746.8	1772.8
137.5°	882.6	919.9	957.4	966.7	1057.5	1178.4	1238.9	1334.0	1524.3	1666.9	1688.2
140°	915.0	949.4	983.9	992.5	1072.7	1179.7	1233.1	1315.3	1479.6	1602.8	1622.7
142.5°	940.0	971.9	1003.6	1011.6	1085.5	1183.9	1233.1	1305.3	1449.6	1557.8	1574.9
145°	978.3	1006.1	1033.8	1040.8	1102.1	1183.9	1224.8	1283.8	1401.9	1490.4	1503.4
147.5°	1016.6	1043.7	1070.7	1077.4	1126.6	1192.0	1224.8	1271.3	1364.1	1433.8	1444.5
150°	1041.6	1066.0	1090.5	1096.6	1139.3	1196.3	1224.8	1264.0	1342.4	1401.3	1409.9
152.5°	1067.4	1085.9	1104.4	1109.0	1147.6	1199.1	1224.8	1258.3	1325.2	1375.5	1382.0
155°	1105.7	1119.4	1133.1	1136.5	1166.0	1205.2	1224.8	1251.5	1304.7	1344.7	1349.1
157.5°	1134.0	1147.3	1160.7	1164.0	1184.2	1211.3	1224.8	1245.5	1286.9	1318.0	1321.0
160°	1153.2	1163.5	1173.9	1176.5	1192.6	1214.0	1224.8	1242.5	1278.1	1304.7	1306.5
162.5°	1172.3	1180.1	1187.8	1189.8	1201.4	1217.0	1224.8	1239.7	1269.7	1292.2	1293.9
165°	1193.2	1200.2	1207.1	1208.9	1214.2	1221.3	1224.8	1235.5	1256.9	1273.0	1274.8
167.5°	1212.3	1215.6	1219.0	1219.8	1224.2	1230.2	1233.1	1240.1	1254.2	1264.7	1265.4
170°	1224.8	1228.1	1231.5	1232.3	1232.6	1232.9	1233.1	1240.1	1254.2	1264.7	1264.7
172.5°	1231.4	1232.1	1232.9	1233.1	1233.1	1233.1	1233.1	1238.7	1249.8	1258.1	1257.5
175°	1240.6	1240.6	1240.6	1240.6	1238.1	1234.8	1233.1	1236.6	1243.7	1249.0	1249.0
177.5°	1240.6	1240.6	1240.6	1240.6	1238.7	1236.1	1234.8	1237.6	1243.1	1247.3	1246.5
180°	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	835.3	835.3
2.5°	891.7	886.4
5°	1147.0	1152.4
7.5°	1544.5	1541.8
10°	1920.5	1944.7
12.5°	2194.5	2199.9
15°	2361.0	2371.8
17.5°	2425.5	2428.2
20°	2428.2	2422.8
22.5°	2398.6	2393.3
25°	2363.7	2361.0
27.5°	2331.5	2334.2
30°	2318.1	2326.1
32.5°	2318.1	2331.5
35°	2323.4	2336.9
37.5°	2320.7	2336.9
40°	2310.0	2328.8
42.5°	2280.4	2293.9
45°	2234.8	2250.9
47.5°	2175.7	2186.4
50°	2100.5	2111.2
52.5°	2006.5	2009.2
55°	1893.7	1904.4
57.5°	1772.8	1775.5
60°	1638.5	1646.6
62.5°	1496.2	1496.2
65°	1345.7	1351.1
67.5°	1190.0	1203.4
70°	1031.5	1034.2
72.5°	875.6	875.6
75°	714.5	717.1
77.5°	561.4	561.4
80°	416.3	419.0
82.5°	287.4	292.8
85°	180.0	180.0
87.5°	83.3	75.2
90°	31.6	31.6
92.5°	126.8	101.6
95°	441.7	365.6
97.5°	1058.4	913.4
100°	1525.0	1352.2
102.5°	1983.9	1835.9
105°	2569.1	2489.5
107.5°	2952.4	2971.6
110°	3098.5	3181.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3111.6	3238.9
115°	3029.0	3205.6
117.5°	2854.1	3049.9
120°	2713.2	2903.3
122.5°	2575.8	2763.5
125°	2380.0	2552.8
127.5°	2203.9	2349.7
130°	2100.0	2234.8
132.5°	2005.9	2126.5
135°	1876.8	1980.8
137.5°	1773.3	1858.4
140°	1702.3	1781.8
142.5°	1643.4	1711.8
145°	1555.2	1606.9
147.5°	1487.4	1530.4
150°	1444.8	1479.6
152.5°	1408.3	1434.6
155°	1366.4	1383.8
157.5°	1333.3	1345.5
160°	1313.5	1320.5
162.5°	1300.5	1307.2
165°	1281.8	1288.9
167.5°	1268.5	1271.4
170°	1264.7	1264.7
172.5°	1254.9	1252.3
175°	1249.0	1249.0
177.5°	1243.6	1240.6
180°	1240.6	1240.6



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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	3.79	4.64	4.79	5.65	6.99	16.98	17.83	17.98	18.84	20.19
	3H	4.50	5.26	5.50	6.28	7.64	18.83	19.59	19.83	20.61	21.97
	4H	4.79	5.52	5.81	6.54	7.91	19.48	20.20	20.49	21.22	22.59
	6H	5.04	5.71	6.07	6.74	8.12	19.91	20.58	20.94	21.60	22.99
	8H	5.11	5.74	6.14	6.79	8.17	20.03	20.67	21.07	21.71	23.09
	12H	5.13	5.73	6.17	6.77	8.18	20.10	20.71	21.14	21.74	23.15
4H	2H	11.01	11.74	12.04	12.76	14.13	17.26	17.98	18.28	19.00	20.37
	3H	12.58	13.18	13.61	14.23	15.62	19.31	19.91	20.34	20.96	22.35
	4H	12.67	13.23	13.71	14.27	15.68	20.07	20.63	21.12	21.67	23.08
	6H	12.68	13.16	13.73	14.23	15.63	20.62	21.10	21.67	22.16	23.56
	8H	12.66	13.11	13.71	14.16	15.58	20.78	21.23	21.83	22.29	23.71
	12H	12.61	13.02	13.69	14.09	15.52	20.88	21.28	21.95	22.36	23.78
8H	4H	14.12	14.57	15.17	15.63	17.04	20.13	20.58	21.19	21.64	23.06
	6H	14.36	14.73	15.44	15.83	17.25	20.77	21.14	21.84	22.24	23.65
	8H	14.38	14.70	15.46	15.79	17.22	20.99	21.31	22.07	22.40	23.83
	12H	14.35	14.63	15.43	15.71	17.19	21.14	21.42	22.22	22.50	23.98
12H	4H	14.26	14.67	15.33	15.74	17.17	20.09	20.49	21.16	21.56	22.99
	6H	14.62	14.95	15.70	16.03	17.47	20.75	21.08	21.83	22.16	23.60
	8H	14.69	14.98	15.78	16.06	17.53	20.98	21.27	22.07	22.35	23.82