

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: P937173

Luminaire Tested: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937173
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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

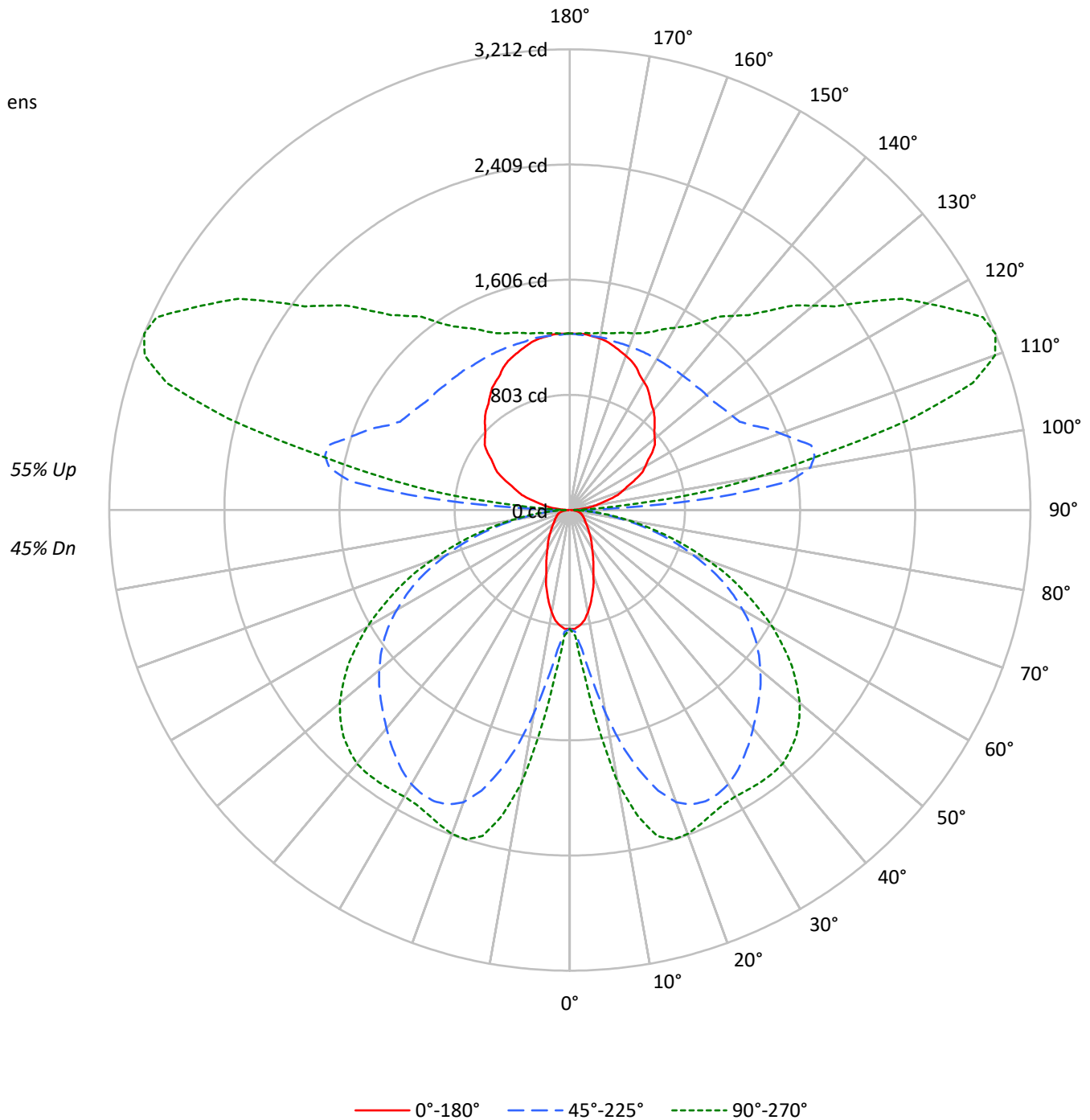
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14390.9 lumens
Efficiency: N/A
Efficacy: 113.1 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

TEST NUMBER: P937173
CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P937173

CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2504	2963	3445
10°	2272	4320	5711
15°	1932	5645	6896
20°	1574	6543	7028
25°	1313	6849	6885
30°	1108	6894	6872
35°	980	6781	7050
40°	854	6634	7233
45°	774	6528	7262
50°	711	6432	7141
55°	682	6290	6825
60°	699	6017	6325
65°	728	5600	5638
70°	777	4887	4763
75°	865	3988	3717
80°	951	2769	2505
85°	862	1471	1282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7262 cd/sqm



TEST NUMBER: P937173

CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	0.7
10°-20°	475.0	3.3
20°-30°	830.9	5.8
30°-40°	1069.5	7.4
40°-50°	1194.7	8.3
50°-60°	1144.2	8.0
60°-70°	906.8	6.3
70°-80°	533.2	3.7
80°-90°	152.8	1.1
90°-100°	599.8	4.2
100°-110°	1576.9	11.0
110°-120°	1635.1	11.4
120°-130°	1311.5	9.1
130°-140°	1029.1	7.2
140°-150°	789.9	5.5
150°-160°	568.8	4.0
160°-170°	348.0	2.4
170°-180°	117.6	0.8
0°-30°	1413.0	9.8
0°-40°	2482.6	17.3
0°-60°	4821.4	33.5
0°-90°	6414.3	44.6
90°-120°	3811.7	26.5
90°-150°	6942.2	48.2
90°-180°	7977.0	55.4
0°-180°	14390.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	807	866	975	1103	1143	75
15°	605	1116	1881	2280	2352	168
25°	386	1266	2240	2339	2342	178
35°	261	1210	2110	2230	2318	163
45°	178	964	1865	2137	2232	138
55°	128	613	1582	1838	1889	117
65°	101	325	1175	1321	1340	100
75°	75	200	645	709	711	78
85°	27	61	160	176	178	28
90°	8	23	63	31	31	9
95°	79	310	1033	533	363	88
105°	284	430	1743	2647	2469	301
115°	505	613	1396	2786	3179	498
125°	702	787	1270	2146	2532	623
135°	837	921	1230	1733	1965	647
145°	970	1032	1215	1478	1594	608
155°	1097	1127	1215	1334	1372	504
165°	1183	1199	1215	1263	1278	334
175°	1230	1230	1223	1239	1239	117
180°	1230	1230	1230	1230	1230	



TEST NUMBER: P937173
 CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5
2.5°	828.5	828.5	833.8	836.5	841.8	844.5	849.8	855.1	871.1	873.8	879.1
5°	807.2	817.8	852.5	865.8	903.1	953.7	975.0	1009.7	1081.7	1103.0	1116.3
7.5°	775.2	799.2	884.4	905.8	999.0	1132.3	1188.2	1262.8	1377.4	1433.3	1478.6
10°	724.6	775.2	927.1	977.7	1129.6	1332.1	1436.0	1539.9	1713.0	1790.3	1819.6
12.5°	668.7	751.2	972.4	1041.7	1260.2	1555.9	1681.1	1795.6	1992.8	2096.7	2112.6
15°	604.7	716.6	1015.1	1116.3	1398.7	1742.3	1880.9	2022.1	2205.9	2280.5	2299.1
17.5°	548.8	690.0	1055.0	1161.6	1505.2	1910.2	2051.4	2168.6	2317.8	2368.4	2381.7
20°	479.5	647.4	1081.7	1220.2	1617.1	2032.7	2168.6	2259.2	2360.4	2392.4	2397.7
22.5°	428.9	602.1	1097.7	1241.5	1691.7	2107.3	2221.9	2293.8	2363.1	2373.7	2376.4
25°	386.3	551.4	1095.0	1265.5	1755.7	2152.6	2240.5	2293.8	2333.8	2339.1	2339.1
27.5°	346.3	495.5	1084.3	1270.8	1803.6	2163.3	2232.5	2269.8	2288.5	2299.1	2299.1
30°	311.7	442.2	1057.7	1260.2	1824.9	2152.6	2208.5	2227.2	2245.8	2261.8	2269.8
32.5°	285.0	391.6	1017.7	1238.8	1827.6	2126.0	2165.9	2176.6	2203.2	2240.5	2253.8
35°	261.1	341.0	972.4	1209.5	1811.6	2083.3	2110.0	2120.6	2173.9	2229.9	2248.5
37.5°	237.1	303.7	913.8	1158.9	1787.6	2032.7	2051.4	2070.0	2152.6	2219.2	2240.5
40°	213.1	271.7	844.5	1103.0	1750.3	1971.4	1987.4	2016.7	2126.0	2203.2	2224.5
42.5°	194.5	245.1	769.9	1044.4	1702.4	1902.2	1926.2	1968.8	2094.0	2176.6	2200.6
45°	178.5	218.4	690.0	964.4	1641.1	1830.3	1864.9	1923.5	2056.7	2136.6	2157.9
47.5°	162.5	199.8	607.4	881.8	1574.5	1758.3	1803.6	1870.2	2006.1	2083.3	2102.0
50°	149.2	181.2	524.8	793.9	1502.6	1681.1	1734.4	1803.6	1942.1	2014.1	2038.0
52.5°	138.5	165.2	447.6	706.0	1420.0	1601.2	1662.4	1734.4	1864.9	1934.2	1950.1
55°	127.9	151.8	381.0	612.7	1334.8	1515.9	1582.5	1651.8	1779.6	1838.2	1848.9
57.5°	122.5	141.2	325.0	524.8	1244.2	1420.0	1494.6	1558.5	1678.4	1723.7	1734.4
60°	114.6	133.2	282.4	450.2	1145.6	1329.4	1393.4	1457.3	1558.5	1595.8	1603.8
62.5°	106.6	127.9	250.4	378.3	1044.4	1222.9	1286.8	1345.4	1430.7	1457.3	1468.0
65°	101.2	122.5	226.4	325.0	940.4	1111.0	1174.9	1225.5	1294.8	1321.4	1326.8
67.5°	95.9	117.2	207.8	279.7	836.5	999.0	1047.0	1095.0	1148.3	1174.9	1177.6
70°	87.9	111.9	191.8	247.8	729.9	871.1	911.1	961.7	1004.3	1017.7	1025.7
72.5°	82.6	103.9	181.2	223.8	620.7	748.6	785.9	815.2	852.5	865.8	865.8
75°	74.6	93.2	170.5	199.8	508.8	612.7	644.7	674.0	703.3	708.6	700.6
77.5°	66.6	82.6	146.5	167.8	396.9	484.8	511.5	527.5	551.4	556.8	559.4
80°	55.9	71.9	114.6	130.5	287.7	357.0	375.6	388.9	410.3	410.3	415.6
82.5°	42.6	55.9	82.6	93.2	194.5	245.1	261.1	269.1	282.4	282.4	282.4
85°	26.6	34.6	53.3	61.3	117.2	149.2	159.8	162.5	173.2	175.8	175.8
87.5°	13.3	18.6	34.6	37.3	61.3	77.3	77.3	82.6	82.6	79.9	77.3
90°	8.3	14.8	21.4	23.1	36.3	54.0	62.8	55.8	41.8	31.3	31.3
92.5°	33.0	89.2	145.4	159.4	224.0	310.3	353.4	309.7	222.4	156.9	150.7
95°	79.3	182.0	284.9	310.5	551.4	872.5	1033.1	921.9	699.5	532.6	513.7
97.5°	137.1	227.8	318.4	341.1	742.7	1278.2	1545.9	1475.6	1335.0	1229.6	1193.6
100°	181.7	263.9	346.1	366.7	812.3	1406.5	1703.6	1708.8	1719.1	1726.8	1683.9
102.5°	219.7	296.4	373.0	392.2	844.2	1446.9	1748.3	1837.8	2016.9	2151.3	2114.6
105°	284.1	349.1	414.0	430.2	867.9	1451.5	1743.3	1944.1	2345.7	2646.8	2627.1
107.5°	350.1	410.7	471.3	486.4	872.4	1387.0	1644.2	1924.3	2484.4	2904.4	2909.2
110°	394.7	449.4	504.1	517.8	865.7	1329.7	1561.6	1874.7	2500.9	2970.4	2991.0



TEST NUMBER: P937173

CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	438.5	490.6	542.7	555.8	866.1	1279.7	1486.5	1806.9	2447.8	2928.4	2959.9
115°	504.6	552.6	600.7	612.7	874.0	1222.3	1396.5	1705.1	2322.5	2785.5	2829.3
117.5°	569.8	613.5	657.1	668.0	890.2	1186.4	1334.5	1613.1	2170.2	2588.1	2636.6
120°	607.8	649.0	690.0	700.3	903.5	1174.3	1309.7	1564.2	2073.3	2455.1	2502.3
122.5°	645.0	686.4	727.9	738.3	922.5	1168.0	1290.7	1519.9	1978.4	2322.2	2368.7
125°	702.0	739.8	777.6	787.0	948.0	1162.7	1270.1	1464.8	1854.2	2146.3	2189.2
127.5°	748.2	786.4	824.6	834.1	973.7	1159.7	1252.8	1420.0	1754.3	2005.1	2041.2
130°	773.0	814.1	855.1	865.4	992.3	1161.5	1246.1	1395.0	1692.6	1915.9	1949.2
132.5°	798.6	839.7	880.7	891.0	1007.4	1162.7	1240.4	1373.6	1640.0	1839.9	1869.9
135°	836.6	874.0	911.4	920.8	1024.0	1161.7	1230.5	1342.0	1565.2	1732.6	1758.3
137.5°	875.4	912.4	949.5	958.8	1048.8	1168.8	1228.8	1323.1	1511.8	1653.3	1674.4
140°	907.5	941.6	975.8	984.3	1063.9	1170.0	1223.0	1304.6	1467.5	1589.7	1609.4
142.5°	932.3	963.9	995.4	1003.4	1076.6	1174.2	1223.0	1294.6	1437.8	1545.1	1562.1
145°	970.3	997.8	1025.4	1032.3	1093.1	1174.2	1214.8	1273.3	1390.4	1478.3	1491.1
147.5°	1008.3	1035.1	1062.0	1068.6	1117.4	1182.3	1214.8	1260.9	1353.0	1422.0	1432.7
150°	1033.1	1057.3	1081.6	1087.6	1130.0	1186.5	1214.8	1253.7	1331.5	1389.8	1398.4
152.5°	1058.7	1077.1	1095.3	1100.0	1138.2	1189.3	1214.8	1248.0	1314.4	1364.2	1370.7
155°	1096.7	1110.3	1123.9	1127.2	1156.4	1195.3	1214.8	1241.2	1294.1	1333.7	1338.0
157.5°	1124.7	1138.0	1151.2	1154.5	1174.6	1201.4	1214.8	1235.3	1276.4	1307.2	1310.2
160°	1143.7	1154.0	1164.3	1166.9	1182.9	1204.1	1214.8	1232.4	1267.6	1294.1	1295.9
162.5°	1162.7	1170.5	1178.1	1180.1	1191.6	1207.1	1214.8	1229.6	1259.4	1281.7	1283.3
165°	1183.4	1190.4	1197.3	1199.1	1204.3	1211.3	1214.8	1225.4	1246.7	1262.6	1264.4
167.5°	1202.4	1205.6	1209.0	1209.8	1214.3	1220.1	1223.0	1230.0	1243.9	1254.4	1255.1
170°	1214.8	1218.1	1221.4	1222.2	1222.5	1222.9	1223.0	1230.0	1243.9	1254.4	1254.4
172.5°	1221.4	1222.1	1222.9	1223.0	1223.0	1223.0	1223.0	1228.5	1239.6	1247.8	1247.2
175°	1230.5	1230.5	1230.5	1230.5	1228.0	1224.7	1223.0	1226.5	1233.5	1238.8	1238.8
177.5°	1230.5	1230.5	1230.5	1230.5	1228.5	1226.0	1224.7	1227.5	1233.0	1237.1	1236.4
180°	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5	1230.5



TEST NUMBER: P937173

CATALOG NUMBER: SQ4-FB-075U-075D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	828.5	828.5
2.5°	884.4	879.1
5°	1137.6	1142.9
7.5°	1531.9	1529.2
10°	1904.8	1928.8
12.5°	2176.6	2181.9
15°	2341.7	2352.4
17.5°	2405.7	2408.3
20°	2408.3	2403.0
22.5°	2379.0	2373.7
25°	2344.4	2341.7
27.5°	2312.4	2315.1
30°	2299.1	2307.1
32.5°	2299.1	2312.4
35°	2304.4	2317.8
37.5°	2301.8	2317.8
40°	2291.1	2309.8
42.5°	2261.8	2275.1
45°	2216.5	2232.5
47.5°	2157.9	2168.6
50°	2083.3	2094.0
52.5°	1990.1	1992.8
55°	1878.2	1888.9
57.5°	1758.3	1761.0
60°	1625.1	1633.1
62.5°	1483.9	1483.9
65°	1334.8	1340.1
67.5°	1180.2	1193.6
70°	1023.1	1025.7
72.5°	868.5	868.5
75°	708.6	711.3
77.5°	556.8	556.8
80°	412.9	415.6
82.5°	285.0	290.4
85°	178.5	178.5
87.5°	82.6	74.6
90°	31.3	31.3
92.5°	125.7	100.8
95°	438.1	362.6
97.5°	1049.8	905.9
100°	1512.5	1341.1
102.5°	1967.7	1820.9
105°	2548.1	2469.2
107.5°	2928.3	2947.4
110°	3073.2	3155.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3086.2	3212.4
115°	3004.3	3179.4
117.5°	2830.8	3025.0
120°	2691.0	2879.6
122.5°	2554.8	2740.9
125°	2360.6	2532.0
127.5°	2185.9	2330.5
130°	2082.9	2216.5
132.5°	1989.5	2109.2
135°	1861.5	1964.6
137.5°	1758.8	1843.2
140°	1688.4	1767.2
142.5°	1630.0	1697.9
145°	1542.5	1593.8
147.5°	1475.2	1517.9
150°	1433.0	1467.5
152.5°	1396.8	1422.8
155°	1355.3	1372.5
157.5°	1322.4	1334.5
160°	1302.8	1309.7
162.5°	1289.9	1296.6
165°	1271.3	1278.4
167.5°	1258.1	1261.0
170°	1254.4	1254.4
172.5°	1244.6	1242.0
175°	1238.8	1238.8
177.5°	1233.4	1230.5
180°	1230.5	1230.5



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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	3.76	4.61	4.76	5.62	6.97	16.96	17.80	17.95	18.81	20.16
	3H	4.47	5.23	5.47	6.25	7.61	18.80	19.56	19.80	20.58	21.94
	4H	4.76	5.49	5.78	6.51	7.88	19.45	20.17	20.46	21.19	22.56
	6H	5.01	5.68	6.04	6.71	8.09	19.88	20.55	20.91	21.57	22.96
	8H	5.08	5.72	6.12	6.76	8.14	20.00	20.64	21.04	21.68	23.06
	12H	5.10	5.70	6.14	6.74	8.15	20.07	20.68	21.11	21.72	23.12
4H	2H	10.98	11.71	12.01	12.73	14.10	17.23	17.95	18.25	18.97	20.34
	3H	12.55	13.15	13.58	14.21	15.59	19.28	19.88	20.31	20.93	22.32
	4H	12.64	13.20	13.68	14.24	15.65	20.05	20.60	21.09	21.64	23.05
	6H	12.65	13.13	13.70	14.20	15.60	20.59	21.07	21.64	22.13	23.54
	8H	12.63	13.08	13.68	14.14	15.56	20.75	21.20	21.81	22.26	23.68
	12H	12.59	12.99	13.66	14.06	15.49	20.85	21.25	21.92	22.33	23.75
8H	4H	14.09	14.54	15.14	15.60	17.02	20.11	20.55	21.16	21.61	23.03
	6H	14.33	14.70	15.41	15.80	17.22	20.74	21.11	21.81	22.21	23.63
	8H	14.35	14.68	15.43	15.76	17.20	20.96	21.29	22.04	22.37	23.81
	12H	14.32	14.60	15.41	15.68	17.16	21.11	21.39	22.20	22.47	23.95
12H	4H	14.24	14.64	15.31	15.71	17.14	20.06	20.46	21.13	21.53	22.96
	6H	14.59	14.92	15.68	16.00	17.44	20.72	21.05	21.80	22.13	23.57
	8H	14.66	14.95	15.75	16.03	17.50	20.95	21.24	22.04	22.32	23.80