

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: P937225

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937225
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

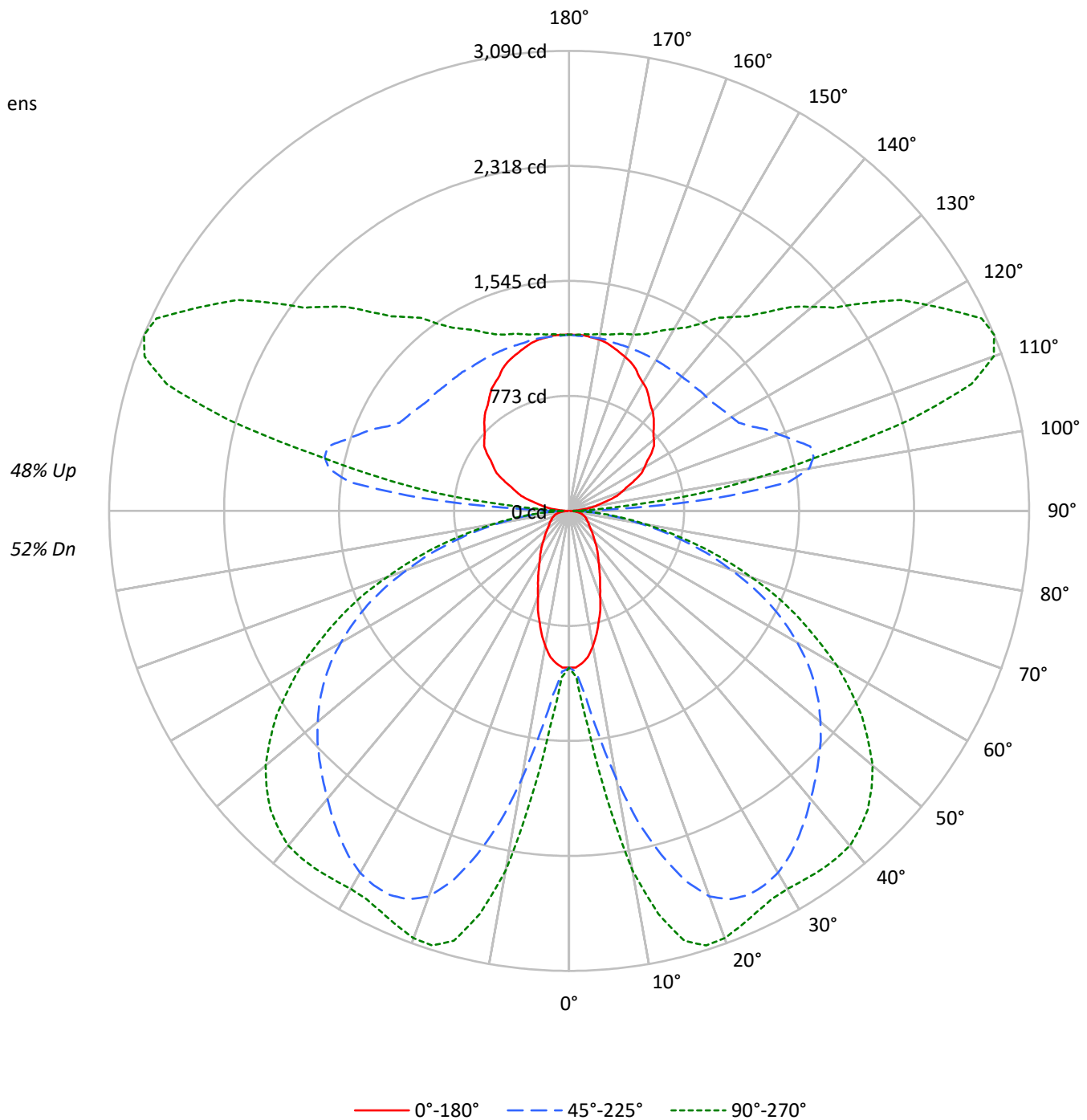
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15821.9 lumens
Efficiency: N/A
Efficacy: 103.0 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): 153.6
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	0
RCR																		
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3257	3257	3257
5°	3183	3765	4377
10°	2888	5490	7257
15°	2455	7174	8763
20°	1999	8315	8931
25°	1669	8704	8749
30°	1408	8761	8733
35°	1245	8618	8958
40°	1086	8431	9192
45°	984	8295	9228
50°	903	8173	9075
55°	866	7994	8673
60°	887	7646	8038
65°	925	7116	7165
70°	988	6210	6053
75°	1099	5068	4724
80°	1209	3519	3183
85°	1095	1870	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	0.9
10°-20°	603.6	3.8
20°-30°	1055.8	6.7
30°-40°	1359.1	8.6
40°-50°	1518.1	9.6
50°-60°	1454.0	9.2
60°-70°	1152.3	7.3
70°-80°	677.6	4.3
80°-90°	192.8	1.2
90°-100°	576.9	3.6
100°-110°	1516.7	9.6
110°-120°	1572.7	9.9
120°-130°	1261.5	8.0
130°-140°	989.8	6.3
140°-150°	759.7	4.8
150°-160°	547.1	3.5
160°-170°	334.8	2.1
170°-180°	113.1	0.7
0°-30°	1795.6	11.3
0°-40°	3154.7	19.9
0°-60°	6126.9	38.7
0°-90°	8149.5	51.5
90°-120°	3666.4	23.2
90°-150°	6677.4	42.2
90°-180°	7672.0	48.5
0°-180°	15821.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1026	1100	1239	1402	1452	95
15°	768	1418	2390	2898	2989	214
25°	491	1608	2847	2972	2976	226
35°	332	1537	2681	2834	2945	207
45°	227	1226	2370	2715	2837	175
55°	162	779	2011	2336	2400	148
65°	129	413	1493	1679	1703	127
75°	95	254	819	900	904	99
85°	34	78	203	223	227	36
90°	8	22	60	30	30	9
95°	76	299	994	512	349	85
105°	273	414	1677	2546	2375	290
115°	485	589	1343	2679	3058	479
125°	675	757	1222	2064	2435	599
135°	805	886	1184	1666	1890	623
145°	933	993	1168	1422	1533	585
155°	1055	1084	1168	1283	1320	485
165°	1138	1153	1168	1214	1230	321
175°	1184	1184	1176	1192	1192	112
180°	1184	1184	1184	1184	1184	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9
2.5°	1052.9	1052.9	1059.6	1063.0	1069.8	1073.2	1080.0	1086.7	1107.0	1110.5	1117.2
5°	1025.8	1039.3	1083.4	1100.3	1147.7	1212.0	1239.1	1283.1	1374.5	1401.5	1418.5
7.5°	985.2	1015.6	1123.9	1151.0	1269.5	1438.8	1509.9	1604.7	1750.3	1821.3	1878.9
10°	920.8	985.2	1178.1	1242.4	1435.4	1692.7	1824.8	1956.8	2176.8	2275.0	2312.2
12.5°	849.8	954.7	1235.7	1323.7	1601.3	1977.1	2136.2	2281.8	2532.3	2664.4	2684.6
15°	768.5	910.7	1289.8	1418.5	1777.4	2214.1	2390.1	2569.6	2803.2	2897.9	2921.6
17.5°	697.4	876.8	1340.6	1476.0	1912.7	2427.3	2606.8	2755.8	2945.3	3009.6	3026.6
20°	609.3	822.7	1374.5	1550.5	2054.9	2583.1	2755.8	2870.8	2999.4	3040.1	3046.8
22.5°	545.0	765.1	1394.8	1577.6	2149.8	2677.9	2823.4	2914.9	3002.9	3016.4	3019.8
25°	490.9	700.8	1391.4	1608.1	2231.0	2735.4	2847.2	2914.9	2965.6	2972.4	2972.4
27.5°	440.1	629.7	1377.9	1614.8	2292.0	2748.9	2837.0	2884.4	2908.0	2921.6	2921.6
30°	396.1	562.0	1344.0	1601.3	2319.0	2735.4	2806.5	2830.2	2853.9	2874.2	2884.4
32.5°	362.2	497.6	1293.2	1574.2	2322.4	2701.6	2752.3	2765.9	2799.7	2847.2	2864.1
35°	331.7	433.3	1235.7	1537.0	2302.0	2647.4	2681.3	2694.8	2762.5	2833.6	2857.3
37.5°	301.3	386.0	1161.2	1472.7	2271.6	2583.1	2606.8	2630.5	2735.4	2820.1	2847.2
40°	270.8	345.3	1073.2	1401.5	2224.2	2505.2	2525.5	2562.7	2701.6	2799.7	2826.8
42.5°	247.1	311.5	978.4	1327.1	2163.2	2417.2	2447.7	2501.8	2661.0	2765.9	2796.3
45°	226.9	277.6	876.8	1225.5	2085.4	2325.8	2369.8	2444.3	2613.5	2715.1	2742.2
47.5°	206.5	253.9	771.9	1120.6	2000.8	2234.4	2292.0	2376.5	2549.2	2647.4	2671.1
50°	189.6	230.2	666.9	1008.9	1909.4	2136.2	2203.9	2292.0	2468.0	2559.4	2589.9
52.5°	176.0	209.9	568.8	897.2	1804.4	2034.6	2112.5	2203.9	2369.8	2457.8	2478.2
55°	162.5	192.9	484.1	778.6	1696.1	1926.3	2011.0	2098.9	2261.5	2336.0	2349.4
57.5°	155.7	179.5	413.1	666.9	1581.0	1804.4	1899.2	1980.5	2132.8	2190.3	2203.9
60°	145.5	169.3	358.8	572.1	1455.7	1689.3	1770.6	1851.8	1980.5	2027.9	2038.0
62.5°	135.4	162.5	318.2	480.7	1327.1	1553.9	1635.1	1709.6	1818.0	1851.8	1865.3
65°	128.6	155.7	287.8	413.1	1195.1	1411.7	1492.9	1557.3	1645.3	1679.1	1686.0
67.5°	121.9	149.0	264.1	355.5	1063.0	1269.5	1330.5	1391.4	1459.1	1492.9	1496.3
70°	111.7	142.2	243.8	314.8	927.6	1107.0	1157.9	1222.2	1276.3	1293.2	1303.4
72.5°	105.0	132.0	230.2	284.3	788.8	951.3	998.7	1036.0	1083.4	1100.3	1100.3
75°	94.8	118.5	216.7	253.9	646.6	778.6	819.3	856.5	893.8	900.5	890.3
77.5°	84.6	105.0	186.2	213.3	504.4	616.2	650.0	670.3	700.8	707.6	711.0
80°	71.1	91.4	145.5	165.9	365.7	453.6	477.4	494.3	521.4	521.4	528.1
82.5°	54.2	71.1	105.0	118.5	247.1	311.5	331.7	341.9	358.8	358.8	358.8
85°	33.8	44.0	67.7	77.9	149.0	189.6	203.1	206.5	220.0	223.4	223.4
87.5°	16.9	23.7	44.0	47.4	77.9	98.1	98.1	105.0	105.0	101.6	98.1
90°	7.9	14.3	20.6	22.2	34.9	51.9	60.4	53.6	40.2	30.2	30.2
92.5°	31.8	85.8	139.8	153.3	215.5	298.4	339.9	297.9	214.0	150.9	144.9
95°	76.3	175.1	274.0	298.7	530.3	839.3	993.7	886.8	672.8	512.3	494.1
97.5°	131.9	219.1	306.3	328.1	714.4	1229.4	1487.0	1419.3	1284.1	1182.7	1148.1
100°	174.8	253.8	332.9	352.7	781.4	1352.9	1638.6	1643.6	1653.5	1660.9	1619.7
102.5°	211.3	285.1	358.8	377.3	812.0	1391.7	1681.6	1767.7	1940.0	2069.2	2033.9
105°	273.2	335.8	398.2	413.8	834.8	1396.2	1676.8	1869.9	2256.2	2545.8	2526.9
107.5°	336.8	395.0	453.3	467.9	839.1	1334.1	1581.5	1850.9	2389.6	2793.6	2798.2
110°	379.7	432.3	484.9	498.0	832.7	1279.0	1502.1	1803.2	2405.5	2857.1	2876.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	421.8	471.9	522.0	534.6	833.0	1230.9	1429.8	1738.0	2354.4	2816.7	2847.0
115°	485.3	531.5	577.8	589.3	840.6	1175.7	1343.2	1640.1	2233.9	2679.2	2721.3
117.5°	548.1	590.1	632.1	642.6	856.3	1141.1	1283.6	1551.5	2087.4	2489.4	2536.1
120°	584.7	624.2	663.7	673.6	869.0	1129.5	1259.8	1504.5	1994.2	2361.5	2406.8
122.5°	620.4	660.2	700.1	710.1	887.3	1123.4	1241.5	1461.9	1902.9	2233.6	2278.4
125°	675.2	711.6	748.0	757.0	911.9	1118.4	1221.7	1409.0	1783.5	2064.4	2105.7
127.5°	719.7	756.4	793.1	802.3	936.6	1115.5	1205.0	1365.8	1687.4	1928.6	1963.4
130°	743.5	783.1	822.5	832.4	954.5	1117.2	1198.6	1341.7	1628.1	1842.8	1874.9
132.5°	768.1	807.7	847.1	857.0	969.0	1118.4	1193.0	1321.2	1577.5	1769.8	1798.5
135°	804.7	840.6	876.7	885.6	985.0	1117.4	1183.6	1290.8	1505.5	1666.5	1691.3
137.5°	842.0	877.6	913.3	922.2	1008.8	1124.2	1181.9	1272.7	1454.2	1590.2	1610.5
140°	872.9	905.7	938.6	946.8	1023.3	1125.4	1176.4	1254.8	1411.5	1529.1	1548.0
142.5°	896.7	927.2	957.5	965.1	1035.5	1129.4	1176.4	1245.2	1382.9	1486.2	1502.5
145°	933.3	959.8	986.3	992.9	1051.4	1129.4	1168.4	1224.7	1337.4	1421.9	1434.3
147.5°	969.9	995.7	1021.5	1027.9	1074.7	1137.2	1168.4	1212.8	1301.3	1367.8	1378.1
150°	993.7	1017.0	1040.3	1046.1	1086.9	1141.3	1168.4	1205.9	1280.7	1336.8	1345.1
152.5°	1018.3	1036.0	1053.6	1058.0	1094.8	1143.9	1168.4	1200.4	1264.3	1312.2	1318.4
155°	1054.8	1067.9	1081.0	1084.2	1112.3	1149.7	1168.4	1193.9	1244.7	1282.8	1287.0
157.5°	1081.8	1094.6	1107.3	1110.5	1129.8	1155.5	1168.4	1188.2	1227.7	1257.4	1260.3
160°	1100.1	1110.0	1119.9	1122.4	1137.8	1158.2	1168.4	1185.4	1219.3	1244.7	1246.4
162.5°	1118.4	1125.8	1133.2	1135.1	1146.2	1161.0	1168.4	1182.7	1211.3	1232.8	1234.4
165°	1138.3	1145.0	1151.6	1153.3	1158.4	1165.1	1168.4	1178.7	1199.1	1214.5	1216.2
167.5°	1156.5	1159.6	1162.9	1163.7	1167.9	1173.6	1176.4	1183.1	1196.5	1206.5	1207.2
170°	1168.4	1171.6	1174.9	1175.6	1175.9	1176.2	1176.4	1183.1	1196.5	1206.5	1206.5
172.5°	1174.8	1175.5	1176.2	1176.4	1176.4	1176.4	1176.4	1181.7	1192.3	1200.2	1199.6
175°	1183.6	1183.6	1183.6	1183.6	1181.2	1178.0	1176.4	1179.7	1186.5	1191.5	1191.5
177.5°	1183.6	1183.6	1183.6	1183.6	1181.7	1179.2	1178.0	1180.7	1186.0	1189.9	1189.2
180°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1052.9	1052.9
2.5°	1123.9	1117.2
5°	1445.6	1452.4
7.5°	1946.6	1943.2
10°	2420.6	2451.0
12.5°	2765.9	2772.7
15°	2975.8	2989.4
17.5°	3057.0	3060.4
20°	3060.4	3053.7
22.5°	3023.2	3016.4
25°	2979.2	2975.8
27.5°	2938.5	2942.0
30°	2921.6	2931.8
32.5°	2921.6	2938.5
35°	2928.4	2945.3
37.5°	2925.0	2945.3
40°	2911.5	2935.1
42.5°	2874.2	2891.1
45°	2816.7	2837.0
47.5°	2742.2	2755.8
50°	2647.4	2661.0
52.5°	2528.9	2532.3
55°	2386.7	2400.3
57.5°	2234.4	2237.7
60°	2065.1	2075.3
62.5°	1885.7	1885.7
65°	1696.1	1702.9
67.5°	1499.8	1516.7
70°	1300.0	1303.4
72.5°	1103.6	1103.6
75°	900.5	903.9
77.5°	707.6	707.6
80°	524.8	528.1
82.5°	362.2	369.0
85°	226.9	226.9
87.5°	105.0	94.8
90°	30.2	30.2
92.5°	120.9	96.9
95°	421.4	348.7
97.5°	1009.8	871.4
100°	1454.8	1290.0
102.5°	1892.7	1751.5
105°	2450.9	2375.0
107.5°	2816.6	2834.9
110°	2956.0	3035.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2968.4	3089.9
115°	2889.7	3058.1
117.5°	2722.8	2909.6
120°	2588.3	2769.8
122.5°	2457.3	2636.4
125°	2270.5	2435.4
127.5°	2102.5	2241.6
130°	2003.4	2132.0
132.5°	1913.6	2028.7
135°	1790.5	1889.7
137.5°	1691.7	1772.9
140°	1624.0	1699.8
142.5°	1567.8	1633.1
145°	1483.6	1533.0
147.5°	1419.0	1460.0
150°	1378.3	1411.5
152.5°	1343.5	1368.6
155°	1303.6	1320.1
157.5°	1272.0	1283.6
160°	1253.1	1259.8
162.5°	1240.7	1247.1
165°	1222.9	1229.6
167.5°	1210.1	1212.9
170°	1206.5	1206.5
172.5°	1197.1	1194.7
175°	1191.5	1191.5
177.5°	1186.4	1183.6
180°	1183.6	1183.6



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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	5.25	6.17	6.19	7.12	8.37	18.44	19.36	19.38	20.31	21.56
	3H	5.96	6.78	6.91	7.75	9.02	20.29	21.11	21.24	22.08	23.35
	4H	6.26	7.04	7.22	8.01	9.29	20.94	21.72	21.90	22.69	23.97
	6H	6.51	7.23	7.49	8.21	9.50	21.38	22.10	22.35	23.08	24.37
	8H	6.58	7.27	7.56	8.26	9.55	21.50	22.19	22.48	23.18	24.47
	12H	6.60	7.25	7.59	8.24	9.56	21.58	22.23	22.56	23.22	24.53
4H	2H	12.48	13.26	13.45	14.23	15.51	18.72	19.50	19.69	20.47	21.75
	3H	14.05	14.70	15.03	15.71	17.00	20.78	21.43	21.75	22.43	23.72
	4H	14.15	14.75	15.13	15.74	17.06	21.55	22.15	22.54	23.14	24.46
	6H	14.16	14.68	15.16	15.70	17.01	22.10	22.61	23.10	23.63	24.94
	8H	14.14	14.62	15.14	15.63	16.96	22.26	22.75	23.26	23.76	25.09
	12H	14.10	14.54	15.12	15.56	16.90	22.36	22.80	23.38	23.83	25.16
8H	4H	15.60	16.08	16.60	17.10	18.42	21.61	22.10	22.62	23.11	24.44
	6H	15.85	16.25	16.87	17.30	18.63	22.25	22.65	23.28	23.70	25.03
	8H	15.86	16.22	16.90	17.26	18.60	22.47	22.83	23.51	23.87	25.21
	12H	15.84	16.15	16.87	17.18	18.57	22.62	22.94	23.66	23.97	25.36
12H	4H	15.75	16.18	16.77	17.21	18.55	21.57	22.01	22.59	23.03	24.37
	6H	16.11	16.46	17.14	17.50	18.84	22.24	22.59	23.27	23.63	24.97
	8H	16.18	16.49	17.22	17.52	18.91	22.47	22.78	23.51	23.82	25.20