

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: P937129

Luminaire Tested: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-12-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937129
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-92765-1D-UNV-STD-W-12-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

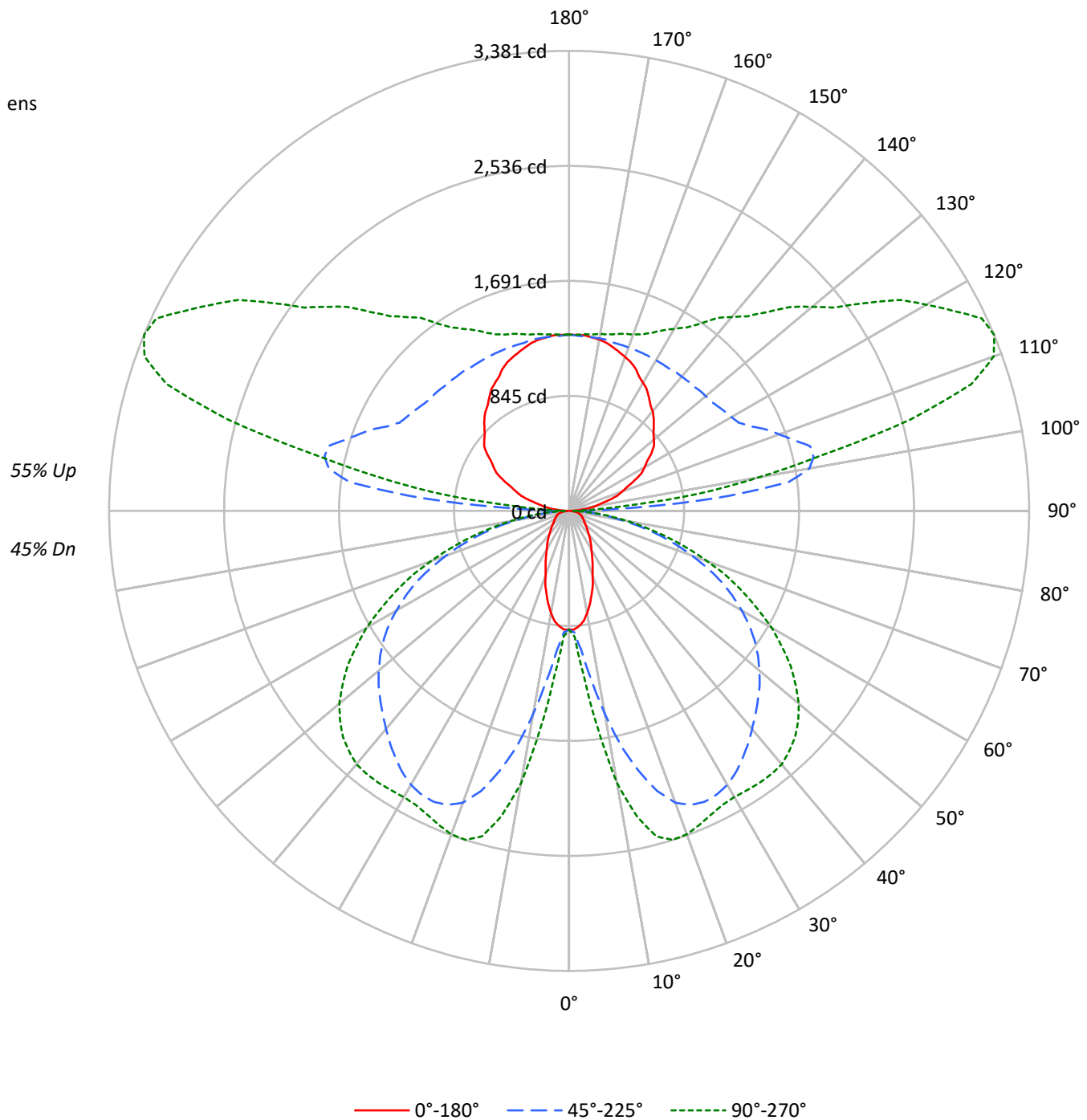
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15147.8 lumens
Efficiency: N/A
Efficacy: 119.1 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: P937129
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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°	2697	2697	2697
5°	2636	3118	3626
10°	2392	4547	6011
15°	2034	5942	7258
20°	1656	6887	7397
25°	1382	7209	7247
30°	1166	7257	7233
35°	1032	7138	7421
40°	899	6984	7614
45°	815	6871	7643
50°	748	6770	7517
55°	717	6621	7184
60°	735	6333	6658
65°	766	5895	5935
70°	818	5144	5014
75°	910	4198	3912
80°	1002	2915	2636
85°	907	1549	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	0.7
10°-20°	500.0	3.3
20°-30°	874.6	5.8
30°-40°	1125.8	7.4
40°-50°	1257.5	8.3
50°-60°	1204.4	8.0
60°-70°	954.5	6.3
70°-80°	561.2	3.7
80°-90°	160.8	1.1
90°-100°	631.3	4.2
100°-110°	1659.8	11.0
110°-120°	1721.1	11.4
120°-130°	1380.5	9.1
130°-140°	1083.2	7.2
140°-150°	831.4	5.5
150°-160°	598.7	4.0
160°-170°	366.3	2.4
170°-180°	123.8	0.8
0°-30°	1487.4	9.8
0°-40°	2613.2	17.3
0°-60°	5075.0	33.5
0°-90°	6751.6	44.6
90°-120°	4012.2	26.5
90°-150°	7307.3	48.2
90°-180°	8396.0	55.4
0°-180°	15147.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	850	911	1026	1161	1203	78
15°	636	1175	1980	2400	2476	177
25°	407	1332	2358	2462	2465	187
35°	275	1273	2221	2347	2440	172
45°	188	1015	1963	2249	2350	145
55°	135	645	1666	1935	1988	123
65°	107	342	1237	1391	1411	106
75°	78	210	679	746	749	82
85°	28	64	168	185	188	30
90°	9	24	66	33	33	9
95°	84	327	1087	561	382	93
105°	299	453	1835	2786	2599	317
115°	531	645	1470	2932	3347	525
125°	739	828	1337	2259	2665	656
135°	881	969	1295	1824	2068	681
145°	1021	1087	1279	1556	1678	640
155°	1154	1186	1279	1404	1445	530
165°	1246	1262	1279	1329	1346	352
175°	1295	1295	1287	1304	1304	123
180°	1295	1295	1295	1295	1295	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	872.1	872.1	872.1	872.1	872.1	872.1	872.1	872.1	872.1	872.1	872.1
2.5°	872.1	872.1	877.7	880.5	886.1	888.9	894.5	900.1	916.9	919.8	925.4
5°	849.6	860.9	897.3	911.3	950.6	1003.9	1026.3	1062.9	1138.6	1161.0	1175.0
7.5°	816.0	841.2	931.0	953.4	1051.5	1191.8	1250.7	1329.2	1449.8	1508.7	1556.4
10°	762.7	816.0	975.8	1029.1	1189.0	1402.2	1511.5	1620.9	1803.1	1884.5	1915.3
12.5°	703.8	790.8	1023.5	1096.5	1326.4	1637.7	1769.5	1890.1	2097.6	2206.9	2223.8
15°	636.5	754.3	1068.5	1175.0	1472.3	1834.0	1979.8	2128.4	2321.9	2400.4	2420.0
17.5°	577.6	726.3	1110.5	1222.7	1584.4	2010.6	2159.3	2282.6	2439.7	2493.0	2507.0
20°	504.7	681.4	1138.6	1284.4	1702.2	2139.6	2282.6	2378.0	2484.5	2518.2	2523.8
22.5°	451.5	633.7	1155.4	1306.8	1780.7	2218.2	2338.7	2414.4	2487.3	2498.6	2501.4
25°	406.6	580.5	1152.6	1332.0	1848.0	2265.8	2358.4	2414.4	2456.5	2462.1	2462.1
27.5°	364.5	521.6	1141.4	1337.7	1898.5	2277.0	2349.9	2389.2	2408.8	2420.0	2420.0
30°	328.1	465.5	1113.3	1326.4	1920.9	2265.8	2324.7	2344.3	2364.0	2380.8	2389.2
32.5°	300.0	412.2	1071.3	1304.0	1923.7	2237.8	2279.8	2291.1	2319.1	2358.4	2372.4
35°	274.8	358.9	1023.5	1273.2	1906.9	2192.9	2221.0	2232.2	2288.3	2347.1	2366.8
37.5°	249.6	319.7	961.8	1219.9	1881.7	2139.6	2159.3	2178.9	2265.8	2335.9	2358.4
40°	224.3	286.0	888.9	1161.0	1842.4	2075.1	2092.0	2122.8	2237.8	2319.1	2341.5
42.5°	204.7	258.0	810.4	1099.3	1791.9	2002.2	2027.5	2072.3	2204.1	2291.1	2316.3
45°	187.9	229.9	726.3	1015.1	1727.4	1926.5	1963.0	2024.7	2164.9	2249.0	2271.4
47.5°	171.1	210.3	639.3	928.2	1657.3	1850.8	1898.5	1968.6	2111.6	2192.9	2212.5
50°	157.0	190.7	552.4	835.6	1581.6	1769.5	1825.6	1898.5	2044.3	2120.0	2145.2
52.5°	145.8	173.9	471.1	743.1	1494.7	1685.4	1749.9	1825.6	1963.0	2035.9	2052.7
55°	134.6	159.8	401.0	644.9	1405.0	1595.6	1665.7	1738.6	1873.2	1934.9	1946.2
57.5°	129.0	148.6	342.1	552.4	1309.6	1494.7	1573.2	1640.5	1766.7	1814.4	1825.6
60°	120.6	140.2	297.2	473.9	1205.9	1399.3	1466.6	1533.9	1640.5	1679.8	1688.2
62.5°	112.2	134.6	263.6	398.2	1099.3	1287.2	1354.5	1416.2	1505.9	1533.9	1545.2
65°	106.6	129.0	238.4	342.1	989.9	1169.4	1236.7	1290.0	1362.9	1390.9	1396.5
67.5°	100.9	123.4	218.7	294.4	880.5	1051.5	1102.1	1152.6	1208.7	1236.7	1239.5
70°	92.5	117.8	201.9	260.8	768.3	916.9	959.0	1012.3	1057.2	1071.3	1079.7
72.5°	86.9	109.4	190.7	235.5	653.4	788.0	827.2	858.1	897.3	911.3	911.3
75°	78.5	98.1	179.5	210.3	535.6	644.9	678.6	709.4	740.3	745.9	737.5
77.5°	70.1	86.9	154.2	176.7	417.8	510.3	538.4	555.2	580.5	586.1	588.9
80°	58.9	75.7	120.6	137.4	302.8	375.8	395.4	409.4	431.8	431.8	437.4
82.5°	44.9	58.9	86.9	98.1	204.7	258.0	274.8	283.2	297.2	297.2	297.2
85°	28.0	36.5	56.1	64.5	123.4	157.0	168.2	171.1	182.3	185.1	185.1
87.5°	14.0	19.6	36.5	39.3	64.5	81.3	81.3	86.9	86.9	84.1	81.3
90°	8.7	15.6	22.5	24.3	38.2	56.8	66.1	58.7	44.0	33.0	33.0
92.5°	34.8	93.8	153.0	167.8	235.8	326.6	372.0	326.0	234.1	165.2	158.6
95°	83.5	191.6	299.9	326.9	580.4	918.4	1087.4	970.4	736.3	560.6	540.7
97.5°	144.3	239.8	335.2	359.0	781.8	1345.4	1627.2	1553.2	1405.2	1294.3	1256.4
100°	191.2	277.8	364.3	385.9	855.1	1480.5	1793.2	1798.7	1809.5	1817.6	1772.5
102.5°	231.2	312.0	392.7	412.9	888.6	1523.0	1840.2	1934.5	2123.0	2264.4	2225.8
105°	299.0	367.4	435.8	452.9	913.6	1527.9	1835.0	2046.4	2469.0	2786.0	2765.2
107.5°	368.6	432.3	496.0	512.0	918.3	1459.9	1730.7	2025.5	2615.0	3057.1	3062.2
110°	415.5	473.1	530.6	545.0	911.2	1399.6	1643.8	1973.4	2632.4	3126.7	3148.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	461.6	516.4	571.3	585.0	911.6	1347.0	1564.7	1901.9	2576.5	3082.4	3115.6
115°	531.1	581.7	632.3	644.9	919.9	1286.6	1469.9	1794.8	2444.6	2932.0	2978.1
117.5°	599.8	645.8	691.7	703.2	937.0	1248.8	1404.7	1697.9	2284.3	2724.2	2775.3
120°	639.8	683.1	726.3	737.1	951.0	1236.1	1378.6	1646.5	2182.4	2584.3	2633.9
122.5°	678.9	722.5	766.2	777.1	971.0	1229.4	1358.6	1599.8	2082.4	2444.3	2493.3
125°	738.9	778.7	818.5	828.4	997.9	1223.9	1336.9	1541.9	1951.8	2259.2	2304.3
127.5°	787.6	827.8	868.0	878.0	1024.9	1220.7	1318.7	1494.7	1846.6	2110.6	2148.6
130°	813.7	856.9	900.1	911.0	1044.5	1222.6	1311.7	1468.3	1781.6	2016.6	2051.8
132.5°	840.6	883.9	927.0	937.9	1060.4	1223.9	1305.6	1445.8	1726.3	1936.7	1968.2
135°	880.6	919.9	959.4	969.2	1077.9	1222.8	1295.2	1412.6	1647.5	1823.7	1850.8
137.5°	921.4	960.4	999.5	1009.2	1104.0	1230.3	1293.4	1392.7	1591.3	1740.2	1762.5
140°	955.3	991.2	1027.1	1036.1	1119.9	1231.6	1287.4	1373.2	1544.7	1673.3	1694.1
142.5°	981.3	1014.6	1047.8	1056.1	1133.2	1236.0	1287.4	1362.7	1513.4	1626.4	1644.2
145°	1021.4	1050.3	1079.3	1086.6	1150.6	1236.0	1278.7	1340.3	1463.6	1556.0	1569.6
147.5°	1061.4	1089.6	1117.8	1124.8	1176.1	1244.5	1278.7	1327.2	1424.1	1496.8	1508.1
150°	1087.4	1113.0	1138.5	1144.8	1189.4	1249.0	1278.7	1319.6	1401.5	1462.9	1472.0
152.5°	1114.4	1133.7	1153.0	1157.8	1198.1	1251.9	1278.7	1313.6	1383.6	1436.0	1442.8
155°	1154.4	1168.7	1183.0	1186.5	1217.3	1258.2	1278.7	1306.5	1362.1	1403.8	1408.4
157.5°	1183.9	1197.8	1211.8	1215.2	1236.3	1264.6	1278.7	1300.3	1343.5	1376.0	1379.2
160°	1203.9	1214.7	1225.6	1228.3	1245.1	1267.5	1278.7	1297.2	1334.3	1362.1	1364.0
162.5°	1223.9	1232.0	1240.1	1242.1	1254.3	1270.5	1278.7	1294.3	1325.6	1349.1	1350.8
165°	1245.7	1253.0	1260.3	1262.1	1267.6	1275.0	1278.7	1289.9	1312.2	1329.1	1330.9
167.5°	1265.6	1269.1	1272.6	1273.4	1278.1	1284.3	1287.4	1294.7	1309.3	1320.4	1321.1
170°	1278.7	1282.1	1285.7	1286.5	1286.8	1287.2	1287.4	1294.7	1309.3	1320.4	1320.4
172.5°	1285.6	1286.3	1287.2	1287.4	1287.4	1287.4	1287.4	1293.2	1304.8	1313.4	1312.8
175°	1295.2	1295.2	1295.2	1295.2	1292.6	1289.1	1287.4	1291.0	1298.4	1303.9	1303.9
177.5°	1295.2	1295.2	1295.2	1295.2	1293.2	1290.5	1289.1	1292.0	1297.8	1302.1	1301.4
180°	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	872.1	872.1
2.5°	931.0	925.4
5°	1197.5	1203.1
7.5°	1612.5	1609.7
10°	2005.0	2030.3
12.5°	2291.1	2296.7
15°	2464.9	2476.1
17.5°	2532.2	2535.0
20°	2535.0	2529.4
22.5°	2504.2	2498.6
25°	2467.7	2464.9
27.5°	2434.1	2436.9
30°	2420.0	2428.5
32.5°	2420.0	2434.1
35°	2425.7	2439.7
37.5°	2422.9	2439.7
40°	2411.6	2431.3
42.5°	2380.8	2394.8
45°	2333.1	2349.9
47.5°	2271.4	2282.6
50°	2192.9	2204.1
52.5°	2094.8	2097.6
55°	1977.0	1988.2
57.5°	1850.8	1853.6
60°	1710.6	1719.0
62.5°	1562.0	1562.0
65°	1405.0	1410.6
67.5°	1242.3	1256.3
70°	1076.9	1079.7
72.5°	914.1	914.1
75°	745.9	748.7
77.5°	586.1	586.1
80°	434.6	437.4
82.5°	300.0	305.6
85°	187.9	187.9
87.5°	86.9	78.5
90°	33.0	33.0
92.5°	132.4	106.1
95°	461.2	381.6
97.5°	1105.0	953.6
100°	1592.1	1411.7
102.5°	2071.2	1916.7
105°	2682.1	2599.0
107.5°	3082.3	3102.4
110°	3234.8	3321.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3248.5	3381.4
115°	3162.3	3346.6
117.5°	2979.7	3184.1
120°	2832.5	3031.1
122.5°	2689.1	2885.1
125°	2484.7	2665.1
127.5°	2300.9	2453.0
130°	2192.4	2333.1
132.5°	2094.1	2220.1
135°	1959.4	2067.9
137.5°	1851.3	1940.2
140°	1777.2	1860.2
142.5°	1715.7	1787.2
145°	1623.6	1677.6
147.5°	1552.8	1597.7
150°	1508.3	1544.7
152.5°	1470.3	1497.7
155°	1426.5	1444.7
157.5°	1392.0	1404.7
160°	1371.3	1378.6
162.5°	1357.8	1364.8
165°	1338.2	1345.6
167.5°	1324.3	1327.4
170°	1320.4	1320.4
172.5°	1310.1	1307.4
175°	1303.9	1303.9
177.5°	1298.3	1295.2
180°	1295.2	1295.2



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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	3.94	4.79	4.94	5.80	7.14	17.13	17.98	18.13	18.99	20.34
	3H	4.65	5.41	5.65	6.43	7.79	18.98	19.74	19.98	20.76	22.12
	4H	4.94	5.66	5.96	6.69	8.06	19.62	20.35	20.64	21.37	22.74
	6H	5.19	5.86	6.22	6.89	8.27	20.06	20.73	21.09	21.75	23.14
	8H	5.26	5.89	6.29	6.94	8.32	20.18	20.82	21.22	21.86	23.24
	12H	5.28	5.88	6.32	6.92	8.32	20.25	20.86	21.29	21.89	23.30
4H	2H	11.16	11.89	12.19	12.91	14.28	17.41	18.13	18.43	19.15	20.52
	3H	12.73	13.33	13.76	14.38	15.77	19.45	20.06	20.49	21.11	22.50
	4H	12.82	13.38	13.86	14.42	15.83	20.22	20.78	21.27	21.82	23.23
	6H	12.83	13.31	13.88	14.38	15.78	20.77	21.25	21.82	22.31	23.71
	8H	12.81	13.25	13.86	14.31	15.73	20.93	21.38	21.98	22.44	23.86
	12H	12.76	13.17	13.84	14.24	15.67	21.03	21.43	22.10	22.51	23.93
8H	4H	14.27	14.72	15.32	15.78	17.19	20.28	20.73	21.34	21.79	23.21
	6H	14.51	14.88	15.59	15.98	17.40	20.92	21.29	21.99	22.39	23.80
	8H	14.53	14.85	15.61	15.94	17.37	21.14	21.46	22.22	22.55	23.98
	12H	14.50	14.78	15.58	15.86	17.34	21.29	21.57	22.37	22.65	24.13
12H	4H	14.41	14.82	15.48	15.89	17.32	20.24	20.64	21.31	21.71	23.14
	6H	14.77	15.10	15.85	16.18	17.62	20.90	21.23	21.98	22.31	23.75
	8H	14.84	15.13	15.93	16.21	17.68	21.13	21.42	22.22	22.50	23.97