

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: P937349

Luminaire Tested: SQ4-FB-075U-125D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937349
REPORT IS A COMBINATION OF REPORTS P933496 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-125D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

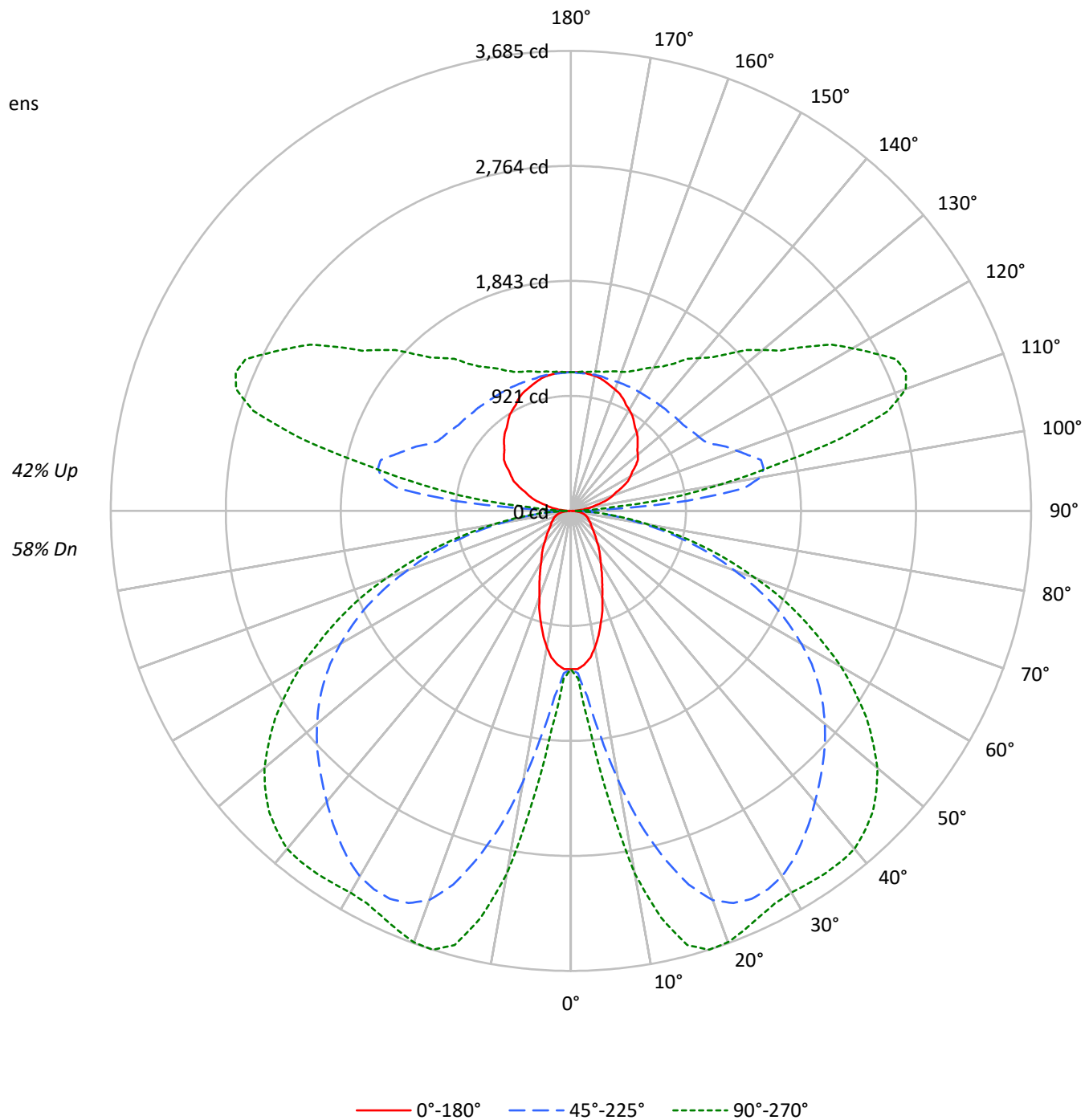
Lumens per Lamp: N/A
Luminaire Lumens: 17025.2 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 186
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17
9	49	36	28	23	46	34	27	22	30	24	20	26	21	17	22	18	15
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3922	3922	3922
5°	3832	4534	5271
10°	3478	6610	8738
15°	2957	8638	10552
20°	2408	10012	10754
25°	2010	10480	10535
30°	1695	10549	10515
35°	1500	10377	10787
40°	1308	10152	11068
45°	1185	9988	11112
50°	1088	9841	10928
55°	1043	9625	10443
60°	1069	9207	9678
65°	1114	8569	8627
70°	1189	7478	7289
75°	1322	6103	5688
80°	1456	4237	3833
85°	1322	2252	1961

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 11112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	1.0
10°-20°	726.8	4.3
20°-30°	1271.4	7.5
30°-40°	1636.6	9.6
40°-50°	1828.0	10.7
50°-60°	1750.8	10.3
60°-70°	1387.6	8.2
70°-80°	815.9	4.8
80°-90°	230.9	1.4
90°-100°	542.4	3.2
100°-110°	1426.0	8.4
110°-120°	1478.5	8.7
120°-130°	1186.0	7.0
130°-140°	930.6	5.5
140°-150°	714.3	4.2
150°-160°	514.4	3.0
160°-170°	314.7	1.8
170°-180°	106.3	0.6
0°-30°	2162.2	12.7
0°-40°	3798.8	22.3
0°-60°	7377.7	43.3
0°-90°	9812.1	57.6
90°-120°	3446.9	20.2
90°-150°	6277.7	36.9
90°-180°	7213.0	42.4
0°-180°	17025.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1235	1325	1492	1688	1749	114
15°	925	1708	2878	3490	3600	258
25°	591	1936	3428	3579	3583	272
35°	400	1851	3229	3412	3547	249
45°	273	1476	2854	3269	3416	211
55°	196	938	2422	2813	2890	178
65°	155	497	1798	2022	2050	154
75°	114	306	987	1084	1088	119
85°	41	94	245	269	273	43
90°	8	21	57	28	28	9
95°	72	281	934	482	328	80
105°	257	389	1576	2393	2233	272
115°	456	554	1263	2519	2875	451
125°	635	712	1148	1941	2290	564
135°	756	833	1113	1567	1777	585
145°	877	934	1098	1337	1441	550
155°	992	1019	1098	1206	1241	456
165°	1070	1084	1098	1142	1156	302
175°	1113	1113	1106	1120	1120	106
180°	1113	1113	1113	1113	1113	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9
2.5°	1267.9	1267.9	1276.0	1280.1	1288.2	1292.3	1300.5	1308.6	1333.1	1337.2	1345.3
5°	1235.2	1251.5	1304.5	1324.9	1382.0	1459.5	1492.1	1545.1	1655.1	1687.7	1708.1
7.5°	1186.3	1223.0	1353.5	1386.1	1528.8	1732.6	1818.2	1932.3	2107.6	2193.2	2262.5
10°	1108.9	1186.3	1418.7	1496.1	1728.5	2038.3	2197.2	2356.2	2621.2	2739.4	2784.3
12.5°	1023.3	1149.6	1488.0	1594.0	1928.2	2380.7	2572.3	2747.6	3049.3	3208.3	3232.7
15°	925.4	1096.6	1553.2	1708.1	2140.2	2666.1	2878.0	3094.1	3375.4	3489.6	3518.1
17.5°	839.8	1055.9	1614.4	1777.4	2303.2	2922.9	3139.0	3318.3	3546.6	3624.1	3644.5
20°	733.8	990.6	1655.1	1867.1	2474.5	3110.4	3318.3	3456.9	3611.9	3660.8	3668.9
22.5°	656.3	921.3	1679.6	1899.7	2588.6	3224.6	3399.9	3509.9	3615.9	3632.2	3636.3
25°	591.1	843.9	1675.5	1936.4	2686.4	3293.9	3428.4	3509.9	3571.1	3579.2	3579.2
27.5°	530.0	758.3	1659.2	1944.5	2759.8	3310.2	3416.2	3473.2	3501.8	3518.1	3518.1
30°	477.0	676.7	1618.4	1928.2	2792.4	3293.9	3379.5	3408.0	3436.6	3461.0	3473.2
32.5°	436.2	599.3	1557.3	1895.6	2796.5	3253.1	3314.3	3330.6	3371.3	3428.4	3448.8
35°	399.5	521.8	1488.0	1850.8	2772.1	3187.9	3228.6	3245.0	3326.5	3412.1	3440.6
37.5°	362.8	464.7	1398.3	1773.3	2735.4	3110.4	3139.0	3167.5	3293.9	3395.8	3428.4
40°	326.1	415.8	1292.3	1687.7	2678.3	3016.7	3041.1	3086.0	3253.1	3371.3	3403.9
42.5°	297.6	375.1	1178.2	1598.1	2604.9	2910.7	2947.4	3012.6	3204.2	3330.6	3367.3
45°	273.1	334.3	1055.9	1475.8	2511.1	2800.6	2853.6	2943.3	3147.1	3269.4	3302.0
47.5°	248.7	305.8	929.5	1349.4	2409.2	2690.5	2759.8	2861.7	3069.7	3187.9	3216.4
50°	228.3	277.2	803.1	1214.9	2299.2	2572.3	2653.8	2759.8	2971.8	3081.9	3118.6
52.5°	212.0	252.8	684.9	1080.3	2172.8	2450.0	2543.8	2653.8	2853.6	2959.6	2984.0
55°	195.7	232.4	583.0	937.6	2042.4	2319.5	2421.5	2527.5	2723.1	2812.8	2829.1
57.5°	187.5	216.1	497.4	803.1	1903.8	2172.8	2286.9	2384.8	2568.2	2637.5	2653.8
60°	175.3	203.8	432.1	689.0	1752.9	2034.2	2132.0	2229.9	2384.8	2441.8	2454.1
62.5°	163.1	195.7	383.2	578.9	1598.1	1871.2	1969.0	2058.7	2189.1	2229.9	2246.2
65°	154.9	187.5	346.5	497.4	1439.1	1700.0	1797.8	1875.2	1981.2	2022.0	2030.1
67.5°	146.8	179.4	318.0	428.1	1280.1	1528.8	1602.1	1675.5	1757.0	1797.8	1801.9
70°	134.5	171.2	293.5	379.1	1117.0	1333.1	1394.2	1471.7	1536.9	1557.3	1569.5
72.5°	126.4	159.0	277.2	342.4	949.9	1145.6	1202.6	1247.5	1304.5	1324.9	1324.9
75°	114.1	142.7	260.9	305.8	778.6	937.6	986.6	1031.4	1076.2	1084.4	1072.2
77.5°	101.9	126.4	224.2	256.8	607.4	742.0	782.7	807.2	843.9	852.0	856.1
80°	85.6	110.1	175.3	199.8	440.3	546.3	574.8	595.2	627.8	627.8	636.0
82.5°	65.2	85.6	126.4	142.7	297.6	375.1	399.5	411.7	432.1	432.1	432.1
85°	40.8	53.0	81.5	93.8	179.4	228.3	244.6	248.7	265.0	269.1	269.1
87.5°	20.4	28.5	53.0	57.1	93.8	118.2	118.2	126.4	126.4	122.3	118.2
90°	7.5	13.4	19.4	20.9	32.8	48.8	56.8	50.4	37.8	28.3	28.3
92.5°	29.9	80.6	131.5	144.1	202.6	280.6	319.6	280.1	201.2	141.9	136.3
95°	71.7	164.6	257.6	280.8	498.6	789.0	934.2	833.7	632.5	481.6	464.5
97.5°	124.0	206.0	288.0	308.4	671.6	1155.8	1397.9	1334.3	1207.2	1111.9	1079.4
100°	164.3	238.7	313.0	331.6	734.6	1271.9	1540.6	1545.2	1554.5	1561.5	1522.7
102.5°	198.7	268.0	337.3	354.7	763.4	1308.4	1580.9	1661.9	1823.9	1945.3	1912.2
105°	256.9	315.7	374.4	389.1	784.9	1312.6	1576.4	1758.0	2121.1	2393.4	2375.6
107.5°	316.6	371.4	426.2	439.9	788.9	1254.2	1486.8	1740.1	2246.6	2626.4	2630.7
110°	356.9	406.4	455.9	468.2	782.8	1202.4	1412.2	1695.3	2261.5	2686.1	2704.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	396.5	443.7	490.8	502.6	783.2	1157.2	1344.2	1633.9	2213.5	2648.1	2676.6
115°	456.3	499.7	543.2	554.1	790.3	1105.3	1262.8	1541.9	2100.2	2518.9	2558.4
117.5°	515.3	554.8	594.2	604.1	805.0	1072.8	1206.7	1458.6	1962.5	2340.3	2384.3
120°	549.7	586.8	623.9	633.2	817.0	1061.9	1184.3	1414.5	1874.8	2220.1	2262.8
122.5°	583.2	620.7	658.2	667.6	834.2	1056.2	1167.2	1374.4	1789.0	2099.9	2142.0
125°	634.8	669.0	703.2	711.7	857.3	1051.4	1148.5	1324.6	1676.7	1940.9	1979.6
127.5°	676.6	711.1	745.7	754.3	880.5	1048.7	1132.9	1284.1	1586.4	1813.2	1845.9
130°	699.0	736.2	773.3	782.6	897.4	1050.3	1126.8	1261.4	1530.6	1732.5	1762.7
132.5°	722.1	759.3	796.4	805.7	911.0	1051.4	1121.6	1242.1	1483.1	1663.8	1690.9
135°	756.5	790.3	824.2	832.6	926.0	1050.5	1112.7	1213.6	1415.4	1566.7	1590.0
137.5°	791.6	825.1	858.6	867.0	948.4	1056.9	1111.2	1196.5	1367.1	1495.0	1514.1
140°	820.7	851.5	882.4	890.1	962.1	1058.0	1106.0	1179.7	1327.0	1437.5	1455.4
142.5°	843.1	871.7	900.2	907.3	973.6	1061.8	1106.0	1170.7	1300.1	1397.2	1412.6
145°	877.4	902.3	927.2	933.5	988.5	1061.8	1098.5	1151.4	1257.3	1336.8	1348.4
147.5°	911.8	936.1	960.3	966.3	1010.4	1069.1	1098.5	1140.2	1223.5	1285.9	1295.6
150°	934.2	956.1	978.1	983.5	1021.8	1073.0	1098.5	1133.7	1204.0	1256.8	1264.6
152.5°	957.3	974.0	990.5	994.7	1029.3	1075.5	1098.5	1128.5	1188.6	1233.6	1239.5
155°	991.7	1004.0	1016.3	1019.3	1045.7	1080.9	1098.5	1122.4	1170.2	1206.0	1210.0
157.5°	1017.1	1029.0	1041.0	1044.0	1062.1	1086.4	1098.5	1117.1	1154.2	1182.1	1184.8
160°	1034.3	1043.6	1052.9	1055.2	1069.7	1088.9	1098.5	1114.4	1146.3	1170.2	1171.8
162.5°	1051.4	1058.4	1065.3	1067.1	1077.5	1091.5	1098.5	1111.9	1138.8	1159.0	1160.5
165°	1070.2	1076.4	1082.7	1084.3	1089.0	1095.4	1098.5	1108.1	1127.3	1141.8	1143.4
167.5°	1087.3	1090.2	1093.3	1094.0	1098.0	1103.3	1106.0	1112.2	1124.8	1134.3	1135.0
170°	1098.5	1101.5	1104.5	1105.2	1105.5	1105.8	1106.0	1112.2	1124.8	1134.3	1134.3
172.5°	1104.4	1105.1	1105.8	1106.0	1106.0	1106.0	1106.0	1111.0	1120.9	1128.4	1127.8
175°	1112.7	1112.7	1112.7	1112.7	1110.5	1107.5	1106.0	1109.1	1115.4	1120.2	1120.2
177.5°	1112.7	1112.7	1112.7	1112.7	1111.0	1108.6	1107.5	1110.0	1115.0	1118.7	1118.0
180°	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1267.9	1267.9
2.5°	1353.5	1345.3
5°	1740.7	1748.9
7.5°	2344.0	2339.9
10°	2914.7	2951.4
12.5°	3330.6	3338.7
15°	3583.3	3599.6
17.5°	3681.2	3685.2
20°	3685.2	3677.1
22.5°	3640.4	3632.2
25°	3587.4	3583.3
27.5°	3538.5	3542.6
30°	3518.1	3530.3
32.5°	3518.1	3538.5
35°	3526.2	3546.6
37.5°	3522.2	3546.6
40°	3505.9	3534.4
42.5°	3461.0	3481.4
45°	3391.7	3416.2
47.5°	3302.0	3318.3
50°	3187.9	3204.2
52.5°	3045.2	3049.3
55°	2874.0	2890.3
57.5°	2690.5	2694.6
60°	2486.7	2498.9
62.5°	2270.6	2270.6
65°	2042.4	2050.5
67.5°	1805.9	1826.3
70°	1565.4	1569.5
72.5°	1329.0	1329.0
75°	1084.4	1088.5
77.5°	852.0	852.0
80°	631.9	636.0
82.5°	436.2	444.4
85°	273.1	273.1
87.5°	126.4	114.1
90°	28.3	28.3
92.5°	113.7	91.1
95°	396.2	327.9
97.5°	949.3	819.2
100°	1367.7	1212.8
102.5°	1779.4	1646.6
105°	2304.2	2232.8
107.5°	2648.0	2665.2
110°	2779.0	2853.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2790.7	2904.9
115°	2716.7	2875.1
117.5°	2559.8	2735.4
120°	2433.4	2604.0
122.5°	2310.2	2478.5
125°	2134.6	2289.6
127.5°	1976.7	2107.4
130°	1883.5	2004.4
132.5°	1799.0	1907.3
135°	1683.3	1776.6
137.5°	1590.4	1666.8
140°	1526.7	1598.1
142.5°	1474.0	1535.3
145°	1394.8	1441.2
147.5°	1334.0	1372.6
150°	1295.8	1327.0
152.5°	1263.1	1286.6
155°	1225.5	1241.1
157.5°	1195.8	1206.7
160°	1178.1	1184.3
162.5°	1166.4	1172.5
165°	1149.7	1156.0
167.5°	1137.7	1140.3
170°	1134.3	1134.3
172.5°	1125.5	1123.2
175°	1120.2	1120.2
177.5°	1115.4	1112.7
180°	1112.7	1112.7

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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	6.43	7.41	7.31	8.31	9.47	19.62	20.60	20.50	21.50	22.66
	3H	7.14	8.02	8.03	8.94	10.12	21.47	22.35	22.36	23.27	24.45
	4H	7.44	8.28	8.35	9.20	10.39	22.12	22.96	23.03	23.88	25.07
	6H	7.70	8.47	8.62	9.40	10.60	22.57	23.34	23.49	24.27	25.47
	8H	7.77	8.51	8.70	9.45	10.65	22.69	23.43	23.62	24.37	25.58
	12H	7.79	8.49	8.73	9.43	10.66	22.77	23.47	23.70	24.41	25.64
4H	2H	13.66	14.50	14.57	15.42	16.61	19.90	20.74	20.82	21.66	22.85
	3H	15.24	15.94	16.16	16.89	18.10	21.97	22.67	22.89	23.62	24.82
	4H	15.34	15.98	16.28	16.93	18.16	22.74	23.38	23.68	24.33	25.56
	6H	15.36	15.91	16.31	16.88	18.11	23.29	23.85	24.24	24.82	26.05
	8H	15.34	15.86	16.29	16.82	18.06	23.46	23.98	24.41	24.94	26.19
	12H	15.30	15.77	16.27	16.75	18.00	23.56	24.03	24.53	25.01	26.26
8H	4H	16.80	17.32	17.75	18.28	19.53	22.81	23.33	23.76	24.30	25.54
	6H	17.05	17.48	18.02	18.48	19.73	23.45	23.88	24.43	24.89	26.13
	8H	17.07	17.45	18.05	18.44	19.70	23.68	24.06	24.66	25.05	26.31
	12H	17.04	17.38	18.03	18.36	19.67	23.83	24.16	24.82	25.15	26.46
12H	4H	16.95	17.42	17.92	18.40	19.65	22.77	23.24	23.74	24.22	25.47
	6H	17.31	17.69	18.29	18.68	19.94	23.44	23.82	24.42	24.81	26.07
	8H	17.38	17.72	18.37	18.71	20.01	23.68	24.01	24.67	25.00	26.31

END OF REPORT