

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: P937253

Luminaire Tested: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937253
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-93050-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

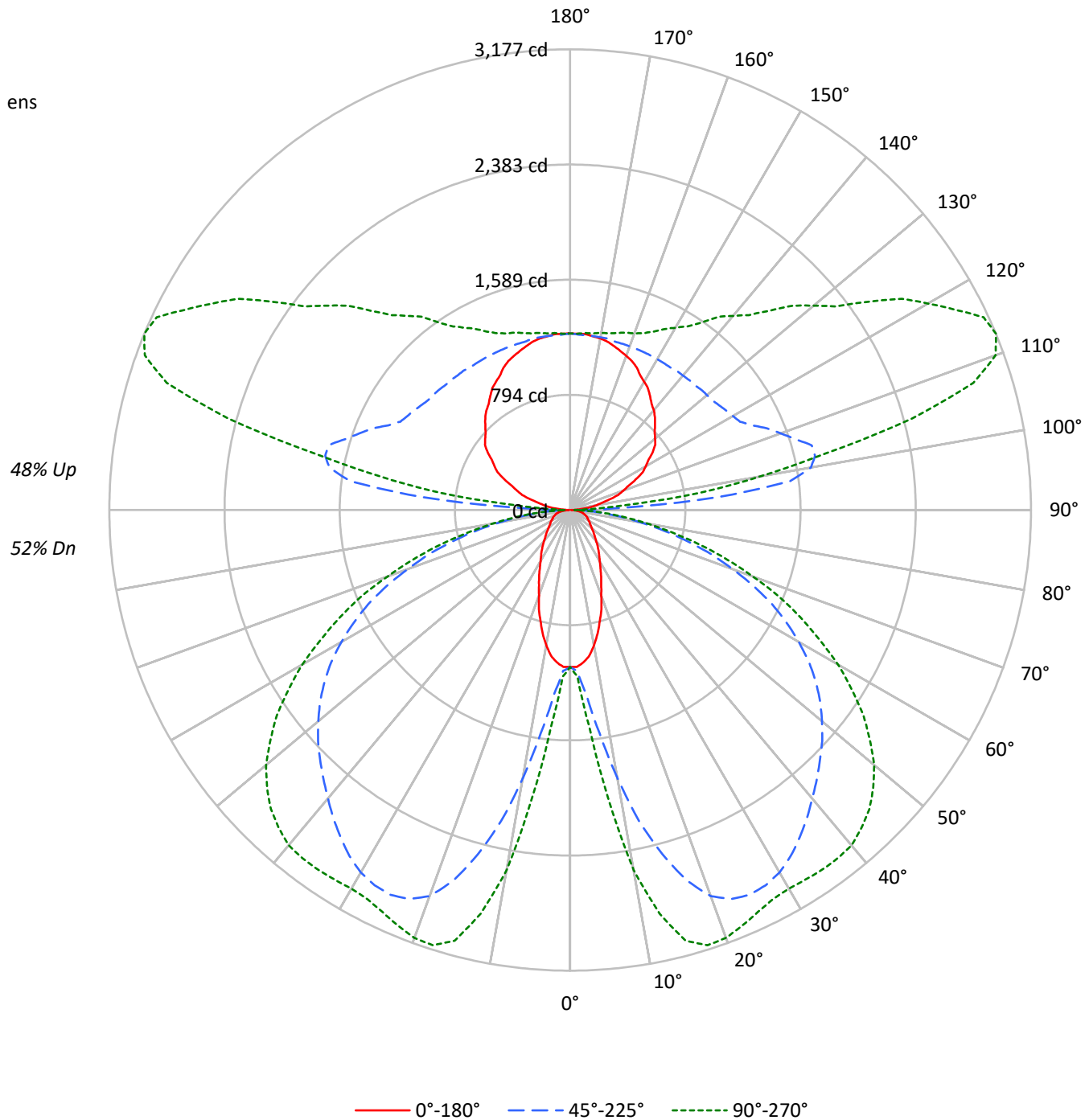
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16269.7 lumens
Efficiency: N/A
Efficacy: 105.9 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°	3349	3349	3349
5°	3273	3872	4501
10°	2970	5645	7462
15°	2525	7376	9011
20°	2056	8551	9183
25°	1716	8950	8997
30°	1448	9008	8980
35°	1281	8862	9212
40°	1117	8669	9452
45°	1012	8529	9489
50°	929	8404	9332
55°	891	8220	8918
60°	913	7862	8265
65°	951	7317	7368
70°	1016	6386	6224
75°	1130	5212	4857
80°	1243	3619	3273
85°	1128	1923	1676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	0.9
10°-20°	620.7	3.8
20°-30°	1085.7	6.7
30°-40°	1397.6	8.6
40°-50°	1561.1	9.6
50°-60°	1495.1	9.2
60°-70°	1184.9	7.3
70°-80°	696.8	4.3
80°-90°	198.2	1.2
90°-100°	593.2	3.6
100°-110°	1559.7	9.6
110°-120°	1617.2	9.9
120°-130°	1297.2	8.0
130°-140°	1017.8	6.3
140°-150°	781.2	4.8
150°-160°	562.6	3.5
160°-170°	344.2	2.1
170°-180°	116.3	0.7
0°-30°	1846.4	11.3
0°-40°	3244.0	19.9
0°-60°	6300.2	38.7
0°-90°	8380.1	51.5
90°-120°	3770.1	23.2
90°-150°	6866.4	42.2
90°-180°	7890.0	48.5
0°-180°	16269.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1055	1131	1274	1441	1494	97
15°	790	1459	2458	2980	3074	220
25°	505	1654	2928	3056	3060	233
35°	341	1580	2757	2914	3029	213
45°	233	1260	2437	2792	2917	180
55°	167	801	2068	2402	2468	152
65°	132	425	1535	1727	1751	131
75°	98	261	842	926	930	102
85°	35	80	209	230	233	37
90°	8	23	62	31	31	9
95°	78	307	1022	527	359	87
105°	281	426	1724	2618	2442	298
115°	499	606	1381	2755	3145	493
125°	694	778	1256	2123	2504	616
135°	827	911	1217	1714	1943	640
145°	960	1021	1202	1462	1576	601
155°	1085	1115	1202	1319	1358	498
165°	1170	1186	1202	1249	1264	330
175°	1217	1217	1210	1225	1225	116
180°	1217	1217	1217	1217	1217	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1082.7	1082.7	1089.6	1093.1	1100.1	1103.6	1110.5	1117.5	1138.4	1141.9	1148.8
5°	1054.8	1068.7	1114.0	1131.4	1180.2	1246.3	1274.2	1319.4	1413.4	1441.2	1458.6
7.5°	1013.0	1044.4	1155.8	1183.6	1305.4	1479.5	1552.7	1650.1	1799.8	1872.9	1932.1
10°	946.9	1013.0	1211.4	1277.6	1476.1	1740.6	1876.4	2012.2	2238.4	2339.4	2377.6
12.5°	873.8	981.7	1270.6	1361.2	1646.6	2033.0	2196.6	2346.4	2604.0	2739.8	2760.6
15°	790.2	936.4	1326.3	1458.6	1827.7	2276.7	2457.7	2642.3	2882.5	2979.9	3004.3
17.5°	717.1	901.7	1378.6	1517.8	1966.9	2496.0	2680.6	2833.8	3028.6	3094.8	3112.3
20°	626.6	846.0	1413.4	1594.4	2113.1	2656.2	2833.8	2952.1	3084.3	3126.1	3133.1
22.5°	560.4	786.8	1434.3	1622.2	2210.6	2753.6	2903.3	2997.4	3087.8	3101.8	3105.2
25°	504.8	720.6	1430.8	1653.6	2294.1	2812.8	2927.7	2997.4	3049.5	3056.5	3056.5
27.5°	452.6	647.5	1416.9	1660.5	2356.8	2826.7	2917.3	2966.0	2990.4	3004.3	3004.3
30°	407.3	577.9	1382.0	1646.6	2384.7	2812.8	2885.9	2910.3	2934.7	2955.6	2966.0
32.5°	372.5	511.7	1329.8	1618.8	2388.1	2778.1	2830.2	2844.2	2879.0	2927.7	2945.1
35°	341.1	445.6	1270.6	1580.5	2367.2	2722.3	2757.2	2771.0	2840.7	2913.8	2938.2
37.5°	309.9	396.9	1194.1	1514.4	2335.9	2656.2	2680.6	2704.9	2812.8	2899.9	2927.7
40°	278.5	355.1	1103.6	1441.2	2287.2	2576.1	2597.0	2635.3	2778.1	2879.0	2906.8
42.5°	254.1	320.3	1006.1	1364.6	2224.5	2485.6	2516.9	2572.6	2736.3	2844.2	2875.5
45°	233.3	285.4	901.7	1260.2	2144.5	2391.6	2436.8	2513.4	2687.5	2791.9	2819.8
47.5°	212.4	261.1	793.7	1152.3	2057.4	2297.6	2356.8	2443.8	2621.4	2722.3	2746.7
50°	195.0	236.7	685.8	1037.4	1963.4	2196.6	2266.3	2356.8	2537.9	2631.8	2663.2
52.5°	181.0	215.8	584.9	922.6	1855.5	2092.2	2172.3	2266.3	2436.8	2527.4	2548.3
55°	167.1	198.4	497.8	800.7	1744.1	1980.8	2067.9	2158.3	2325.5	2402.1	2415.9
57.5°	160.1	184.5	424.7	685.8	1625.7	1855.5	1953.0	2036.5	2193.2	2252.3	2266.3
60°	149.7	174.1	369.0	588.3	1496.9	1737.1	1820.7	1904.2	2036.5	2085.3	2095.7
62.5°	139.2	167.1	327.3	494.3	1364.6	1597.9	1681.4	1758.0	1869.5	1904.2	1918.1
65°	132.3	160.1	295.9	424.7	1228.9	1451.7	1535.2	1601.4	1691.9	1726.7	1733.7
67.5°	125.3	153.2	271.6	365.5	1093.1	1305.4	1368.1	1430.8	1500.4	1535.2	1538.7
70°	114.9	146.2	250.7	323.7	953.8	1138.4	1190.6	1256.8	1312.4	1329.8	1340.3
72.5°	107.9	135.8	236.7	292.4	811.1	978.3	1027.0	1065.3	1114.0	1131.4	1131.4
75°	97.5	121.8	222.8	261.1	664.9	800.7	842.5	880.8	919.1	926.0	915.5
77.5°	87.0	107.9	191.5	219.3	518.7	633.6	668.4	689.3	720.6	727.6	731.1
80°	73.1	94.0	149.7	170.6	376.0	466.5	490.9	508.3	536.1	536.1	543.1
82.5°	55.7	73.1	107.9	121.8	254.1	320.3	341.1	351.6	369.0	369.0	369.0
85°	34.8	45.2	69.6	80.1	153.2	195.0	208.9	212.4	226.3	229.8	229.8
87.5°	17.4	24.3	45.2	48.7	80.1	100.9	100.9	107.9	107.9	104.4	100.9
90°	8.2	14.7	21.2	22.8	35.9	53.4	62.1	55.2	41.4	31.0	31.0
92.5°	32.7	88.2	143.8	157.7	221.6	306.9	349.6	306.4	220.0	155.2	149.0
95°	78.4	180.1	281.8	307.1	545.3	863.0	1021.8	911.9	691.8	526.8	508.1
97.5°	135.6	225.3	315.0	337.4	734.6	1264.2	1529.0	1459.5	1320.4	1216.2	1180.6
100°	179.7	261.0	342.4	362.7	803.5	1391.1	1685.0	1690.1	1700.3	1707.9	1665.5
102.5°	217.3	293.2	369.0	387.9	835.0	1431.1	1729.2	1817.7	1994.9	2127.8	2091.5
105°	281.0	345.3	409.5	425.5	858.5	1435.7	1724.3	1922.9	2320.0	2617.9	2598.4
107.5°	346.3	406.2	466.1	481.1	862.8	1371.8	1626.3	1903.3	2457.2	2872.7	2877.4
110°	390.4	444.5	498.6	512.1	856.3	1315.2	1544.6	1854.3	2473.6	2938.0	2958.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	433.7	485.3	536.8	549.7	856.6	1265.7	1470.3	1787.2	2421.0	2896.4	2927.6
115°	499.1	546.6	594.2	606.0	864.4	1209.0	1381.2	1686.5	2297.1	2755.1	2798.4
117.5°	563.6	606.8	649.9	660.7	880.5	1173.4	1319.9	1595.4	2146.5	2559.8	2607.9
120°	601.2	641.9	682.4	692.6	893.6	1161.5	1295.4	1547.1	2050.7	2428.3	2475.0
122.5°	637.9	678.9	719.9	730.2	912.4	1155.2	1276.6	1503.3	1956.8	2296.8	2342.9
125°	694.3	731.7	769.1	778.4	937.7	1150.0	1256.2	1448.8	1834.0	2122.9	2165.3
127.5°	740.1	777.8	815.6	825.0	963.1	1147.1	1239.1	1404.5	1735.2	1983.2	2019.0
130°	764.6	805.2	845.8	856.0	981.5	1148.8	1232.5	1379.7	1674.1	1894.9	1928.0
132.5°	789.9	830.5	871.1	881.3	996.4	1150.0	1226.8	1358.6	1622.1	1819.8	1849.4
135°	827.4	864.4	901.5	910.7	1012.9	1149.0	1217.1	1327.4	1548.1	1713.7	1739.1
137.5°	865.8	902.5	939.2	948.3	1037.4	1156.0	1215.4	1308.7	1495.3	1635.2	1656.1
140°	897.6	931.4	965.2	973.6	1052.3	1157.2	1209.7	1290.3	1451.5	1572.3	1591.8
142.5°	922.1	953.4	984.6	992.4	1064.9	1161.4	1209.7	1280.5	1422.1	1528.2	1545.0
145°	959.7	986.9	1014.2	1021.0	1081.2	1161.4	1201.5	1259.4	1375.2	1462.1	1474.8
147.5°	997.3	1023.8	1050.4	1056.9	1105.2	1169.4	1201.5	1247.1	1338.2	1406.5	1417.1
150°	1021.8	1045.8	1069.8	1075.7	1117.6	1173.6	1201.5	1240.0	1316.9	1374.6	1383.1
152.5°	1047.1	1065.3	1083.4	1088.0	1125.8	1176.3	1201.5	1234.4	1300.1	1349.3	1355.7
155°	1084.7	1098.1	1111.6	1114.9	1143.8	1182.3	1201.5	1227.7	1279.9	1319.1	1323.4
157.5°	1112.5	1125.5	1138.6	1141.9	1161.7	1188.3	1201.5	1221.8	1262.5	1292.9	1295.9
160°	1131.3	1141.4	1151.6	1154.2	1170.0	1191.0	1201.5	1218.9	1253.8	1279.9	1281.7
162.5°	1150.0	1157.7	1165.2	1167.2	1178.6	1193.9	1201.5	1216.2	1245.6	1267.7	1269.3
165°	1170.5	1177.4	1184.2	1186.0	1191.2	1198.1	1201.5	1212.1	1233.0	1248.9	1250.6
167.5°	1189.2	1192.5	1195.8	1196.6	1201.0	1206.8	1209.7	1216.5	1230.3	1240.7	1241.4
170°	1201.5	1204.8	1208.1	1208.9	1209.2	1209.5	1209.7	1216.5	1230.3	1240.7	1240.7
172.5°	1208.0	1208.7	1209.5	1209.7	1209.7	1209.7	1209.7	1215.1	1226.0	1234.2	1233.6
175°	1217.1	1217.1	1217.1	1217.1	1214.6	1211.4	1209.7	1213.1	1220.0	1225.2	1225.2
177.5°	1217.1	1217.1	1217.1	1217.1	1215.1	1212.6	1211.4	1214.1	1219.5	1223.6	1222.9
180°	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1	1217.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1082.7	1082.7
2.5°	1155.8	1148.8
5°	1486.5	1493.5
7.5°	2001.7	1998.2
10°	2489.1	2520.4
12.5°	2844.2	2851.1
15°	3060.0	3074.0
17.5°	3143.5	3147.0
20°	3147.0	3140.1
22.5°	3108.7	3101.8
25°	3063.5	3060.0
27.5°	3021.7	3025.2
30°	3004.3	3014.8
32.5°	3004.3	3021.7
35°	3011.3	3028.6
37.5°	3007.7	3028.6
40°	2993.9	3018.2
42.5°	2955.6	2973.0
45°	2896.4	2917.3
47.5°	2819.8	2833.8
50°	2722.3	2736.3
52.5°	2600.5	2604.0
55°	2454.2	2468.2
57.5°	2297.6	2301.1
60°	2123.6	2134.0
62.5°	1939.0	1939.0
65°	1744.1	1751.1
67.5°	1542.2	1559.6
70°	1336.8	1340.3
72.5°	1134.9	1134.9
75°	926.0	929.5
77.5°	727.6	727.6
80°	539.6	543.1
82.5°	372.5	379.4
85°	233.3	233.3
87.5°	107.9	97.5
90°	31.0	31.0
92.5°	124.4	99.7
95°	433.4	358.6
97.5°	1038.3	896.0
100°	1496.0	1326.5
102.5°	1946.2	1801.0
105°	2520.3	2442.2
107.5°	2896.3	2915.2
110°	3039.6	3121.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3052.4	3177.3
115°	2971.5	3144.7
117.5°	2799.8	2991.9
120°	2661.6	2848.2
122.5°	2526.9	2711.0
125°	2334.8	2504.3
127.5°	2162.0	2305.0
130°	2060.1	2192.3
132.5°	1967.7	2086.1
135°	1841.2	1943.2
137.5°	1739.6	1823.1
140°	1669.9	1747.9
142.5°	1612.2	1679.3
145°	1525.6	1576.4
147.5°	1459.1	1501.3
150°	1417.3	1451.5
152.5°	1381.6	1407.3
155°	1340.5	1357.5
157.5°	1308.0	1319.9
160°	1288.6	1295.4
162.5°	1275.8	1282.4
165°	1257.5	1264.4
167.5°	1244.4	1247.3
170°	1240.7	1240.7
172.5°	1231.0	1228.5
175°	1225.2	1225.2
177.5°	1220.0	1217.1
180°	1217.1	1217.1



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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	5.35	6.26	6.28	7.22	8.47	18.54	19.45	19.47	20.41	21.66
	3H	6.06	6.88	7.00	7.85	9.11	20.39	21.21	21.33	22.18	23.45
	4H	6.36	7.14	7.32	8.11	9.39	21.04	21.82	22.00	22.79	24.07
	6H	6.61	7.33	7.58	8.31	9.60	21.48	22.20	22.45	23.17	24.46
	8H	6.68	7.36	7.66	8.36	9.65	21.60	22.29	22.58	23.28	24.57
	12H	6.70	7.35	7.68	8.34	9.65	21.67	22.33	22.66	23.32	24.63
4H	2H	12.58	13.36	13.54	14.33	15.61	18.82	19.60	19.79	20.57	21.85
	3H	14.15	14.80	15.13	15.80	17.09	20.87	21.53	21.85	22.53	23.82
	4H	14.24	14.84	15.23	15.84	17.15	21.65	22.24	22.63	23.24	24.56
	6H	14.26	14.77	15.26	15.79	17.11	22.19	22.71	23.19	23.73	25.04
	8H	14.24	14.72	15.24	15.73	17.06	22.36	22.84	23.36	23.85	25.18
	12H	14.20	14.63	15.22	15.66	16.99	22.46	22.90	23.48	23.92	25.26
8H	4H	15.70	16.18	16.70	17.19	18.52	21.71	22.19	22.71	23.21	24.53
	6H	15.94	16.34	16.97	17.40	18.72	22.35	22.75	23.37	23.80	25.13
	8H	15.96	16.31	17.00	17.35	18.70	22.57	22.92	23.61	23.96	25.31
	12H	15.93	16.24	16.97	17.28	18.67	22.72	23.03	23.76	24.07	25.46
12H	4H	15.85	16.28	16.87	17.31	18.64	21.67	22.10	22.69	23.13	24.47
	6H	16.20	16.56	17.24	17.60	18.94	22.33	22.69	23.37	23.72	25.07
	8H	16.28	16.59	17.31	17.62	19.01	22.57	22.88	23.61	23.91	25.30