

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: P938575

Luminaire Tested: SQ4-FB-150U-125D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938575
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

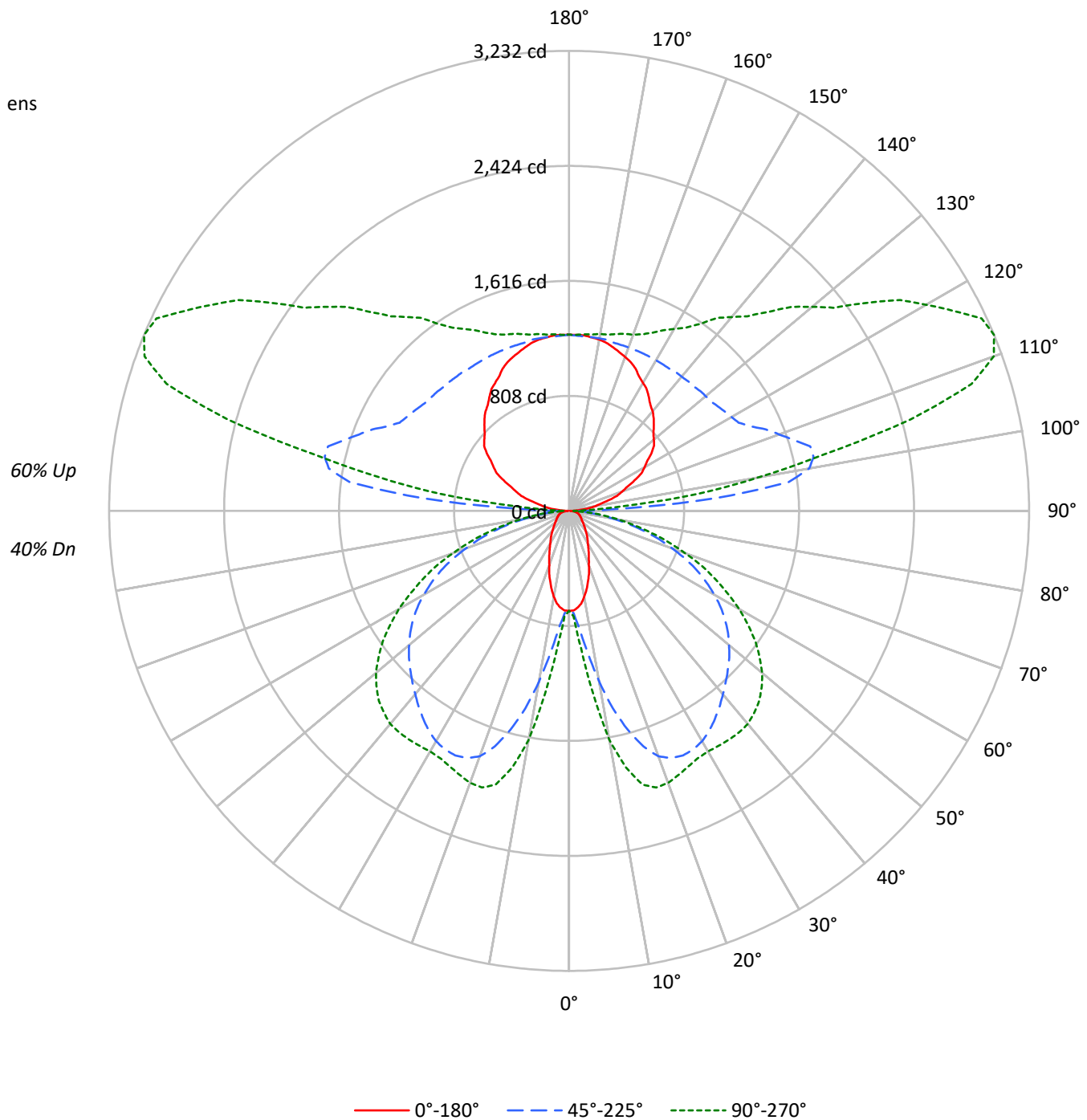
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13452.3 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124.8
Input Voltage (V): NR
Input Current (A_{in}): 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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4336	4336	4336
5°	4235	5011	5829
10°	3840	7303	9664
15°	3263	9539	11669
20°	2655	11051	11892
25°	2214	11561	11650
30°	1866	11631	11628
35°	1649	11435	11930
40°	1437	11181	12240
45°	1299	10993	12288
50°	1191	10825	12084
55°	1140	10579	11549
60°	1165	10110	10703
65°	1211	9398	9541
70°	1287	8191	8060
75°	1420	6673	6290
80°	1540	4622	4238
85°	1347	2447	2169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	0.7
10°-20°	401.9	3.0
20°-30°	703.0	5.2
30°-40°	904.9	6.7
40°-50°	1010.8	7.5
50°-60°	968.1	7.2
60°-70°	767.2	5.7
70°-80°	451.1	3.4
80°-90°	130.1	1.0
90°-100°	603.4	4.5
100°-110°	1586.4	11.8
110°-120°	1644.9	12.2
120°-130°	1319.4	9.8
130°-140°	1035.3	7.7
140°-150°	794.6	5.9
150°-160°	572.2	4.3
160°-170°	350.1	2.6
170°-180°	118.3	0.9
0°-30°	1195.5	8.9
0°-40°	2100.5	15.6
0°-60°	4079.3	30.3
0°-90°	5427.7	40.3
90°-120°	3834.7	28.5
90°-150°	6983.9	51.9
90°-180°	8025.0	59.7
0°-180°	13452.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	683	733	825	933	967	63
15°	512	944	1591	1929	1990	142
25°	327	1071	1896	1979	1981	151
35°	221	1023	1785	1887	1961	138
45°	151	816	1578	1808	1889	117
55°	108	518	1339	1555	1598	99
65°	86	275	994	1118	1134	85
75°	63	169	546	600	602	66
85°	23	52	135	149	151	24
90°	8	23	63	32	32	8
95°	80	312	1039	536	365	89
105°	286	433	1754	2663	2484	303
115°	508	616	1405	2802	3198	501
125°	706	792	1278	2159	2547	627
135°	842	926	1238	1743	1976	651
145°	976	1038	1222	1487	1603	612
155°	1103	1134	1222	1342	1381	507
165°	1190	1206	1222	1270	1286	336
175°	1238	1238	1230	1246	1246	118
180°	1238	1238	1238	1238	1238	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	701.0	701.0	705.5	707.7	712.3	714.6	719.0	723.5	737.0	739.3	743.9
5°	683.0	692.0	721.3	732.6	764.1	806.9	825.0	854.3	915.2	933.2	944.5
7.5°	656.0	676.2	748.3	766.3	845.3	958.0	1005.3	1068.4	1165.3	1212.7	1251.0
10°	613.1	656.0	784.4	827.3	955.8	1127.0	1215.0	1302.9	1449.4	1514.8	1539.5
12.5°	565.7	635.6	822.7	881.3	1066.1	1316.4	1422.3	1519.2	1686.0	1774.0	1787.5
15°	511.7	606.3	858.8	944.5	1183.3	1474.2	1591.4	1710.8	1866.4	1929.4	1945.3
17.5°	464.3	583.8	892.6	982.7	1273.6	1616.2	1735.6	1834.8	1961.1	2003.9	2015.1
20°	405.7	547.7	915.2	1032.4	1368.2	1719.9	1834.8	1911.4	1997.1	2024.1	2028.6
22.5°	362.9	509.4	928.7	1050.4	1431.4	1782.9	1879.9	1940.7	1999.3	2008.4	2010.6
25°	326.9	466.6	926.5	1070.7	1485.4	1821.3	1895.7	1940.7	1974.6	1979.1	1979.1
27.5°	293.0	419.2	917.4	1075.2	1526.0	1830.3	1888.9	1920.5	1936.2	1945.3	1945.3
30°	263.7	374.2	894.8	1066.1	1544.1	1821.3	1868.6	1884.4	1900.1	1913.7	1920.5
32.5°	241.2	331.3	861.0	1048.1	1546.3	1798.7	1832.6	1841.5	1864.1	1895.7	1906.9
35°	220.9	288.5	822.7	1023.3	1532.8	1762.7	1785.2	1794.2	1839.3	1886.6	1902.5
37.5°	200.6	257.0	773.2	980.5	1512.4	1719.9	1735.6	1751.4	1821.3	1877.6	1895.7
40°	180.4	229.9	714.6	933.2	1480.9	1668.0	1681.5	1706.3	1798.7	1864.1	1882.1
42.5°	164.5	207.3	651.4	883.6	1440.3	1609.4	1629.7	1665.7	1771.6	1841.5	1861.9
45°	151.0	184.8	583.8	816.0	1388.5	1548.5	1577.8	1627.4	1740.1	1807.8	1825.8
47.5°	137.5	169.1	513.9	746.1	1332.2	1487.7	1526.0	1582.3	1697.3	1762.7	1778.5
50°	126.2	153.3	444.1	671.7	1271.3	1422.3	1467.4	1526.0	1643.2	1704.1	1724.3
52.5°	117.2	139.8	378.6	597.4	1201.4	1354.6	1406.5	1467.4	1577.8	1636.4	1650.0
55°	108.2	128.5	322.3	518.4	1129.3	1282.5	1338.9	1397.5	1505.7	1555.3	1564.3
57.5°	103.7	119.4	275.0	444.1	1052.6	1201.4	1264.5	1318.6	1420.1	1458.4	1467.4
60°	96.9	112.7	239.0	381.0	969.3	1124.7	1178.9	1233.0	1318.6	1350.2	1357.0
62.5°	90.1	108.2	211.9	320.0	883.6	1034.6	1088.7	1138.3	1210.4	1233.0	1242.0
65°	85.7	103.7	191.6	275.0	795.6	939.9	994.0	1036.8	1095.4	1118.0	1122.5
67.5°	81.2	99.2	175.8	236.7	707.7	845.3	885.9	926.5	971.5	994.0	996.3
70°	74.4	94.7	162.3	209.7	617.6	737.0	770.9	813.7	849.8	861.0	867.8
72.5°	69.9	87.9	153.3	189.3	525.2	633.4	664.9	689.7	721.3	732.6	732.6
75°	63.1	78.9	144.3	169.1	430.5	518.4	545.5	570.3	595.0	599.6	592.8
77.5°	56.4	69.9	124.0	142.0	335.8	410.3	432.8	446.3	466.6	471.1	473.4
80°	47.3	60.8	96.9	110.5	243.4	302.0	317.8	329.1	347.1	347.1	351.6
82.5°	36.1	47.3	69.9	78.9	164.5	207.3	220.9	227.7	239.0	239.0	239.0
85°	22.6	29.3	45.1	51.9	99.2	126.2	135.2	137.5	146.5	148.7	148.7
87.5°	11.3	15.8	29.3	31.5	51.9	65.4	65.4	69.9	69.9	67.7	65.4
90°	8.3	15.0	21.6	23.3	36.6	54.3	63.1	56.1	42.1	31.6	31.6
92.5°	33.2	89.7	146.3	160.4	225.5	312.2	355.6	311.6	223.8	157.9	151.6
95°	79.7	183.1	286.6	312.4	554.7	877.8	1039.3	927.4	703.7	535.8	516.8
97.5°	137.9	229.1	320.3	343.1	747.2	1285.9	1555.2	1484.6	1343.1	1237.1	1200.8
100°	182.8	265.5	348.2	368.9	817.2	1415.0	1713.9	1719.1	1729.5	1737.2	1694.1
102.5°	221.0	298.2	375.4	394.6	849.4	1455.6	1758.8	1848.8	2029.0	2164.1	2127.2
105°	285.8	351.1	416.5	432.8	873.2	1460.2	1753.8	1955.7	2359.7	2662.7	2642.8
107.5°	352.3	413.2	474.1	489.3	877.5	1395.2	1654.1	1935.8	2499.3	2921.9	2926.7
110°	397.1	452.2	507.1	520.9	871.0	1337.6	1571.0	1885.9	2515.9	2988.3	3009.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	441.2	493.6	545.9	559.1	871.2	1287.3	1495.4	1817.7	2462.4	2945.9	2977.7
115°	507.6	556.0	604.4	616.4	879.2	1229.6	1404.8	1715.3	2336.4	2802.2	2846.2
117.5°	573.2	617.2	661.1	672.1	895.6	1193.6	1342.6	1622.8	2183.2	2603.6	2652.5
120°	611.5	652.9	694.2	704.5	908.9	1181.4	1317.6	1573.7	2085.8	2469.9	2517.3
122.5°	648.9	690.6	732.3	742.7	928.0	1175.0	1298.5	1529.1	1990.3	2336.2	2382.9
125°	706.1	744.1	782.2	791.7	953.7	1169.8	1277.7	1473.6	1865.3	2159.2	2202.2
127.5°	752.7	791.0	829.5	839.1	979.5	1166.7	1260.2	1428.4	1764.8	2017.1	2053.5
130°	777.6	819.0	860.4	870.7	998.4	1168.6	1253.7	1403.4	1702.8	1927.4	1961.0
132.5°	803.4	844.8	886.1	896.4	1013.6	1169.8	1247.8	1381.8	1649.9	1850.9	1881.1
135°	841.6	879.2	916.9	926.4	1030.2	1168.6	1237.9	1350.1	1574.6	1743.0	1768.9
137.5°	880.6	917.9	955.2	964.5	1055.1	1175.8	1236.2	1331.1	1520.9	1663.2	1684.4
140°	913.0	947.4	981.7	990.3	1070.3	1177.0	1230.4	1312.4	1476.3	1599.3	1619.1
142.5°	937.9	969.7	1001.5	1009.4	1083.1	1181.3	1230.4	1302.4	1446.4	1554.4	1571.4
145°	976.2	1003.9	1031.6	1038.5	1099.7	1181.3	1222.1	1280.9	1398.8	1487.1	1500.0
147.5°	1014.4	1041.4	1068.3	1075.0	1124.0	1189.4	1222.1	1268.4	1361.0	1430.6	1441.3
150°	1039.3	1063.6	1088.0	1094.1	1136.7	1193.6	1222.1	1261.2	1339.5	1398.2	1406.9
152.5°	1065.1	1083.5	1102.0	1106.6	1145.1	1196.4	1222.1	1255.5	1322.3	1372.4	1379.0
155°	1103.3	1116.9	1130.6	1134.0	1163.4	1202.5	1222.1	1248.6	1301.8	1341.7	1346.0
157.5°	1131.5	1144.8	1158.1	1161.4	1181.7	1208.6	1222.1	1242.8	1284.1	1315.1	1318.1
160°	1150.7	1161.0	1171.3	1173.8	1189.9	1211.3	1222.1	1239.8	1275.3	1301.8	1303.6
162.5°	1169.8	1177.5	1185.2	1187.2	1198.8	1214.3	1222.1	1237.0	1266.9	1289.4	1291.1
165°	1190.5	1197.6	1204.5	1206.3	1211.5	1218.5	1222.1	1232.8	1254.2	1270.3	1272.1
167.5°	1209.6	1212.9	1216.3	1217.1	1221.5	1227.5	1230.4	1237.4	1251.5	1261.9	1262.6
170°	1222.1	1225.4	1228.7	1229.5	1229.8	1230.2	1230.4	1237.4	1251.5	1261.9	1261.9
172.5°	1228.7	1229.4	1230.2	1230.4	1230.4	1230.4	1230.4	1235.9	1247.0	1255.3	1254.7
175°	1237.9	1237.9	1237.9	1237.9	1235.4	1232.1	1230.4	1233.9	1240.9	1246.1	1246.1
177.5°	1237.9	1237.9	1237.9	1237.9	1235.9	1233.3	1232.0	1234.8	1240.4	1244.5	1243.8
180°	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	701.0	701.0
2.5°	748.3	743.9
5°	962.5	967.0
7.5°	1296.1	1293.8
10°	1611.6	1632.0
12.5°	1841.5	1846.1
15°	1981.3	1990.4
17.5°	2035.4	2037.7
20°	2037.7	2033.2
22.5°	2012.8	2008.4
25°	1983.5	1981.3
27.5°	1956.5	1958.8
30°	1945.3	1952.0
32.5°	1945.3	1956.5
35°	1949.8	1961.1
37.5°	1947.5	1961.1
40°	1938.5	1954.2
42.5°	1913.7	1925.0
45°	1875.4	1888.9
47.5°	1825.8	1834.8
50°	1762.7	1771.6
52.5°	1683.7	1686.0
55°	1589.1	1598.1
57.5°	1487.7	1489.9
60°	1375.0	1381.7
62.5°	1255.5	1255.5
65°	1129.3	1133.8
67.5°	998.6	1009.8
70°	865.5	867.8
72.5°	734.8	734.8
75°	599.6	601.8
77.5°	471.1	471.1
80°	349.3	351.6
82.5°	241.2	245.7
85°	151.0	151.0
87.5°	69.9	63.1
90°	31.6	31.6
92.5°	126.5	101.3
95°	440.7	364.7
97.5°	1056.1	911.4
100°	1521.7	1349.2
102.5°	1979.5	1831.9
105°	2563.4	2484.0
107.5°	2945.9	2965.0
110°	3091.7	3174.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3104.7	3231.7
115°	3022.3	3198.5
117.5°	2847.8	3043.2
120°	2707.2	2896.9
122.5°	2570.1	2757.3
125°	2374.7	2547.1
127.5°	2199.0	2344.5
130°	2095.4	2229.8
132.5°	2001.4	2121.8
135°	1872.7	1976.4
137.5°	1769.4	1854.3
140°	1698.5	1777.9
142.5°	1639.8	1708.1
145°	1551.7	1603.4
147.5°	1484.1	1527.0
150°	1441.6	1476.3
152.5°	1405.2	1431.5
155°	1363.3	1380.8
157.5°	1330.4	1342.6
160°	1310.6	1317.6
162.5°	1297.6	1304.3
165°	1279.0	1286.0
167.5°	1265.7	1268.6
170°	1261.9	1261.9
172.5°	1252.1	1249.5
175°	1246.1	1246.1
177.5°	1240.8	1237.9
180°	1237.9	1237.9



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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	5.15	5.96	6.17	7.00	8.40	18.31	19.12	19.34	20.16	21.56
	3H	5.85	6.58	6.89	7.62	9.04	20.14	20.87	21.18	21.92	23.34
	4H	6.14	6.83	7.19	7.89	9.31	20.78	21.47	21.83	22.52	23.95
	6H	6.39	7.03	7.45	8.08	9.52	21.20	21.84	22.27	22.90	24.34
	8H	6.46	7.06	7.52	8.14	9.57	21.32	21.93	22.39	23.00	24.43
	12H	6.47	7.05	7.55	8.12	9.57	21.39	21.96	22.46	23.03	24.49
4H	2H	12.35	13.04	13.40	14.09	15.51	18.58	19.27	19.64	20.32	21.75
	3H	13.91	14.49	14.98	15.57	17.01	20.62	21.19	21.68	22.27	23.71
	4H	14.00	14.53	15.07	15.60	17.06	21.38	21.91	22.45	22.98	24.44
	6H	14.01	14.47	15.09	15.56	17.01	21.91	22.36	22.99	23.46	24.91
	8H	13.99	14.41	15.07	15.50	16.97	22.07	22.49	23.15	23.58	25.05
	12H	13.94	14.33	15.04	15.43	16.90	22.15	22.54	23.25	23.64	25.12
8H	4H	15.44	15.87	16.52	16.95	18.42	21.43	21.86	22.51	22.94	24.42
	6H	15.68	16.03	16.78	17.16	18.63	22.06	22.41	23.16	23.54	25.00
	8H	15.70	16.01	16.81	17.12	18.60	22.27	22.58	23.38	23.69	25.18
	12H	15.66	15.94	16.78	17.04	18.57	22.41	22.68	23.53	23.79	25.31
12H	4H	15.58	15.97	16.68	17.06	18.54	21.38	21.77	22.48	22.87	24.35
	6H	15.94	16.25	17.05	17.36	18.84	22.04	22.35	23.15	23.46	24.95
	8H	16.00	16.28	17.12	17.38	18.91	22.26	22.54	23.38	23.64	25.17