

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: P938052

Luminaire Tested: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938052
REPORT IS A COMBINATION OF REPORTS P933615 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

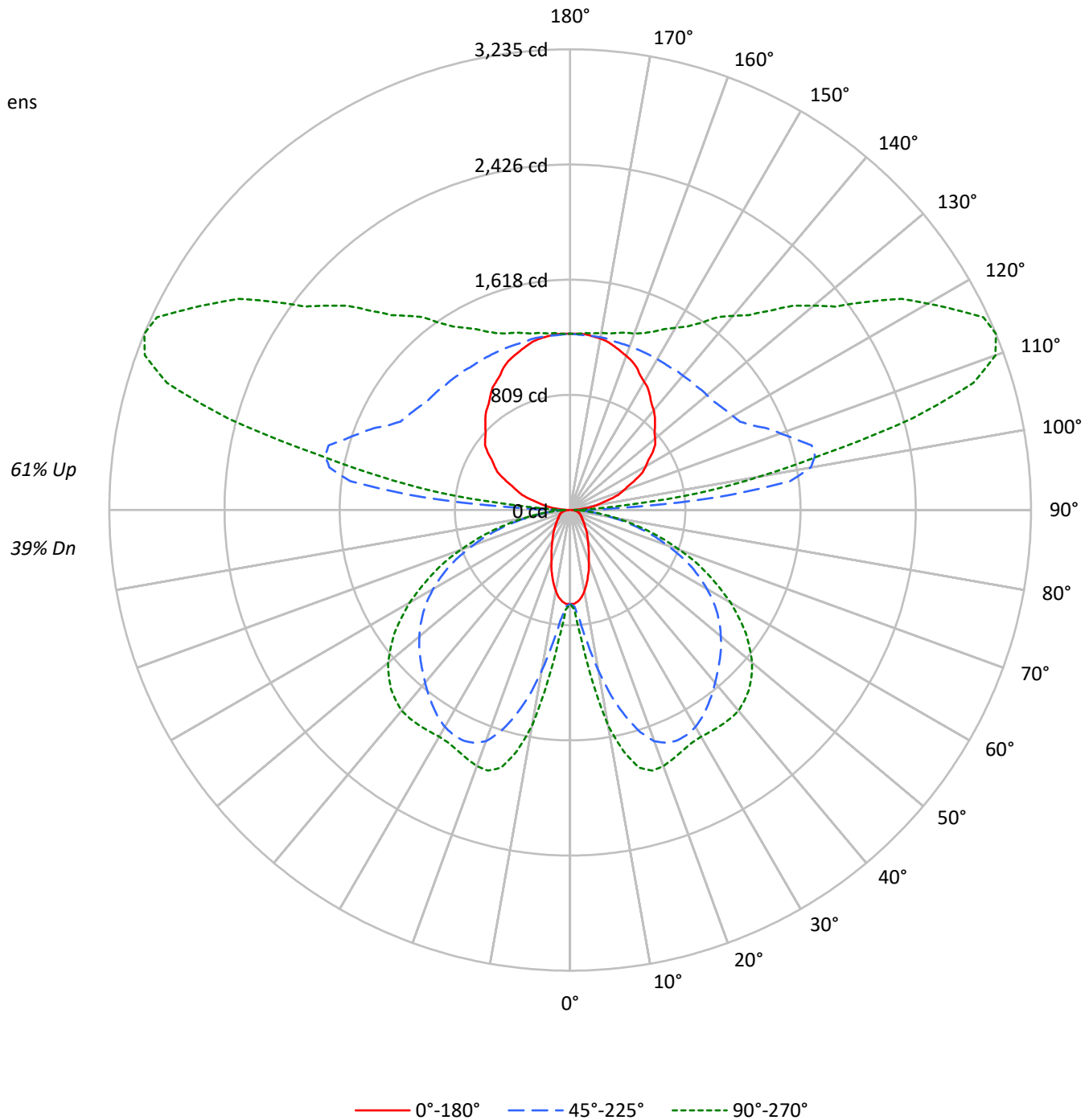
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13141.9 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 128.8
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

TEST NUMBER: P938052
CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P938052

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32				32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26				26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21				21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18				18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10				10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3062	3062	3062
5°	2991	3539	4116
10°	2713	5159	6823
15°	2306	6740	8239
20°	1878	7810	8397
25°	1566	8173	8226
30°	1321	8225	8211
35°	1168	8088	8423
40°	1018	7910	8642
45°	922	7781	8676
50°	845	7664	8532
55°	809	7492	8155
60°	828	7163	7558
65°	862	6663	6737
70°	918	5811	5691
75°	1017	4738	4441
80°	1113	3286	2993
85°	987	1744	1532

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8676 cd/sqm



TEST NUMBER: P938052

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	0.6
10°-20°	378.4	2.9
20°-30°	661.8	5.0
30°-40°	851.9	6.5
40°-50°	951.6	7.2
50°-60°	911.4	6.9
60°-70°	722.3	5.5
70°-80°	424.7	3.2
80°-90°	122.7	0.9
90°-100°	603.9	4.6
100°-110°	1587.8	12.1
110°-120°	1646.3	12.5
120°-130°	1320.6	10.0
130°-140°	1036.2	7.9
140°-150°	795.3	6.1
150°-160°	572.7	4.4
160°-170°	350.4	2.7
170°-180°	118.4	0.9
0°-30°	1125.5	8.6
0°-40°	1977.5	15.0
0°-60°	3840.5	29.2
0°-90°	5110.2	38.9
90°-120°	3838.1	29.2
90°-150°	6990.1	53.2
90°-180°	8032.0	61.1
0°-180°	13141.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	643	690	777	879	910	59
15°	482	889	1498	1816	1874	134
25°	308	1008	1785	1863	1865	142
35°	208	963	1681	1776	1846	130
45°	142	768	1486	1702	1778	110
55°	102	488	1260	1464	1505	93
65°	81	259	936	1053	1067	80
75°	59	159	514	564	567	62
85°	21	49	127	140	142	23
90°	8	23	63	32	32	8
95°	80	313	1040	536	365	89
105°	286	433	1755	2665	2486	303
115°	508	617	1406	2805	3201	502
125°	707	792	1279	2161	2549	628
135°	842	927	1239	1744	1978	652
145°	977	1039	1223	1488	1605	612
155°	1104	1135	1223	1343	1382	507
165°	1192	1207	1223	1271	1287	336
175°	1239	1239	1232	1247	1247	118
180°	1239	1239	1239	1239	1239	



TEST NUMBER: P938052

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0
2.5°	660.0	660.0	664.2	666.3	670.6	672.7	676.9	681.2	694.0	696.0	700.3
5°	643.0	651.5	679.1	689.7	719.4	759.7	776.7	804.3	861.5	878.6	889.2
7.5°	617.5	636.6	704.6	721.5	795.8	901.8	946.4	1005.8	1097.1	1141.7	1177.8
10°	577.2	617.5	738.5	778.8	899.8	1061.0	1143.8	1226.6	1364.5	1426.0	1449.3
12.5°	532.6	598.4	774.6	829.7	1003.8	1239.3	1339.0	1430.3	1587.3	1670.1	1682.8
15°	481.7	570.9	808.5	889.2	1114.1	1387.8	1498.2	1610.7	1757.0	1816.5	1831.3
17.5°	437.2	549.7	840.3	925.2	1199.0	1521.5	1634.0	1727.3	1846.2	1886.5	1897.2
20°	382.0	515.7	861.5	971.9	1288.1	1619.2	1727.3	1799.5	1880.1	1905.6	1909.9
22.5°	341.7	479.6	874.3	988.9	1347.5	1678.6	1769.8	1827.1	1882.3	1890.7	1892.9
25°	307.7	439.2	872.1	1008.0	1398.4	1714.6	1784.7	1827.1	1858.9	1863.2	1863.2
27.5°	275.8	394.7	863.7	1012.3	1436.6	1723.2	1778.3	1808.0	1822.9	1831.3	1831.3
30°	248.3	352.3	842.4	1003.8	1453.6	1714.6	1759.2	1774.1	1788.9	1801.6	1808.0
32.5°	227.1	312.0	810.6	986.7	1455.8	1693.4	1725.2	1733.8	1755.0	1784.7	1795.3
35°	208.0	271.7	774.6	963.4	1443.0	1659.5	1680.7	1689.2	1731.6	1776.2	1791.0
37.5°	188.9	241.9	727.8	923.1	1423.9	1619.2	1634.0	1648.9	1714.6	1767.6	1784.7
40°	169.8	216.5	672.7	878.6	1394.2	1570.3	1583.0	1606.4	1693.4	1755.0	1771.9
42.5°	154.9	195.2	613.3	831.8	1356.0	1515.2	1534.3	1568.2	1667.9	1733.8	1752.9
45°	142.2	174.0	549.7	768.1	1307.2	1457.8	1485.5	1532.1	1638.2	1701.9	1718.9
47.5°	129.4	159.2	483.8	702.4	1254.1	1400.6	1436.6	1489.7	1597.9	1659.5	1674.3
50°	118.8	144.3	418.0	632.4	1196.9	1339.0	1381.5	1436.6	1547.0	1604.3	1623.3
52.5°	110.3	131.5	356.5	562.3	1131.0	1275.3	1324.1	1381.5	1485.5	1540.6	1553.3
55°	101.8	120.9	303.5	488.1	1063.2	1207.5	1260.5	1315.7	1417.5	1464.2	1472.7
57.5°	97.6	112.5	258.9	418.0	991.0	1131.0	1190.4	1241.4	1336.9	1373.0	1381.5
60°	91.2	106.1	224.9	358.6	912.5	1058.9	1109.8	1160.7	1241.4	1271.1	1277.5
62.5°	84.9	101.8	199.5	301.4	831.8	974.0	1024.9	1071.7	1139.5	1160.7	1169.2
65°	80.6	97.6	180.4	258.9	749.1	884.9	935.8	976.1	1031.3	1052.6	1056.8
67.5°	76.4	93.4	165.5	222.8	666.3	795.8	834.0	872.1	914.6	935.8	938.0
70°	70.0	89.1	152.8	197.4	581.5	694.0	725.8	766.1	800.0	810.6	817.0
72.5°	65.8	82.8	144.3	178.3	494.4	596.3	626.0	649.4	679.1	689.7	689.7
75°	59.4	74.3	135.8	159.2	405.4	488.1	513.5	536.9	560.3	564.5	558.1
77.5°	53.1	65.8	116.7	133.7	316.2	386.2	407.4	420.1	439.2	443.5	445.7
80°	44.6	57.3	91.2	104.0	229.2	284.3	299.2	309.8	326.8	326.8	331.1
82.5°	34.0	44.6	65.8	74.3	154.9	195.2	208.0	214.3	224.9	224.9	224.9
85°	21.2	27.6	42.5	48.8	93.4	118.8	127.4	129.4	138.0	140.0	140.0
87.5°	10.6	14.9	27.6	29.7	48.8	61.5	61.5	65.8	65.8	63.7	61.5
90°	8.4	15.0	21.6	23.3	36.6	54.4	63.2	56.1	42.1	31.6	31.6
92.5°	33.2	89.8	146.4	160.5	225.6	312.4	355.9	311.9	224.0	158.0	151.7
95°	79.8	183.3	286.8	312.7	555.2	878.6	1040.2	928.3	704.3	536.3	517.3
97.5°	138.0	229.3	320.6	343.4	747.8	1287.0	1556.6	1485.9	1344.3	1238.1	1201.9
100°	182.9	265.7	348.5	369.2	817.9	1416.3	1715.4	1720.6	1730.9	1738.7	1695.6
102.5°	221.1	298.4	375.6	395.0	850.1	1457.0	1760.3	1850.5	2030.9	2166.1	2129.2
105°	286.0	351.5	416.8	433.2	873.9	1461.5	1755.4	1957.5	2361.8	2665.0	2645.2
107.5°	352.6	413.5	474.5	489.7	878.3	1396.5	1655.5	1937.6	2501.5	2924.4	2929.3
110°	397.5	452.6	507.7	521.4	871.7	1338.8	1572.4	1887.7	2518.1	2990.9	3011.7



TEST NUMBER: P938052

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	441.6	494.0	546.5	559.6	872.0	1288.5	1496.7	1819.4	2464.6	2948.5	2980.3
115°	508.1	556.5	604.8	616.9	880.0	1230.8	1406.1	1716.9	2338.5	2804.7	2848.8
117.5°	573.7	617.7	661.7	672.7	896.4	1194.6	1343.7	1624.2	2185.2	2606.0	2654.9
120°	612.0	653.4	694.8	705.1	909.6	1182.4	1318.8	1575.1	2087.6	2472.1	2519.6
122.5°	649.4	691.1	732.9	743.3	928.7	1176.0	1299.7	1530.4	1992.1	2338.3	2385.1
125°	706.8	744.9	782.9	792.4	954.5	1170.8	1278.9	1475.0	1867.1	2161.1	2204.2
127.5°	753.4	791.8	830.2	839.9	980.4	1167.7	1261.4	1429.7	1766.4	2018.9	2055.3
130°	778.3	819.7	861.1	871.4	999.2	1169.6	1254.8	1404.6	1704.4	1929.1	1962.8
132.5°	804.0	845.5	886.8	897.2	1014.4	1170.8	1248.9	1383.1	1651.4	1852.6	1882.7
135°	842.3	880.0	917.7	927.1	1031.1	1169.6	1238.9	1351.3	1576.0	1744.5	1770.5
137.5°	881.4	918.7	956.1	965.4	1056.0	1176.9	1237.3	1332.3	1522.2	1664.7	1686.0
140°	913.8	948.2	982.6	991.1	1071.3	1178.1	1231.5	1313.5	1477.6	1600.7	1620.5
142.5°	938.8	970.6	1002.3	1010.3	1084.0	1182.3	1231.5	1303.5	1447.6	1555.7	1572.8
145°	977.0	1004.7	1032.5	1039.4	1100.7	1182.3	1223.1	1282.1	1400.0	1488.4	1501.4
147.5°	1015.3	1042.3	1069.3	1076.0	1125.1	1190.4	1223.1	1269.5	1362.3	1431.9	1442.6
150°	1040.2	1064.6	1089.0	1095.1	1137.8	1194.7	1223.1	1262.3	1340.7	1399.5	1408.1
152.5°	1066.0	1084.5	1102.9	1107.6	1146.1	1197.4	1223.1	1256.6	1323.5	1373.7	1380.3
155°	1104.3	1117.9	1131.6	1135.0	1164.4	1203.5	1223.1	1249.8	1303.0	1342.9	1347.3
157.5°	1132.6	1145.8	1159.1	1162.4	1182.7	1209.6	1223.1	1243.8	1285.2	1316.3	1319.3
160°	1151.7	1162.0	1172.4	1174.9	1191.0	1212.4	1223.1	1240.9	1276.4	1302.9	1304.7
162.5°	1170.8	1178.5	1186.3	1188.2	1199.8	1215.3	1223.1	1238.1	1268.0	1290.5	1292.2
165°	1191.6	1198.6	1205.6	1207.4	1212.6	1219.6	1223.1	1233.9	1255.3	1271.4	1273.2
167.5°	1210.7	1214.0	1217.3	1218.2	1222.6	1228.5	1231.5	1238.5	1252.5	1263.0	1263.8
170°	1223.1	1226.5	1229.9	1230.7	1230.9	1231.3	1231.5	1238.5	1252.5	1263.0	1263.0
172.5°	1229.8	1230.5	1231.3	1231.5	1231.5	1231.5	1231.5	1237.0	1248.1	1256.5	1255.8
175°	1238.9	1238.9	1238.9	1238.9	1236.5	1233.2	1231.5	1235.0	1242.0	1247.3	1247.3
177.5°	1238.9	1238.9	1238.9	1238.9	1237.0	1234.5	1233.2	1235.9	1241.4	1245.6	1244.9
180°	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9



TEST NUMBER: P938052

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	660.0	660.0
2.5°	704.6	700.3
5°	906.1	910.4
7.5°	1220.2	1218.1
10°	1517.3	1536.4
12.5°	1733.8	1738.0
15°	1865.3	1873.8
17.5°	1916.2	1918.4
20°	1918.4	1914.1
22.5°	1895.0	1890.7
25°	1867.5	1865.3
27.5°	1841.9	1844.1
30°	1831.3	1837.7
32.5°	1831.3	1841.9
35°	1835.6	1846.2
37.5°	1833.5	1846.2
40°	1825.0	1839.8
42.5°	1801.6	1812.2
45°	1765.6	1778.3
47.5°	1718.9	1727.3
50°	1659.5	1667.9
52.5°	1585.2	1587.3
55°	1496.1	1504.6
57.5°	1400.6	1402.7
60°	1294.4	1300.9
62.5°	1182.0	1182.0
65°	1063.2	1067.4
67.5°	940.1	950.7
70°	814.9	817.0
72.5°	691.8	691.8
75°	564.5	566.6
77.5°	443.5	443.5
80°	328.9	331.1
82.5°	227.1	231.3
85°	142.2	142.2
87.5°	65.8	59.4
90°	31.6	31.6
92.5°	126.6	101.4
95°	441.2	365.0
97.5°	1057.1	912.2
100°	1523.0	1350.4
102.5°	1981.3	1833.5
105°	2565.7	2486.2
107.5°	2948.5	2967.6
110°	3094.4	3177.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3107.4	3234.6
115°	3025.1	3201.3
117.5°	2850.3	3045.9
120°	2709.6	2899.5
122.5°	2572.5	2759.8
125°	2376.9	2549.4
127.5°	2200.9	2346.5
130°	2097.3	2231.8
132.5°	2003.2	2123.7
135°	1874.4	1978.2
137.5°	1770.9	1856.0
140°	1700.0	1779.4
142.5°	1641.2	1709.6
145°	1553.1	1604.8
147.5°	1485.5	1528.3
150°	1442.9	1477.6
152.5°	1406.5	1432.7
155°	1364.6	1382.0
157.5°	1331.5	1343.7
160°	1311.7	1318.8
162.5°	1298.9	1305.5
165°	1280.1	1287.2
167.5°	1266.7	1269.7
170°	1263.0	1263.0
172.5°	1253.2	1250.6
175°	1247.3	1247.3
177.5°	1241.9	1238.9
180°	1238.9	1238.9



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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	3.78	4.58	4.82	5.63	7.05	16.96	17.76	18.00	18.81	20.23
	3H	4.48	5.20	5.53	6.26	7.70	18.80	19.51	19.85	20.57	22.01
	4H	4.78	5.46	5.84	6.52	7.96	19.44	20.12	20.50	21.18	22.62
	6H	5.03	5.65	6.10	6.72	8.17	19.87	20.49	20.94	21.56	23.01
	8H	5.09	5.69	6.17	6.77	8.22	19.98	20.58	21.06	21.66	23.11
	12H	5.11	5.67	6.19	6.75	8.23	20.05	20.62	21.13	21.69	23.17
4H	2H	10.99	11.67	12.06	12.73	14.18	17.23	17.91	18.30	18.97	20.41
	3H	12.55	13.12	13.63	14.21	15.67	19.27	19.84	20.34	20.92	22.38
	4H	12.64	13.17	13.73	14.24	15.72	20.03	20.55	21.11	21.63	23.11
	6H	12.65	13.10	13.74	14.20	15.67	20.57	21.02	21.66	22.12	23.59
	8H	12.63	13.05	13.72	14.14	15.63	20.73	21.15	21.82	22.24	23.73
	12H	12.58	12.96	13.69	14.07	15.56	20.82	21.20	21.93	22.31	23.80
8H	4H	14.08	14.50	15.17	15.60	17.09	20.09	20.51	21.18	21.60	23.09
	6H	14.32	14.67	15.44	15.81	17.29	20.71	21.06	21.83	22.20	23.68
	8H	14.34	14.64	15.46	15.76	17.27	20.93	21.24	22.05	22.35	23.86
	12H	14.30	14.57	15.43	15.69	17.23	21.07	21.34	22.20	22.46	24.00
12H	4H	14.22	14.60	15.33	15.71	17.21	20.04	20.42	21.15	21.52	23.02
	6H	14.58	14.89	15.70	16.00	17.51	20.69	21.00	21.82	22.12	23.62
	8H	14.65	14.91	15.77	16.03	17.57	20.92	21.19	22.05	22.30	23.85