

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: P937017

Luminaire Tested: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937017
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

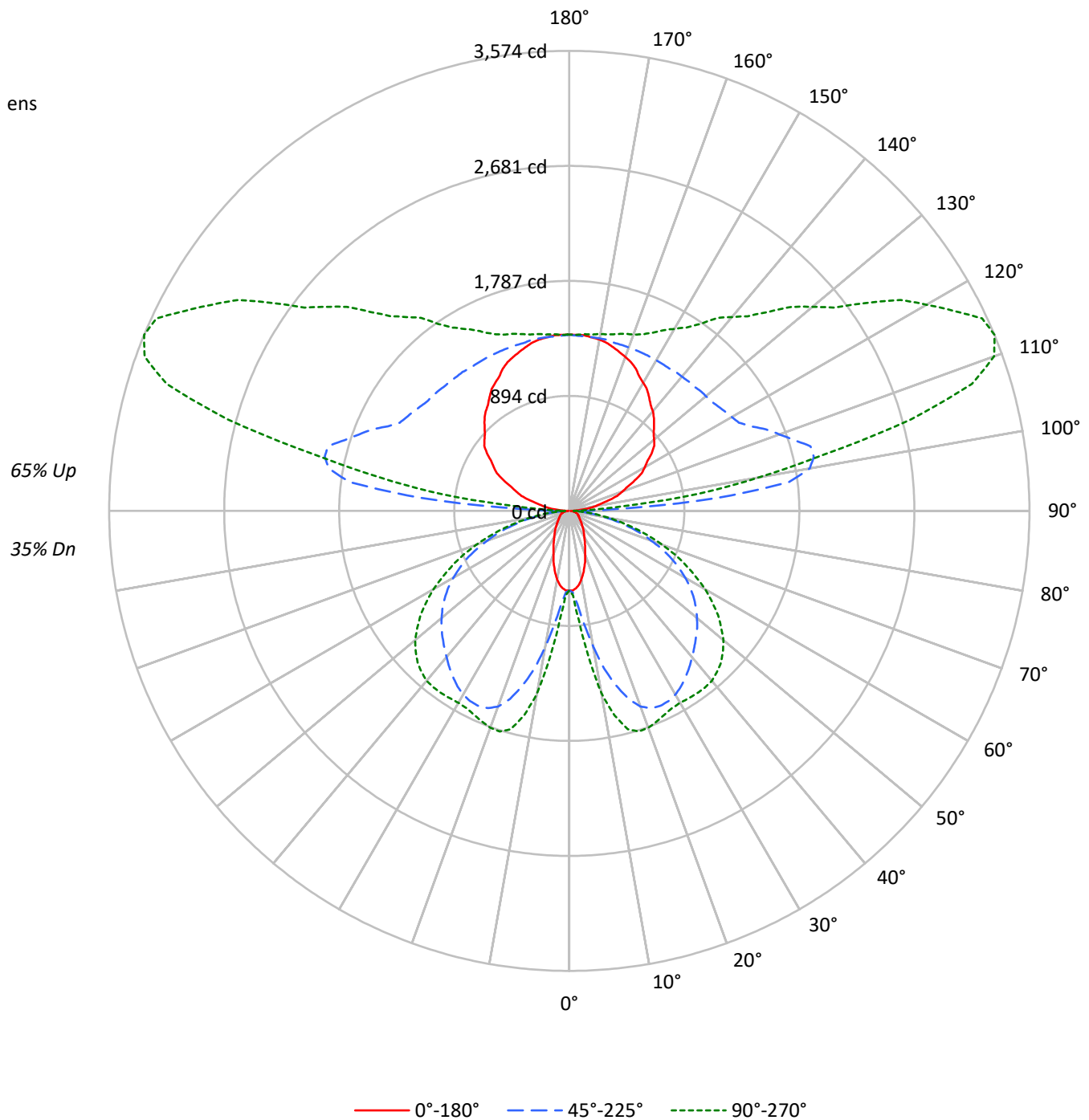
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13663.1 lumens
Efficiency: N/A
Efficacy: 132.4 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: Semi-Indirect

Input Watts (W): 103.2
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: P937017
CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P937017

CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

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	94	94	94	94	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1912	1912	1912
5°	1869	2211	2570
10°	1696	3223	4261
15°	1442	4213	5146
20°	1174	4883	5244
25°	980	5111	5138
30°	827	5145	5128
35°	731	5060	5261
40°	638	4951	5398
45°	578	4871	5419
50°	530	4799	5329
55°	508	4694	5093
60°	521	4490	4720
65°	544	4179	4207
70°	580	3647	3554
75°	644	2976	2774
80°	711	2066	1869
85°	645	1098	957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5419 cd/sqm



TEST NUMBER: P937017

CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	0.6
10°-20°	354.5	2.6
20°-30°	620.0	4.5
30°-40°	798.1	5.8
40°-50°	891.5	6.5
50°-60°	853.8	6.2
60°-70°	676.7	5.0
70°-80°	397.9	2.9
80°-90°	115.8	0.8
90°-100°	667.3	4.9
100°-110°	1754.5	12.8
110°-120°	1819.2	13.3
120°-130°	1459.2	10.7
130°-140°	1145.0	8.4
140°-150°	878.8	6.4
150°-160°	632.9	4.6
160°-170°	387.2	2.8
170°-180°	130.8	1.0
0°-30°	1054.4	7.7
0°-40°	1852.5	13.6
0°-60°	3597.8	26.3
0°-90°	4788.1	35.0
90°-120°	4241.0	31.0
90°-150°	7724.0	56.5
90°-180°	8875.0	65.0
0°-180°	13663.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	602	646	728	823	853	56
15°	451	833	1404	1702	1755	126
25°	288	944	1672	1746	1748	133
35°	195	902	1574	1664	1730	122
45°	133	720	1392	1594	1666	103
55°	95	457	1181	1372	1410	87
65°	76	243	877	986	1000	75
75°	56	149	481	529	531	58
85°	20	46	119	131	133	21
90°	9	26	70	35	35	9
95°	88	346	1149	593	403	98
105°	316	479	1940	2945	2747	335
115°	561	682	1554	3099	3537	554
125°	781	876	1413	2388	2817	693
135°	931	1024	1369	1928	2186	720
145°	1080	1149	1352	1645	1773	676
155°	1220	1254	1352	1484	1527	561
165°	1317	1334	1352	1405	1422	372
175°	1369	1369	1361	1378	1378	130
180°	1369	1369	1369	1369	1369	



TEST NUMBER: P937017

CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	618.3	618.3	618.3	618.3	618.3	618.3	618.3	618.3	618.3	618.3	618.3
2.5°	618.3	618.3	622.2	624.2	628.2	630.1	634.2	638.1	650.1	652.1	656.0
5°	602.4	610.3	636.2	646.1	673.9	711.7	727.6	753.4	807.1	823.0	833.0
7.5°	578.5	596.4	660.0	675.9	745.5	844.9	886.6	942.4	1027.8	1069.5	1103.3
10°	540.7	578.5	691.8	729.6	842.9	994.0	1071.5	1149.0	1278.3	1336.0	1357.8
12.5°	498.9	560.6	725.6	777.3	940.3	1161.0	1254.5	1339.9	1487.0	1564.6	1576.5
15°	451.3	534.8	757.4	833.0	1043.7	1300.1	1403.6	1508.9	1646.1	1701.7	1715.7
17.5°	409.5	514.8	787.2	866.8	1123.3	1425.4	1530.7	1618.2	1729.6	1767.3	1777.3
20°	357.9	483.1	807.1	910.5	1206.7	1516.9	1618.2	1685.8	1761.4	1785.2	1789.2
22.5°	320.1	449.2	819.1	926.4	1262.4	1572.5	1658.0	1711.7	1763.4	1771.3	1773.3
25°	288.3	411.5	817.1	944.3	1310.1	1606.3	1671.9	1711.7	1741.4	1745.5	1745.5
27.5°	258.5	369.8	809.1	948.3	1345.9	1614.3	1666.0	1693.7	1707.7	1715.7	1715.7
30°	232.6	330.0	789.2	940.3	1361.8	1606.3	1648.1	1662.0	1675.8	1687.8	1693.7
32.5°	212.7	292.3	759.4	924.4	1363.7	1586.4	1616.3	1624.2	1644.0	1671.9	1681.9
35°	194.8	254.5	725.6	902.5	1351.9	1554.6	1574.5	1582.5	1622.2	1664.0	1677.8
37.5°	177.0	226.6	681.9	864.8	1333.9	1516.9	1530.7	1544.6	1606.3	1656.0	1671.9
40°	159.1	202.7	630.1	823.0	1306.1	1471.1	1483.1	1504.9	1586.4	1644.0	1659.9
42.5°	145.1	182.9	574.5	779.3	1270.4	1419.5	1437.3	1469.2	1562.5	1624.2	1642.1
45°	133.2	163.0	514.8	719.7	1224.6	1365.7	1391.6	1435.4	1534.8	1594.3	1610.2
47.5°	121.2	149.1	453.3	658.0	1174.9	1312.1	1345.9	1395.6	1496.9	1554.6	1568.5
50°	111.3	135.2	391.6	592.4	1121.2	1254.5	1294.2	1345.9	1449.3	1502.9	1520.8
52.5°	103.3	123.3	333.9	526.8	1059.6	1194.8	1240.5	1294.2	1391.6	1443.3	1455.2
55°	95.4	113.3	284.2	457.2	996.0	1131.2	1180.9	1232.5	1328.0	1371.7	1379.6
57.5°	91.5	105.3	242.6	391.6	928.4	1059.6	1115.3	1163.0	1252.4	1286.3	1294.2
60°	85.5	99.4	210.7	336.0	854.8	992.1	1039.8	1087.4	1163.0	1190.8	1196.8
62.5°	79.5	95.4	186.8	282.3	779.3	912.5	960.2	1003.9	1067.5	1087.4	1095.4
65°	75.6	91.5	168.9	242.6	701.8	829.0	876.8	914.5	966.2	986.0	990.0
67.5°	71.5	87.4	155.0	208.8	624.2	745.5	781.3	817.1	856.8	876.8	878.7
70°	65.6	83.5	143.2	184.9	544.7	650.1	679.9	717.7	749.5	759.4	765.4
72.5°	61.7	77.6	135.2	167.0	463.2	558.6	586.5	608.3	636.2	646.1	646.1
75°	55.6	69.6	127.3	149.1	379.7	457.2	481.1	503.0	524.8	528.8	522.8
77.5°	49.7	61.7	109.4	125.3	296.2	361.8	381.7	393.6	411.5	415.5	417.4
80°	41.8	53.6	85.5	97.4	214.7	266.4	280.3	290.3	306.2	306.2	310.1
82.5°	31.8	41.8	61.7	69.6	145.1	182.9	194.8	200.8	210.7	210.7	210.7
85°	19.9	25.9	39.7	45.7	87.4	111.3	119.3	121.2	129.2	131.2	131.2
87.5°	10.0	13.9	25.9	27.9	45.7	57.7	57.7	61.7	61.7	59.7	57.7
90°	9.2	16.5	23.8	25.7	40.4	60.1	69.9	62.0	46.5	34.9	34.9
92.5°	36.8	99.2	161.7	177.3	249.3	345.2	393.2	344.6	247.5	174.6	167.7
95°	88.2	202.5	317.0	345.5	613.4	970.8	1149.4	1025.7	778.2	592.6	571.6
97.5°	152.5	253.4	354.3	379.5	826.4	1422.1	1720.0	1641.8	1485.4	1368.1	1328.1
100°	202.1	293.6	385.1	407.9	903.8	1564.9	1895.5	1901.2	1912.7	1921.3	1873.5
102.5°	244.4	329.8	415.1	436.4	939.3	1609.8	1945.2	2044.8	2244.0	2393.5	2352.7
105°	316.1	388.4	460.6	478.7	965.7	1615.0	1939.6	2163.0	2609.8	2944.8	2922.9
107.5°	389.6	457.0	524.3	541.2	970.6	1543.2	1829.4	2141.0	2764.1	3231.5	3236.8
110°	439.2	500.0	560.9	576.1	963.2	1479.4	1737.5	2085.9	2782.5	3305.0	3327.8



TEST NUMBER: P937017

CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	487.9	545.9	603.9	618.4	963.6	1423.8	1653.9	2010.4	2723.4	3258.1	3293.2
115°	561.4	614.8	668.4	681.7	972.4	1360.0	1553.7	1897.2	2584.0	3099.2	3147.9
117.5°	634.0	682.6	731.1	743.3	990.5	1320.0	1484.8	1794.7	2414.6	2879.5	2933.6
120°	676.3	722.0	767.7	779.1	1005.2	1306.5	1457.2	1740.4	2306.8	2731.6	2784.1
122.5°	717.6	763.7	809.9	821.4	1026.3	1299.5	1436.1	1691.1	2201.2	2583.7	2635.5
125°	781.0	823.1	865.2	875.7	1054.8	1293.7	1413.1	1629.8	2063.0	2388.0	2435.7
127.5°	832.5	875.0	917.5	928.0	1083.3	1290.3	1393.9	1579.9	1951.9	2230.9	2271.1
130°	860.1	905.8	951.4	962.9	1104.1	1292.3	1386.5	1552.0	1883.2	2131.6	2168.8
132.5°	888.5	934.3	979.9	991.4	1120.9	1293.7	1380.0	1528.2	1824.7	2047.1	2080.4
135°	930.8	972.4	1014.1	1024.5	1139.4	1292.5	1369.1	1493.2	1741.4	1927.7	1956.3
137.5°	974.0	1015.2	1056.5	1066.7	1166.9	1300.4	1367.2	1472.1	1682.1	1839.5	1863.0
140°	1009.7	1047.7	1085.7	1095.2	1183.7	1301.8	1360.8	1451.5	1632.8	1768.7	1790.7
142.5°	1037.3	1072.5	1107.5	1116.3	1197.9	1306.4	1360.8	1440.4	1599.7	1719.1	1738.0
145°	1079.6	1110.2	1140.8	1148.6	1216.2	1306.4	1351.6	1416.7	1547.0	1644.7	1659.0
147.5°	1121.9	1151.7	1181.5	1189.0	1243.2	1315.4	1351.6	1402.9	1505.3	1582.2	1594.0
150°	1149.4	1176.4	1203.4	1210.1	1257.2	1320.2	1351.6	1394.9	1481.4	1546.3	1555.9
152.5°	1177.9	1198.3	1218.7	1223.8	1266.4	1323.2	1351.6	1388.5	1462.4	1517.9	1525.1
155°	1220.2	1235.3	1250.4	1254.2	1286.7	1329.9	1351.6	1381.0	1439.8	1483.9	1488.7
157.5°	1251.4	1266.1	1280.8	1284.5	1306.8	1336.7	1351.6	1374.4	1420.2	1454.4	1457.8
160°	1272.5	1284.0	1295.5	1298.3	1316.1	1339.7	1351.6	1371.1	1410.4	1439.8	1441.8
162.5°	1293.7	1302.3	1310.8	1313.0	1325.8	1343.0	1351.6	1368.1	1401.2	1426.0	1427.9
165°	1316.7	1324.4	1332.1	1334.1	1339.9	1347.7	1351.6	1363.4	1387.1	1404.8	1406.8
167.5°	1337.8	1341.4	1345.2	1346.1	1351.0	1357.5	1360.8	1368.5	1384.0	1395.6	1396.4
170°	1351.6	1355.2	1359.0	1359.9	1360.2	1360.6	1360.8	1368.5	1384.0	1395.6	1395.6
172.5°	1358.9	1359.7	1360.6	1360.8	1360.8	1360.8	1360.8	1366.9	1379.1	1388.3	1387.6
175°	1369.1	1369.1	1369.1	1369.1	1366.3	1362.6	1360.8	1364.6	1372.4	1378.3	1378.3
177.5°	1369.1	1369.1	1369.1	1369.1	1366.9	1364.0	1362.6	1365.7	1371.8	1376.4	1375.6
180°	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1	1369.1



TEST NUMBER: P937017

CATALOG NUMBER: SQ4-FB-075U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	618.3	618.3
2.5°	660.0	656.0
5°	848.9	852.8
7.5°	1143.1	1141.1
10°	1421.4	1439.3
12.5°	1624.2	1628.1
15°	1747.5	1755.4
17.5°	1795.2	1797.2
20°	1797.2	1793.2
22.5°	1775.2	1771.3
25°	1749.5	1747.5
27.5°	1725.5	1727.6
30°	1715.7	1721.6
32.5°	1715.7	1725.5
35°	1719.6	1729.6
37.5°	1717.6	1729.6
40°	1709.6	1723.6
42.5°	1687.8	1697.8
45°	1654.0	1666.0
47.5°	1610.2	1618.2
50°	1554.6	1562.5
52.5°	1485.1	1487.0
55°	1401.6	1409.5
57.5°	1312.1	1314.0
60°	1212.7	1218.6
62.5°	1107.4	1107.4
65°	996.0	1000.0
67.5°	880.7	890.6
70°	763.4	765.4
72.5°	648.1	648.1
75°	528.8	530.8
77.5°	415.5	415.5
80°	308.2	310.1
82.5°	212.7	216.7
85°	133.2	133.2
87.5°	61.7	55.6
90°	34.9	34.9
92.5°	139.9	112.1
95°	487.5	403.4
97.5°	1168.0	1008.0
100°	1682.9	1492.2
102.5°	2189.3	2026.0
105°	2835.1	2747.2
107.5°	3258.0	3279.3
110°	3419.3	3510.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3433.7	3574.2
115°	3342.6	3537.4
117.5°	3149.5	3365.6
120°	2994.0	3203.9
122.5°	2842.5	3049.6
125°	2626.4	2817.1
127.5°	2432.1	2592.9
130°	2317.5	2466.1
132.5°	2213.5	2346.7
135°	2071.1	2185.9
137.5°	1956.8	2050.8
140°	1878.5	1966.2
142.5°	1813.6	1889.1
145°	1716.2	1773.3
147.5°	1641.4	1688.8
150°	1594.3	1632.8
152.5°	1554.1	1583.1
155°	1507.9	1527.1
157.5°	1471.3	1484.8
160°	1449.5	1457.2
162.5°	1435.2	1442.6
165°	1414.5	1422.3
167.5°	1399.8	1403.1
170°	1395.6	1395.6
172.5°	1384.8	1381.9
175°	1378.3	1378.3
177.5°	1372.3	1369.1
180°	1369.1	1369.1



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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	1.71	2.48	2.78	3.55	5.02	14.90	15.67	15.97	16.75	18.21
	3H	2.41	3.10	3.49	4.18	5.67	16.74	17.43	17.82	18.51	20.00
	4H	2.70	3.36	3.79	4.44	5.93	17.39	18.04	18.48	19.12	20.62
	6H	2.95	3.55	4.05	4.64	6.14	17.82	18.42	18.91	19.51	21.01
	8H	3.01	3.59	4.12	4.69	6.19	17.94	18.51	19.04	19.61	21.11
	12H	3.03	3.57	4.14	4.67	6.19	18.00	18.55	19.11	19.65	21.17
4H	2H	8.92	9.58	10.02	10.66	12.15	15.17	15.82	16.26	16.90	18.40
	3H	10.48	11.03	11.59	12.14	13.64	17.21	17.75	18.31	18.87	20.37
	4H	10.57	11.07	11.68	12.18	13.70	17.97	18.48	19.08	19.58	21.10
	6H	10.58	11.01	11.69	12.13	13.65	18.51	18.94	19.63	20.07	21.59
	8H	10.55	10.95	11.67	12.07	13.61	18.67	19.08	19.79	20.19	21.73
	12H	10.50	10.87	11.64	12.00	13.54	18.77	19.13	19.90	20.26	21.80
8H	4H	12.01	12.41	13.13	13.53	15.07	18.03	18.43	19.14	19.55	21.08
	6H	12.25	12.58	13.39	13.74	15.27	18.65	18.99	19.79	20.15	21.68
	8H	12.27	12.56	13.41	13.70	15.25	18.88	19.17	20.02	20.31	21.86
	12H	12.23	12.49	13.38	13.62	15.21	19.02	19.28	20.17	20.41	22.00
12H	4H	12.15	12.52	13.29	13.65	15.19	17.97	18.34	19.11	19.47	21.01
	6H	12.51	12.80	13.65	13.94	15.49	18.64	18.93	19.78	20.07	21.62
	8H	12.57	12.83	13.72	13.97	15.55	18.86	19.12	20.01	20.26	21.84