

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: P937592

Luminaire Tested: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937592
REPORT IS A COMBINATION OF REPORTS P933582 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

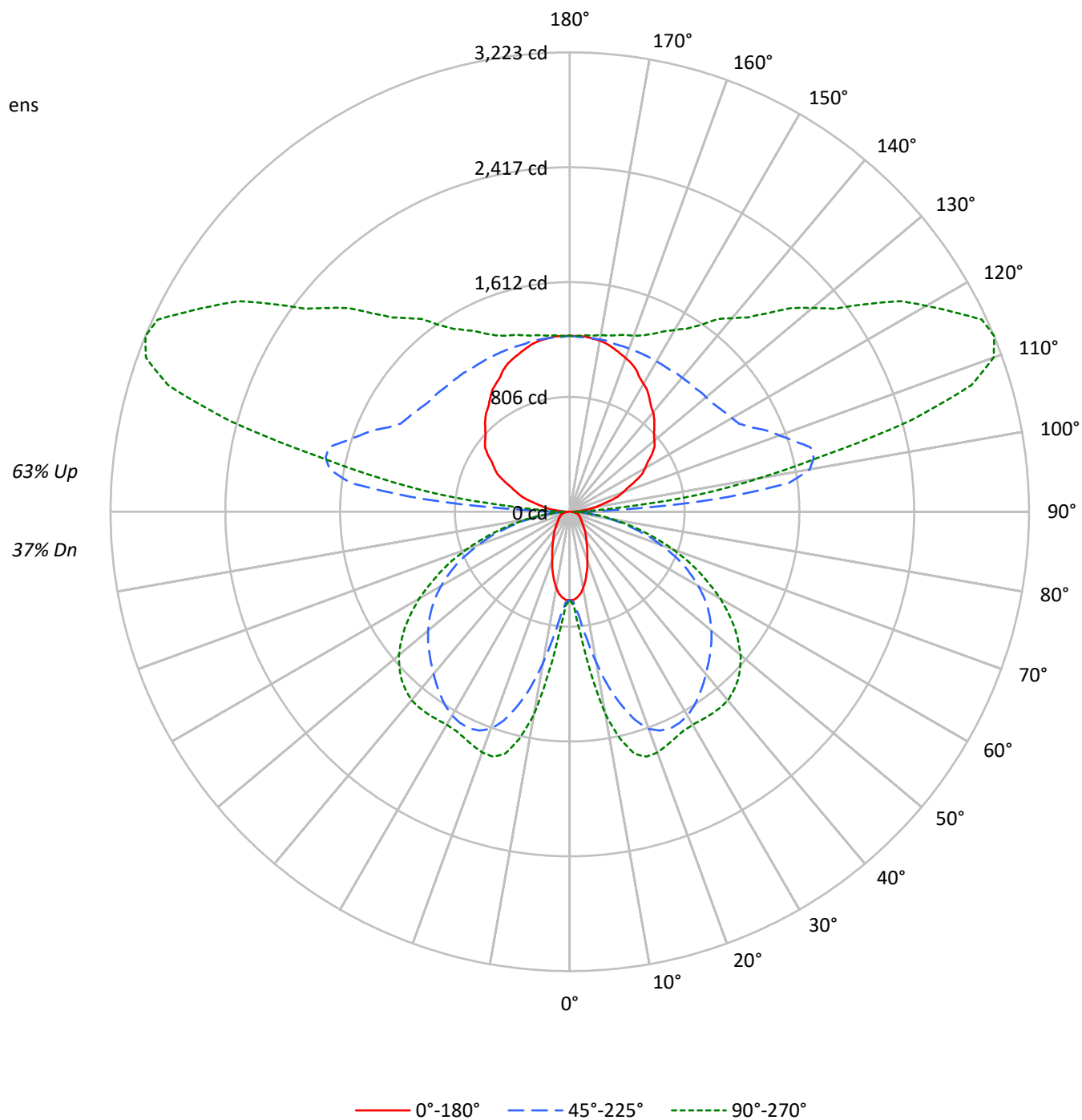
Lumens per Lamp: N/A
Luminaire Lumens: 12800.6 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 98.4
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

TEST NUMBER: P937592

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2874	2874	2874
5°	2808	3322	3864
10°	2547	4843	6405
15°	2165	6327	7734
20°	1763	7332	7883
25°	1470	7673	7723
30°	1240	7721	7708
35°	1096	7593	7907
40°	955	7426	8113
45°	865	7304	8145
50°	794	7195	8010
55°	760	7034	7655
60°	778	6724	7095
65°	809	6255	6324
70°	862	5455	5342
75°	956	4448	4169
80°	1043	3085	2810
85°	927	1636	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8145 cd/sqm

TEST NUMBER: P937592

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	0.6
10°-20°	355.2	2.8
20°-30°	621.3	4.9
30°-40°	799.8	6.2
40°-50°	893.3	7.0
50°-60°	855.6	6.7
60°-70°	678.0	5.3
70°-80°	398.7	3.1
80°-90°	115.5	0.9
90°-100°	601.8	4.7
100°-110°	1582.1	12.4
110°-120°	1640.5	12.8
120°-130°	1315.9	10.3
130°-140°	1032.5	8.1
140°-150°	792.5	6.2
150°-160°	570.7	4.5
160°-170°	349.2	2.7
170°-180°	118.0	0.9
0°-30°	1056.6	8.3
0°-40°	1856.4	14.5
0°-60°	3605.3	28.2
0°-90°	4797.5	37.5
90°-120°	3824.4	29.9
90°-150°	6965.3	54.4
90°-180°	8003.0	62.5
0°-180°	12800.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	604	647	729	825	855	56
15°	452	835	1406	1705	1759	126
25°	289	946	1675	1749	1751	133
35°	195	904	1578	1667	1733	122
45°	134	721	1394	1598	1669	103
55°	96	458	1183	1375	1412	87
65°	76	243	878	988	1002	75
75°	56	149	482	530	532	58
85°	20	46	120	132	134	21
90°	8	23	63	32	32	8
95°	80	312	1036	534	364	88
105°	285	432	1749	2656	2477	302
115°	506	615	1401	2795	3190	500
125°	704	790	1274	2154	2540	625
135°	839	924	1234	1738	1971	649
145°	974	1036	1219	1483	1599	610
155°	1100	1131	1219	1338	1377	506
165°	1187	1203	1219	1267	1283	335
175°	1234	1234	1227	1243	1243	117
180°	1234	1234	1234	1234	1234	

TEST NUMBER: P937592

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5
2.5°	619.5	619.5	623.5	625.5	629.5	631.5	635.4	639.4	651.4	653.4	657.4
5°	603.6	611.5	637.4	647.4	675.3	713.1	729.1	755.0	808.8	824.7	834.6
7.5°	579.7	597.6	661.3	677.3	747.0	846.6	888.4	944.2	1029.9	1071.7	1105.6
10°	541.8	579.7	693.2	731.1	844.6	996.0	1073.7	1151.5	1281.0	1338.7	1360.6
12.5°	500.0	561.7	727.1	778.9	942.2	1163.4	1257.1	1342.7	1490.1	1567.8	1579.8
15°	452.2	535.8	759.0	834.6	1045.8	1302.9	1406.5	1512.0	1649.5	1705.3	1719.2
17.5°	410.4	515.9	788.8	868.5	1125.5	1428.4	1533.9	1621.6	1733.1	1771.0	1780.9
20°	358.6	484.1	808.8	912.3	1209.2	1520.0	1621.6	1689.3	1765.0	1788.9	1792.9
22.5°	320.7	450.2	820.7	928.3	1265.0	1575.8	1661.4	1715.2	1767.0	1775.0	1777.0
25°	288.8	412.3	818.7	946.2	1312.8	1609.6	1675.4	1715.2	1745.1	1749.1	1749.1
27.5°	259.0	370.5	810.7	950.2	1348.7	1617.6	1669.4	1697.3	1711.2	1719.2	1719.2
30°	233.1	330.7	790.8	942.2	1364.6	1609.6	1651.5	1665.4	1679.4	1691.3	1697.3
32.5°	213.1	292.8	760.9	926.3	1366.6	1589.7	1619.6	1627.6	1647.5	1675.4	1685.3
35°	195.2	255.0	727.1	904.4	1354.7	1557.8	1577.8	1585.7	1625.6	1667.4	1681.3
37.5°	177.3	227.1	683.3	866.5	1336.7	1520.0	1533.9	1547.9	1609.6	1659.4	1675.4
40°	159.4	203.2	631.5	824.7	1308.8	1474.2	1486.1	1508.0	1589.7	1647.5	1663.4
42.5°	145.4	183.3	575.7	780.9	1273.0	1422.4	1440.3	1472.2	1565.8	1627.6	1645.5
45°	133.5	163.3	515.9	721.1	1227.2	1368.6	1394.5	1438.3	1537.9	1597.7	1613.6
47.5°	121.5	149.4	454.2	659.4	1177.4	1314.8	1348.7	1398.5	1500.1	1557.8	1571.8
50°	111.6	135.5	392.4	593.6	1123.5	1257.1	1296.9	1348.7	1452.3	1506.1	1524.0
52.5°	103.6	123.5	334.7	527.9	1061.7	1197.3	1243.1	1296.9	1394.5	1446.3	1458.2
55°	95.6	113.5	284.9	458.2	998.0	1133.5	1183.3	1235.1	1330.8	1374.6	1382.5
57.5°	91.6	105.6	243.0	392.4	930.3	1061.7	1117.5	1165.4	1255.1	1288.9	1296.9
60°	85.7	99.6	211.2	336.6	856.6	994.0	1041.8	1089.6	1165.4	1193.3	1199.3
62.5°	79.7	95.6	187.2	282.9	780.9	914.3	962.1	1006.0	1069.7	1089.6	1097.6
65°	75.7	91.6	169.3	243.0	703.2	830.7	878.5	916.3	968.1	988.0	992.0
67.5°	71.7	87.6	155.4	209.2	625.5	747.0	782.9	818.7	858.6	878.5	880.5
70°	65.7	83.7	143.4	185.3	545.8	651.4	681.3	719.1	751.0	760.9	766.9
72.5°	61.8	77.7	135.5	167.3	464.1	559.8	587.6	609.6	637.4	647.4	647.4
75°	55.8	69.7	127.5	149.4	380.5	458.2	482.1	504.0	525.9	529.9	523.9
77.5°	49.8	61.8	109.6	125.5	296.8	362.5	382.5	394.4	412.3	416.3	418.3
80°	41.8	53.8	85.7	97.6	215.1	266.9	280.9	290.8	306.8	306.8	310.8
82.5°	31.9	41.8	61.8	69.7	145.4	183.3	195.2	201.2	211.2	211.2	211.2
85°	19.9	25.9	39.8	45.8	87.6	111.6	119.5	121.5	129.5	131.5	131.5
87.5°	10.0	13.9	25.9	27.9	45.8	57.8	57.8	61.8	61.8	59.8	57.8
90°	8.3	14.9	21.5	23.2	36.5	54.1	62.9	56.0	41.9	31.5	31.5
92.5°	33.2	89.5	145.9	160.0	224.8	311.3	354.6	310.8	223.2	157.5	151.2
95°	79.6	182.7	285.8	311.5	553.2	875.4	1036.5	925.0	701.8	534.5	515.5
97.5°	137.5	228.5	319.5	342.2	745.2	1282.4	1551.1	1480.6	1339.5	1233.7	1197.7
100°	182.3	264.7	347.3	367.9	815.0	1411.2	1709.3	1714.5	1724.8	1732.5	1689.5
102.5°	220.4	297.3	374.3	393.5	847.0	1451.7	1754.1	1843.9	2023.7	2158.4	2121.6
105°	285.1	350.2	415.3	431.7	870.8	1456.4	1749.1	1950.5	2353.3	2655.5	2635.7
107.5°	351.3	412.0	472.8	488.0	875.3	1391.5	1649.7	1930.6	2492.6	2914.0	2918.8
110°	396.0	450.9	505.8	519.5	868.6	1334.0	1566.8	1880.9	2509.1	2980.3	3000.9

TEST NUMBER: P937592

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	439.9	492.2	544.6	557.7	868.9	1283.9	1491.4	1812.9	2455.8	2938.1	2969.8
115°	506.3	554.5	602.8	614.8	876.9	1226.4	1401.1	1710.8	2330.2	2794.8	2838.7
117.5°	571.7	615.5	659.4	670.3	893.2	1190.3	1338.9	1618.4	2177.5	2596.7	2645.4
120°	609.9	651.1	692.3	702.6	906.5	1178.3	1314.1	1569.5	2080.2	2463.3	2510.6
122.5°	647.1	688.7	730.4	740.7	925.5	1171.8	1295.0	1525.0	1984.9	2329.9	2376.7
125°	704.3	742.2	780.2	789.6	951.2	1166.6	1274.3	1469.7	1860.4	2153.5	2196.5
127.5°	750.7	788.9	827.3	836.8	976.9	1163.6	1257.0	1424.7	1760.1	2011.7	2048.0
130°	775.5	816.7	858.0	868.3	995.6	1165.4	1250.3	1399.6	1698.3	1922.3	1955.7
132.5°	801.2	842.4	883.7	894.0	1010.8	1166.6	1244.5	1378.2	1645.5	1846.0	1876.0
135°	839.3	876.9	914.5	923.9	1027.5	1165.5	1234.5	1346.5	1570.4	1738.3	1764.2
137.5°	878.3	915.4	952.7	961.9	1052.3	1172.7	1232.8	1327.5	1516.8	1658.7	1680.0
140°	910.5	944.8	979.1	987.6	1067.4	1173.9	1227.1	1308.8	1472.4	1595.0	1614.8
142.5°	935.4	967.1	998.8	1006.7	1080.2	1178.1	1227.1	1298.9	1442.5	1550.3	1567.3
145°	973.6	1001.2	1028.9	1035.7	1096.8	1178.2	1218.8	1277.6	1395.0	1483.1	1496.0
147.5°	1011.6	1038.5	1065.4	1072.2	1121.1	1186.2	1218.8	1265.0	1357.4	1426.8	1437.4
150°	1036.5	1060.8	1085.1	1091.2	1133.7	1190.4	1218.8	1257.8	1335.9	1394.5	1403.2
152.5°	1062.2	1080.7	1099.1	1103.7	1142.0	1193.2	1218.8	1252.2	1318.8	1368.8	1375.4
155°	1100.3	1113.9	1127.6	1131.0	1160.2	1199.3	1218.8	1245.3	1298.4	1338.1	1342.4
157.5°	1128.5	1141.7	1155.1	1158.3	1178.5	1205.4	1218.8	1239.4	1280.7	1311.6	1314.6
160°	1147.6	1157.9	1168.2	1170.8	1186.8	1208.1	1218.8	1236.5	1271.9	1298.4	1300.2
162.5°	1166.6	1174.4	1182.2	1184.0	1195.6	1211.0	1218.8	1233.7	1263.5	1285.9	1287.6
165°	1187.3	1194.3	1201.3	1203.1	1208.3	1215.3	1218.8	1229.5	1250.9	1266.9	1268.7
167.5°	1206.4	1209.6	1213.0	1213.8	1218.2	1224.1	1227.1	1234.0	1248.1	1258.5	1259.2
170°	1218.8	1222.1	1225.5	1226.3	1226.6	1226.9	1227.1	1234.0	1248.1	1258.5	1258.5
172.5°	1225.5	1226.2	1226.9	1227.1	1227.1	1227.1	1227.1	1232.6	1243.7	1252.0	1251.4
175°	1234.5	1234.5	1234.5	1234.5	1232.1	1228.8	1227.1	1230.6	1237.5	1242.8	1242.8
177.5°	1234.5	1234.5	1234.5	1234.5	1232.6	1230.1	1228.8	1231.6	1237.0	1241.2	1240.5
180°	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5

TEST NUMBER: P937592

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	619.5	619.5
2.5°	661.3	657.4
5°	850.6	854.6
7.5°	1145.5	1143.5
10°	1424.4	1442.3
12.5°	1627.6	1631.5
15°	1751.1	1759.0
17.5°	1798.9	1800.9
20°	1800.9	1796.9
22.5°	1779.0	1775.0
25°	1753.1	1751.1
27.5°	1729.2	1731.1
30°	1719.2	1725.2
32.5°	1719.2	1729.2
35°	1723.2	1733.1
37.5°	1721.2	1733.1
40°	1713.2	1727.2
42.5°	1691.3	1701.3
45°	1657.4	1669.4
47.5°	1613.6	1621.6
50°	1557.8	1565.8
52.5°	1488.1	1490.1
55°	1404.5	1412.4
57.5°	1314.8	1316.8
60°	1215.2	1221.2
62.5°	1109.5	1109.5
65°	998.0	1002.0
67.5°	882.5	892.4
70°	764.9	766.9
72.5°	649.4	649.4
75°	529.9	531.9
77.5°	416.3	416.3
80°	308.8	310.8
82.5°	213.1	217.1
85°	133.5	133.5
87.5°	61.8	55.8
90°	31.5	31.5
92.5°	126.2	101.1
95°	439.6	363.7
97.5°	1053.3	908.9
100°	1517.6	1345.6
102.5°	1974.3	1827.0
105°	2556.5	2477.4
107.5°	2938.0	2957.1
110°	3083.4	3165.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3096.4	3223.1
115°	3014.3	3190.0
117.5°	2840.2	3035.0
120°	2700.0	2889.2
122.5°	2563.3	2750.0
125°	2368.4	2540.4
127.5°	2193.1	2338.2
130°	2089.8	2223.9
132.5°	1996.1	2116.1
135°	1867.7	1971.2
137.5°	1764.6	1849.4
140°	1693.9	1773.1
142.5°	1635.4	1703.6
145°	1547.6	1599.1
147.5°	1480.2	1522.9
150°	1437.7	1472.4
152.5°	1401.5	1427.6
155°	1359.7	1377.1
157.5°	1326.8	1338.9
160°	1307.2	1314.1
162.5°	1294.2	1300.9
165°	1275.7	1282.6
167.5°	1262.2	1265.2
170°	1258.5	1258.5
172.5°	1248.8	1246.2
175°	1242.8	1242.8
177.5°	1237.5	1234.5
180°	1234.5	1234.5

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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	3.41	4.19	4.46	5.25	6.69	16.59	17.37	17.64	18.43	19.87
	3H	4.11	4.81	5.17	5.88	7.33	18.42	19.12	19.48	20.19	21.65
	4H	4.40	5.07	5.47	6.14	7.60	19.06	19.73	20.13	20.80	22.26
	6H	4.65	5.26	5.73	6.34	7.81	19.49	20.10	20.57	21.18	22.65
	8H	4.71	5.30	5.80	6.39	7.86	19.61	20.19	20.69	21.28	22.75
	12H	4.73	5.29	5.82	6.37	7.86	19.67	20.23	20.76	21.31	22.81
4H	2H	10.61	11.28	11.69	12.35	13.81	16.85	17.52	17.93	18.59	20.05
	3H	12.17	12.73	13.26	13.83	15.30	18.89	19.45	19.97	20.55	22.02
	4H	12.26	12.78	13.36	13.87	15.36	19.65	20.17	20.74	21.25	22.75
	6H	12.27	12.71	13.37	13.82	15.31	20.19	20.63	21.29	21.74	23.23
	8H	12.24	12.66	13.35	13.76	15.27	20.35	20.76	21.45	21.86	23.37
	12H	12.20	12.57	13.32	13.69	15.20	20.44	20.81	21.55	21.93	23.44
8H	4H	13.70	14.12	14.80	15.22	16.72	19.71	20.12	20.81	21.22	22.73
	6H	13.94	14.28	15.06	15.43	16.93	20.33	20.67	21.45	21.82	23.32
	8H	13.96	14.26	15.09	15.38	16.91	20.55	20.85	21.68	21.98	23.50
	12H	13.92	14.19	15.06	15.31	16.87	20.69	20.95	21.82	22.08	23.64
12H	4H	13.84	14.22	14.96	15.33	16.84	19.65	20.03	20.77	21.14	22.66
	6H	14.20	14.50	15.33	15.62	17.15	20.31	20.61	21.44	21.74	23.26
	8H	14.26	14.53	15.40	15.65	17.21	20.54	20.80	21.67	21.93	23.48