

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: P937966

Luminaire Tested: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937966  
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-93050-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

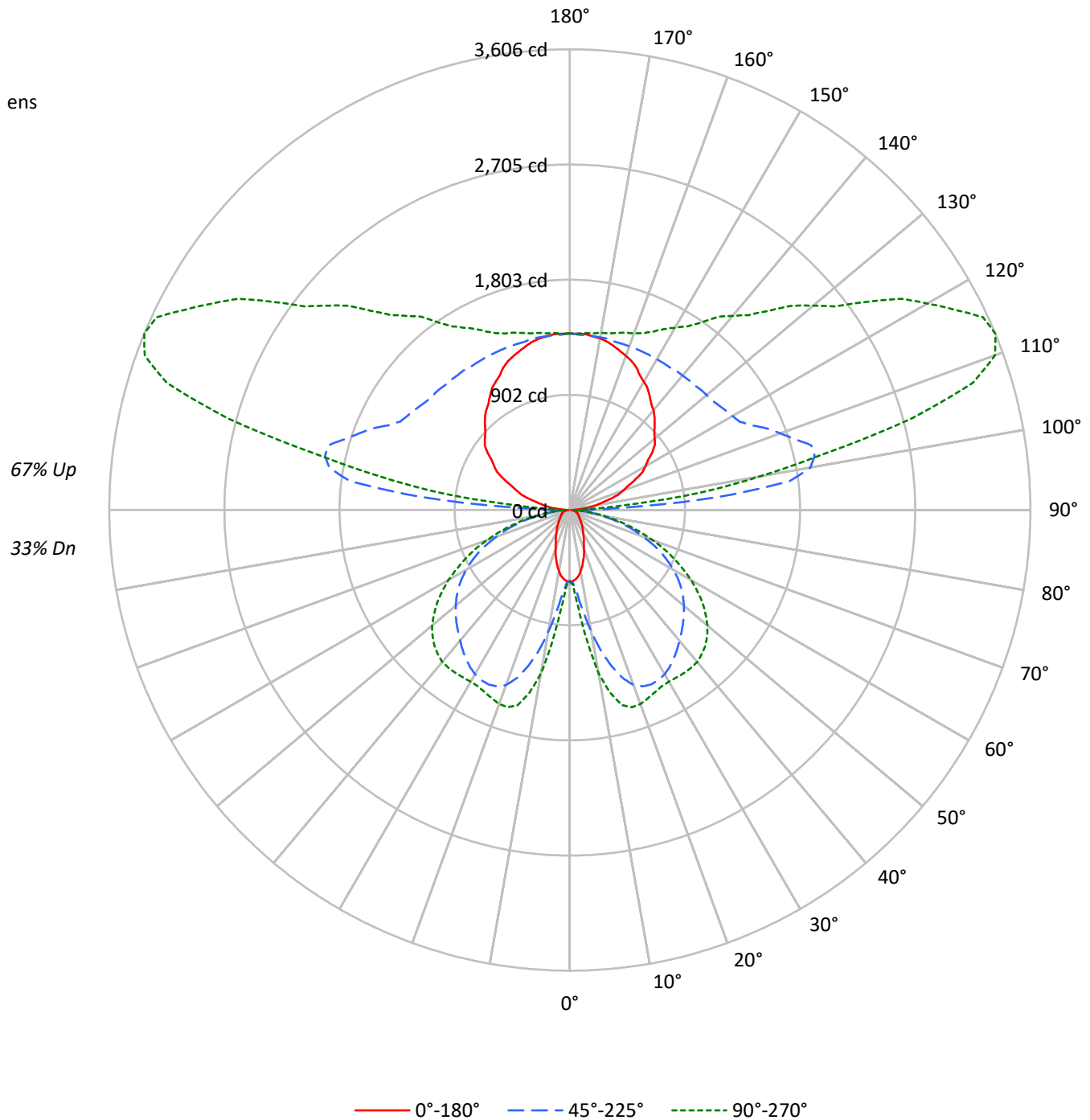
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13268.5 lumens  
Efficiency: N/A  
Efficacy: 119.3 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): 111.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2584	2584	2584
5°	2524	2986	3473
10°	2289	4353	5758
15°	1946	5688	6953
20°	1584	6591	7086
25°	1321	6897	6942
30°	1114	6941	6929
35°	985	6826	7108
40°	858	6676	7293
45°	778	6566	7321
50°	713	6467	7200
55°	683	6323	6881
60°	699	6045	6377
65°	727	5623	5685
70°	775	4903	4802
75°	858	3998	3748
80°	938	2773	2525
85°	834	1470	1293

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7321 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	0.5
10°-20°	319.3	2.4
20°-30°	558.5	4.2
30°-40°	718.9	5.4
40°-50°	803.0	6.1
50°-60°	769.1	5.8
60°-70°	609.5	4.6
70°-80°	358.4	2.7
80°-90°	104.8	0.8
90°-100°	673.4	5.1
100°-110°	1770.3	13.3
110°-120°	1835.6	13.8
120°-130°	1472.4	11.1
130°-140°	1155.3	8.7
140°-150°	886.7	6.7
150°-160°	638.6	4.8
160°-170°	390.7	2.9
170°-180°	132.0	1.0
0°-30°	949.8	7.2
0°-40°	1668.7	12.6
0°-60°	3240.8	24.4
0°-90°	4313.5	32.5
90°-120°	4279.3	32.3
90°-150°	7793.7	58.7
90°-180°	8955.0	67.5
0°-180°	13268.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	543	582	655	741	768	50
15°	406	750	1264	1533	1581	113
25°	260	850	1506	1572	1574	120
35°	176	813	1418	1499	1558	110
45°	120	648	1254	1436	1501	93
55°	86	412	1064	1236	1270	78
65°	68	218	790	888	901	67
75°	50	134	433	476	478	52
85°	18	41	107	118	120	19
90°	9	26	70	35	35	9
95°	89	349	1160	598	407	99
105°	319	483	1957	2971	2772	338
115°	566	688	1568	3127	3569	559
125°	788	884	1426	2410	2842	700
135°	939	1034	1381	1945	2206	727
145°	1089	1159	1364	1660	1789	682
155°	1231	1266	1364	1497	1541	566
165°	1329	1346	1364	1418	1435	375
175°	1381	1381	1373	1391	1391	131
180°	1381	1381	1381	1381	1381	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9
2.5°	556.9	556.9	560.5	562.3	565.8	567.6	571.2	574.8	585.5	587.3	590.9
5°	542.6	549.7	573.0	582.0	607.0	641.0	655.4	678.6	727.0	741.3	750.3
7.5°	521.1	537.2	594.5	608.8	671.5	761.0	798.6	848.8	925.8	963.4	993.8
10°	487.0	521.1	623.1	657.2	759.2	895.3	965.1	1035.1	1151.5	1203.4	1223.1
12.5°	449.4	505.0	653.6	700.1	847.0	1045.8	1130.0	1207.0	1339.5	1409.3	1420.1
15°	406.5	481.7	682.2	750.3	940.1	1171.2	1264.3	1359.2	1482.7	1532.9	1545.4
17.5°	368.9	463.8	709.1	780.7	1011.7	1284.0	1378.9	1457.7	1557.9	1592.0	1600.9
20°	322.3	435.1	727.0	820.1	1087.0	1366.3	1457.7	1518.5	1586.6	1608.1	1611.7
22.5°	288.3	404.7	737.7	834.4	1137.1	1416.5	1493.5	1541.8	1588.4	1595.5	1597.3
25°	259.6	370.7	735.9	850.5	1180.1	1446.9	1506.0	1541.8	1568.7	1572.3	1572.3
27.5°	232.8	333.1	728.8	854.1	1212.3	1454.1	1500.6	1525.7	1538.2	1545.4	1545.4
30°	209.5	297.2	710.9	847.0	1226.7	1446.9	1484.5	1497.1	1509.6	1520.3	1525.7
32.5°	191.6	263.2	684.0	832.6	1228.5	1429.0	1455.9	1463.0	1480.9	1506.0	1515.0
35°	175.5	229.2	653.6	812.9	1217.7	1400.4	1418.3	1425.4	1461.2	1498.8	1511.4
37.5°	159.4	204.1	614.2	778.9	1201.6	1366.3	1378.9	1391.4	1446.9	1491.7	1506.0
40°	143.2	182.6	567.6	741.3	1176.5	1325.2	1335.9	1355.6	1429.0	1480.9	1495.3
42.5°	130.7	164.7	517.5	701.9	1144.3	1278.6	1294.7	1323.4	1407.5	1463.0	1479.1
45°	120.0	146.8	463.8	648.2	1103.1	1230.2	1253.5	1292.9	1382.5	1436.2	1450.5
47.5°	109.2	134.3	408.3	592.7	1058.3	1181.9	1212.3	1257.1	1348.4	1400.4	1412.9
50°	100.3	121.8	352.8	533.6	1009.9	1130.0	1165.8	1212.3	1305.5	1353.8	1369.9
52.5°	93.1	111.0	300.8	474.5	954.4	1076.3	1117.4	1165.8	1253.5	1300.1	1310.8
55°	85.9	102.1	256.1	411.8	897.1	1019.0	1063.7	1110.3	1196.2	1235.6	1242.8
57.5°	82.4	94.9	218.5	352.8	836.2	954.4	1004.5	1047.6	1128.2	1158.6	1165.8
60°	77.0	89.5	189.8	302.6	770.0	893.5	936.5	979.5	1047.6	1072.7	1078.0
62.5°	71.6	85.9	168.3	254.3	701.9	821.9	864.9	904.3	961.6	979.5	986.6
65°	68.0	82.4	152.2	218.5	632.1	746.7	789.7	823.7	870.2	888.1	891.7
67.5°	64.5	78.8	139.7	188.0	562.3	671.5	703.7	735.9	771.8	789.7	791.5
70°	59.1	75.2	128.9	166.5	490.6	585.5	612.4	646.4	675.1	684.0	689.4
72.5°	55.5	69.8	121.8	150.4	417.2	503.2	528.2	547.9	573.0	582.0	582.0
75°	50.1	62.7	114.6	134.3	342.0	411.8	433.3	453.0	472.7	476.3	470.9
77.5°	44.8	55.5	98.5	112.8	266.8	325.9	343.8	354.5	370.7	374.2	376.0
80°	37.6	48.3	77.0	87.7	193.4	239.9	252.5	261.4	275.8	275.8	279.3
82.5°	28.6	37.6	55.5	62.7	130.7	164.7	175.5	180.9	189.8	189.8	189.8
85°	17.9	23.3	35.8	41.2	78.8	100.3	107.4	109.2	116.4	118.2	118.2
87.5°	9.0	12.5	23.3	25.1	41.2	51.9	51.9	55.5	55.5	53.7	51.9
90°	9.3	16.7	24.1	26.0	40.8	60.6	70.5	62.6	46.9	35.2	35.2
92.5°	37.1	100.1	163.2	179.0	251.6	348.4	396.8	347.7	249.7	176.1	169.1
95°	89.0	204.4	319.8	348.6	619.0	979.6	1159.8	1035.0	785.3	598.0	576.8
97.5°	153.9	255.7	357.5	382.9	833.8	1435.0	1735.6	1656.7	1498.8	1380.5	1340.1
100°	204.0	296.3	388.6	411.7	912.0	1579.1	1912.7	1918.4	1929.9	1938.6	1890.5
102.5°	246.6	332.7	418.8	440.4	947.9	1624.5	1962.7	2063.2	2264.3	2415.1	2373.9
105°	318.9	391.9	464.8	483.0	974.4	1629.6	1957.2	2182.5	2633.3	2971.4	2949.2
107.5°	393.1	461.1	529.0	546.1	979.3	1557.0	1845.9	2160.3	2789.1	3260.6	3266.0
110°	443.2	504.6	566.0	581.3	972.0	1492.8	1753.2	2104.7	2807.6	3334.8	3357.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	492.3	550.8	609.3	623.9	972.2	1436.6	1668.8	2028.5	2747.9	3287.5	3323.0
115°	566.5	620.5	674.3	687.9	981.2	1372.2	1567.8	1914.3	2607.3	3127.1	3176.3
117.5°	639.7	688.8	737.7	750.0	999.4	1332.0	1498.2	1810.9	2436.4	2905.6	2960.1
120°	682.3	728.5	774.6	786.2	1014.2	1318.3	1470.4	1756.2	2327.6	2756.3	2809.2
122.5°	724.0	770.6	817.2	828.8	1035.5	1311.2	1449.1	1706.4	2221.1	2607.1	2659.3
125°	788.1	830.5	872.9	883.5	1064.3	1305.4	1425.9	1644.5	2081.7	2409.6	2457.6
127.5°	840.0	882.9	925.7	936.4	1093.1	1302.0	1406.4	1594.1	1969.5	2251.0	2291.6
130°	867.7	913.9	960.0	971.6	1114.0	1304.0	1399.0	1566.1	1900.3	2150.9	2188.4
132.5°	896.5	942.7	988.8	1000.3	1131.0	1305.4	1392.5	1542.1	1841.2	2065.6	2099.1
135°	939.2	981.2	1023.3	1033.7	1149.6	1304.1	1381.4	1506.6	1757.1	1945.1	1974.0
137.5°	982.7	1024.3	1066.0	1076.3	1177.4	1312.2	1379.5	1485.4	1697.2	1856.1	1879.8
140°	1018.9	1057.2	1095.5	1105.1	1194.4	1313.5	1373.1	1464.6	1647.5	1784.7	1806.8
142.5°	1046.7	1082.2	1117.5	1126.4	1208.6	1318.3	1373.1	1453.4	1614.1	1734.6	1753.6
145°	1089.3	1120.2	1151.2	1158.9	1227.2	1318.3	1363.7	1429.5	1561.0	1659.6	1674.0
147.5°	1132.0	1162.1	1192.2	1199.7	1254.4	1327.3	1363.7	1415.5	1518.9	1596.5	1608.4
150°	1159.8	1187.0	1214.2	1221.0	1268.6	1332.0	1363.7	1407.4	1494.8	1560.3	1570.0
152.5°	1188.5	1209.1	1229.7	1234.9	1277.9	1335.1	1363.7	1401.1	1475.7	1531.6	1539.0
155°	1231.2	1246.5	1261.7	1265.5	1298.3	1341.9	1363.7	1393.5	1452.8	1497.3	1502.2
157.5°	1262.7	1277.5	1292.4	1296.1	1318.6	1348.7	1363.7	1386.8	1432.9	1467.6	1471.0
160°	1284.1	1295.6	1307.2	1310.0	1327.9	1351.8	1363.7	1383.5	1423.1	1452.7	1454.7
162.5°	1305.4	1314.0	1322.6	1324.8	1337.8	1355.1	1363.7	1380.4	1413.8	1438.9	1440.7
165°	1328.6	1336.4	1344.2	1346.2	1352.0	1359.8	1363.7	1375.7	1399.6	1417.5	1419.5
167.5°	1349.9	1353.5	1357.3	1358.2	1363.1	1369.7	1373.1	1380.8	1396.5	1408.2	1409.0
170°	1363.7	1367.5	1371.3	1372.2	1372.4	1372.9	1373.1	1380.8	1396.5	1408.2	1408.2
172.5°	1371.2	1372.0	1372.9	1373.1	1373.1	1373.1	1373.1	1379.2	1391.6	1400.9	1400.2
175°	1381.4	1381.4	1381.4	1381.4	1378.6	1374.9	1373.1	1377.0	1384.8	1390.7	1390.7
177.5°	1381.4	1381.4	1381.4	1381.4	1379.2	1376.4	1374.9	1378.0	1384.2	1388.8	1388.0
180°	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	556.9	556.9
2.5°	594.5	590.9
5°	764.6	768.2
7.5°	1029.7	1027.9
10°	1280.4	1296.5
12.5°	1463.0	1466.6
15°	1574.0	1581.2
17.5°	1617.0	1618.8
20°	1618.8	1615.2
22.5°	1599.1	1595.5
25°	1575.8	1574.0
27.5°	1554.4	1556.1
30°	1545.4	1550.8
32.5°	1545.4	1554.4
35°	1549.0	1557.9
37.5°	1547.2	1557.9
40°	1540.0	1552.6
42.5°	1520.3	1529.3
45°	1489.9	1500.6
47.5°	1450.5	1457.7
50°	1400.4	1407.5
52.5°	1337.7	1339.5
55°	1262.5	1269.6
57.5°	1181.9	1183.7
60°	1092.4	1097.7
62.5°	997.4	997.4
65°	897.1	900.7
67.5°	793.2	802.2
70°	687.6	689.4
72.5°	583.7	583.7
75°	476.3	478.1
77.5°	374.2	374.2
80°	277.5	279.3
82.5°	191.6	195.2
85°	120.0	120.0
87.5°	55.5	50.1
90°	35.2	35.2
92.5°	141.1	113.1
95°	491.9	407.0
97.5°	1178.6	1017.1
100°	1698.0	1505.6
102.5°	2209.1	2044.3
105°	2860.6	2772.1
107.5°	3287.4	3308.8
110°	3450.2	3542.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3464.7	3606.4
115°	3372.8	3569.3
117.5°	3178.0	3396.0
120°	3021.1	3232.8
122.5°	2868.2	3077.1
125°	2650.1	2842.5
127.5°	2454.0	2616.3
130°	2338.4	2488.3
132.5°	2233.5	2367.8
135°	2089.8	2205.6
137.5°	1974.5	2069.3
140°	1895.5	1984.0
142.5°	1829.8	1906.1
145°	1731.6	1789.3
147.5°	1656.2	1704.0
150°	1608.8	1647.5
152.5°	1568.1	1597.4
155°	1521.5	1540.8
157.5°	1484.6	1498.2
160°	1462.5	1470.4
162.5°	1448.2	1455.6
165°	1427.3	1435.2
167.5°	1412.4	1415.7
170°	1408.2	1408.2
172.5°	1397.2	1394.4
175°	1390.7	1390.7
177.5°	1384.7	1381.4
180°	1381.4	1381.4



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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	2.44	3.19	3.53	4.28	5.78	15.62	16.37	16.71	17.46	18.95
	3H	3.14	3.81	4.24	4.91	6.42	17.45	18.12	18.55	19.22	20.73
	4H	3.43	4.07	4.54	5.17	6.69	18.09	18.73	19.20	19.83	21.35
	6H	3.68	4.26	4.79	5.36	6.90	18.51	19.10	19.63	20.20	21.74
	8H	3.74	4.30	4.86	5.42	6.94	18.63	19.19	19.75	20.31	21.84
	12H	3.75	4.28	4.88	5.40	6.95	18.70	19.22	19.82	20.34	21.89
4H	2H	9.64	10.28	10.76	11.38	12.90	15.88	16.52	16.99	17.62	19.14
	3H	11.20	11.73	12.32	12.86	14.39	17.91	18.45	19.04	19.57	21.11
	4H	11.29	11.78	12.41	12.89	14.45	18.68	19.16	19.80	20.28	21.84
	6H	11.29	11.71	12.42	12.85	14.40	19.21	19.63	20.34	20.77	22.31
	8H	11.27	11.66	12.40	12.79	14.35	19.37	19.76	20.50	20.89	22.45
	12H	11.22	11.57	12.37	12.72	14.28	19.45	19.81	20.60	20.95	22.52
8H	4H	12.72	13.11	13.85	14.25	15.81	18.73	19.12	19.86	20.25	21.81
	6H	12.96	13.28	14.11	14.46	16.02	19.35	19.67	20.50	20.85	22.41
	8H	12.98	13.26	14.14	14.41	15.99	19.57	19.85	20.73	21.00	22.58
	12H	12.94	13.19	14.10	14.34	15.95	19.71	19.96	20.87	21.11	22.72
12H	4H	12.86	13.22	14.01	14.36	15.93	18.67	19.03	19.82	20.17	21.74
	6H	13.22	13.50	14.38	14.65	16.23	19.33	19.62	20.49	20.77	22.35
	8H	13.28	13.53	14.44	14.68	16.29	19.56	19.81	20.72	20.95	22.57