

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: P938166

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938166
REPORT IS A COMBINATION OF REPORTS P933616 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

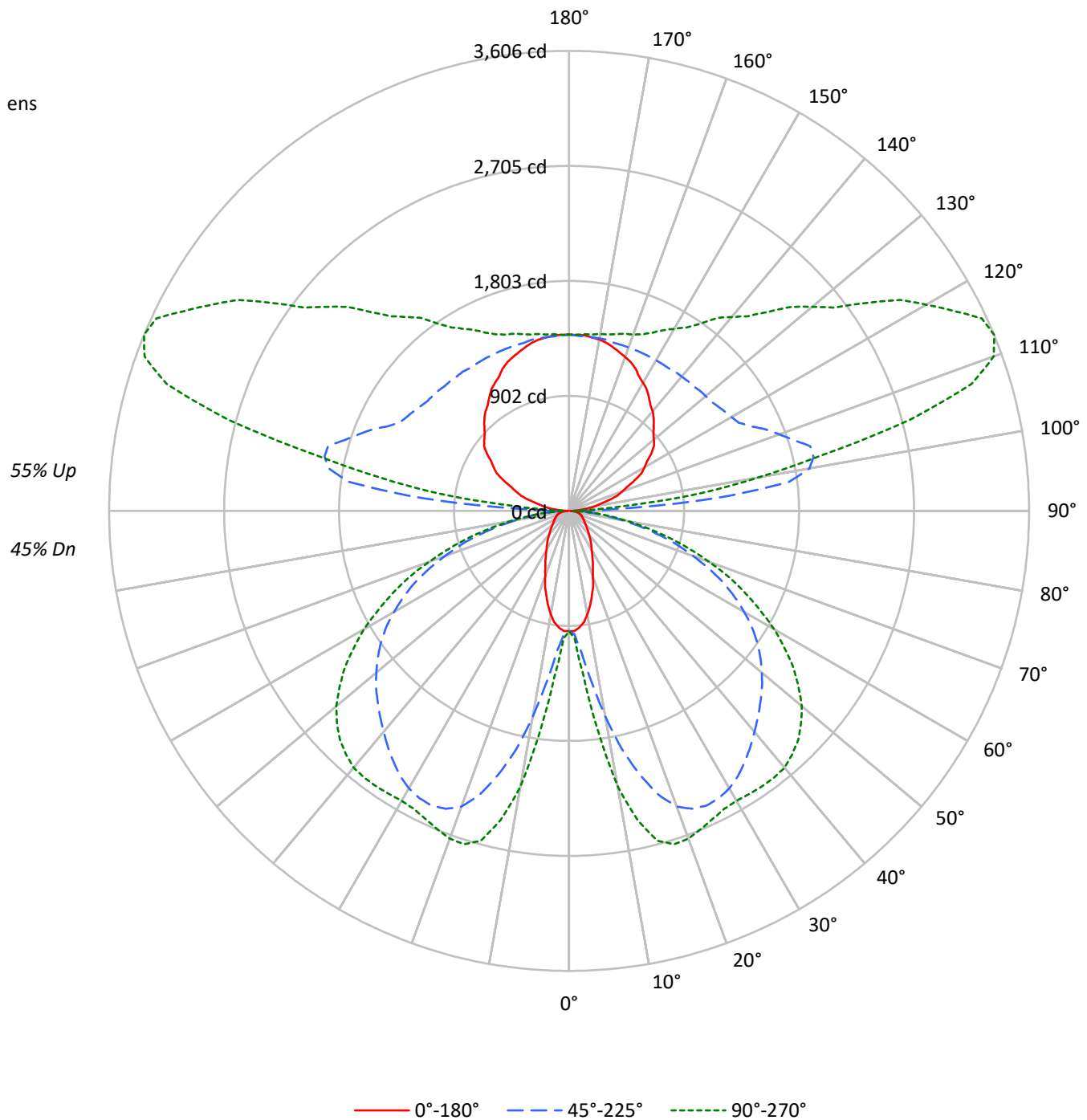
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16250.8 lumens
Efficiency: N/A
Efficacy: 108.1 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: General Diffuse

Input Watts (W): 150.4
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	
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4372	4372	4372
5°	4271	5054	5877
10°	3874	7367	9744
15°	3293	9624	11765
20°	2681	11153	11990
25°	2236	11671	11747
30°	1886	11745	11725
35°	1668	11550	12028
40°	1453	11297	12342
45°	1316	11111	12390
50°	1207	10944	12185
55°	1156	10699	11645
60°	1183	10229	10792
65°	1231	9515	9620
70°	1311	8298	8127
75°	1454	6766	6342
80°	1589	4691	4273
85°	1411	2489	2188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12390 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	0.8
10°-20°	540.3	3.3
20°-30°	945.0	5.8
30°-40°	1216.6	7.5
40°-50°	1358.9	8.4
50°-60°	1301.5	8.0
60°-70°	1031.4	6.3
70°-80°	606.5	3.7
80°-90°	173.8	1.1
90°-100°	673.4	4.1
100°-110°	1770.3	10.9
110°-120°	1835.6	11.3
120°-130°	1472.4	9.1
130°-140°	1155.3	7.1
140°-150°	886.7	5.5
150°-160°	638.6	3.9
160°-170°	390.7	2.4
170°-180°	132.0	0.8
0°-30°	1607.2	9.9
0°-40°	2823.8	17.4
0°-60°	5484.1	33.7
0°-90°	7295.8	44.9
90°-120°	4279.3	26.3
90°-150°	7793.7	48.0
90°-180°	8955.0	55.1
0°-180°	16250.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	918	985	1109	1254	1300	85
15°	688	1270	2139	2594	2676	191
25°	439	1439	2548	2661	2664	202
35°	297	1376	2400	2536	2636	185
45°	203	1097	2121	2430	2539	157
55°	146	697	1800	2091	2148	133
65°	115	370	1336	1503	1524	114
75°	85	227	733	806	809	89
85°	30	70	182	200	203	32
90°	9	26	70	35	35	10
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°	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4
2.5°	942.4	942.4	948.5	951.5	957.5	960.6	966.7	972.8	990.9	994.0	1000.0
5°	918.1	930.3	969.7	984.8	1027.3	1084.8	1109.1	1148.5	1230.2	1254.5	1269.6
7.5°	881.8	909.1	1006.1	1030.3	1136.3	1287.9	1351.5	1436.3	1566.6	1630.3	1681.8
10°	824.2	881.8	1054.5	1112.1	1284.9	1515.1	1633.3	1751.5	1948.5	2036.4	2069.7
12.5°	760.6	854.6	1106.1	1184.9	1433.3	1769.7	1912.1	2042.4	2266.7	2384.8	2403.0
15°	687.9	815.2	1154.5	1269.6	1590.9	1981.8	2139.3	2300.0	2509.1	2593.9	2615.1
17.5°	624.2	784.8	1200.0	1321.2	1712.1	2172.7	2333.3	2466.7	2636.3	2693.9	2709.0
20°	545.4	736.4	1230.2	1387.8	1839.4	2312.1	2466.7	2569.6	2684.9	2721.2	2727.2
22.5°	487.9	684.8	1248.5	1412.1	1924.2	2396.9	2527.3	2609.0	2687.8	2700.0	2703.0
25°	439.4	627.3	1245.5	1439.4	1997.0	2448.5	2548.5	2609.0	2654.5	2660.6	2660.6
27.5°	393.9	563.6	1233.3	1445.5	2051.5	2460.6	2539.4	2581.8	2603.0	2615.1	2615.1
30°	354.5	503.0	1203.0	1433.3	2075.8	2448.5	2512.1	2533.3	2554.5	2572.7	2581.8
32.5°	324.3	445.4	1157.5	1409.0	2078.7	2418.1	2463.6	2475.7	2506.1	2548.5	2563.6
35°	297.0	387.8	1106.1	1375.7	2060.6	2369.7	2400.0	2412.1	2472.7	2536.3	2557.5
37.5°	269.7	345.4	1039.4	1318.2	2033.3	2312.1	2333.3	2354.5	2448.5	2524.2	2548.5
40°	242.5	309.1	960.6	1254.5	1990.9	2242.4	2260.6	2293.9	2418.1	2506.1	2530.2
42.5°	221.2	278.8	875.8	1187.9	1936.4	2163.6	2190.9	2239.4	2381.8	2475.7	2503.0
45°	203.1	248.4	784.8	1096.9	1866.6	2081.8	2121.2	2187.9	2339.4	2430.3	2454.5
47.5°	184.9	227.2	690.9	1003.0	1790.9	1999.9	2051.5	2127.3	2281.8	2369.7	2390.9
50°	169.7	206.1	597.0	903.0	1709.1	1912.1	1972.7	2051.5	2209.1	2290.9	2318.1
52.5°	157.6	187.8	509.1	803.0	1615.1	1821.2	1890.9	1972.7	2121.2	2200.0	2218.1
55°	145.5	172.7	433.3	697.0	1518.2	1724.2	1800.0	1878.8	2024.2	2090.9	2103.0
57.5°	139.4	160.6	369.7	597.0	1415.1	1615.1	1700.0	1772.7	1909.1	1960.6	1972.7
60°	130.3	151.5	321.2	512.1	1303.0	1512.1	1584.8	1657.6	1772.7	1815.2	1824.2
62.5°	121.2	145.5	284.9	430.3	1187.9	1390.9	1463.7	1530.3	1627.2	1657.6	1669.7
65°	115.1	139.4	257.6	369.7	1069.7	1263.6	1336.3	1393.9	1472.7	1503.0	1509.0
67.5°	109.0	133.3	236.4	318.2	951.5	1136.3	1190.9	1245.5	1306.1	1336.3	1339.4
70°	100.0	127.3	218.2	281.8	830.3	990.9	1036.3	1093.9	1142.4	1157.5	1166.7
72.5°	93.9	118.2	206.1	254.5	706.0	851.5	894.0	927.3	969.7	984.8	984.8
75°	84.9	106.1	193.9	227.2	578.8	697.0	733.4	766.7	800.0	806.0	797.0
77.5°	75.7	93.9	166.7	190.9	451.5	551.5	581.8	600.0	627.3	633.3	636.4
80°	63.7	81.8	130.3	148.4	327.2	406.0	427.2	442.5	466.6	466.6	472.7
82.5°	48.5	63.7	93.9	106.1	221.2	278.8	297.0	306.0	321.2	321.2	321.2
85°	30.3	39.4	60.6	69.7	133.3	169.7	181.8	184.9	197.0	200.0	200.0
87.5°	15.1	21.2	39.4	42.4	69.7	87.9	87.9	93.9	93.9	90.9	87.9
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°	942.4	942.4
2.5°	1006.1	1000.0
5°	1293.9	1300.0
7.5°	1742.4	1739.4
10°	2166.7	2194.0
12.5°	2475.7	2481.8
15°	2663.6	2675.7
17.5°	2736.3	2739.4
20°	2739.4	2733.3
22.5°	2706.1	2700.0
25°	2666.7	2663.6
27.5°	2630.2	2633.3
30°	2615.1	2624.2
32.5°	2615.1	2630.2
35°	2621.2	2636.3
37.5°	2618.2	2636.3
40°	2606.1	2627.3
42.5°	2572.7	2587.9
45°	2521.2	2539.4
47.5°	2454.5	2466.7
50°	2369.7	2381.8
52.5°	2263.6	2266.7
55°	2136.3	2148.5
57.5°	1999.9	2003.0
60°	1848.5	1857.6
62.5°	1687.8	1687.8
65°	1518.2	1524.3
67.5°	1342.4	1357.6
70°	1163.6	1166.7
72.5°	987.9	987.9
75°	806.0	809.1
77.5°	633.3	633.3
80°	469.7	472.7
82.5°	324.3	330.3
85°	203.1	203.1
87.5°	93.9	84.9
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	5.65	6.50	6.64	7.51	8.85	18.83	19.68	19.82	20.68	22.02
	3H	6.35	7.12	7.35	8.13	9.49	20.66	21.43	21.67	22.45	23.81
	4H	6.65	7.37	7.66	8.39	9.76	21.31	22.03	22.32	23.05	24.42
	6H	6.90	7.57	7.92	8.59	9.97	21.74	22.41	22.76	23.43	24.81
	8H	6.97	7.60	8.00	8.65	10.02	21.86	22.50	22.89	23.54	24.91
	12H	6.98	7.59	8.02	8.63	10.03	21.93	22.53	22.96	23.57	24.97
4H	2H	12.86	13.58	13.88	14.61	15.97	19.10	19.82	20.12	20.84	22.21
	3H	14.43	15.03	15.46	16.08	17.46	21.14	21.75	22.17	22.80	24.18
	4H	14.52	15.08	15.56	16.12	17.52	21.91	22.46	22.95	23.51	24.91
	6H	14.53	15.01	15.58	16.08	17.47	22.45	22.93	23.50	23.99	25.39
	8H	14.51	14.96	15.56	16.01	17.43	22.61	23.06	23.66	24.11	25.53
	12H	14.46	14.87	15.53	15.94	17.36	22.70	23.11	23.77	24.18	25.60
8H	4H	15.97	16.41	17.01	17.47	18.89	21.97	22.42	23.02	23.47	24.89
	6H	16.21	16.58	17.28	17.68	19.09	22.60	22.97	23.67	24.07	25.48
	8H	16.22	16.55	17.31	17.63	19.07	22.82	23.14	23.90	24.23	25.66
	12H	16.19	16.48	17.28	17.56	19.03	22.96	23.25	24.05	24.33	25.80
12H	4H	16.11	16.51	17.18	17.59	19.01	21.92	22.33	22.99	23.40	24.82
	6H	16.47	16.79	17.55	17.87	19.31	22.58	22.91	23.66	23.99	25.42
	8H	16.53	16.82	17.62	17.90	19.37	22.81	23.10	23.90	24.18	25.65