

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: P937229

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937229
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-12-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

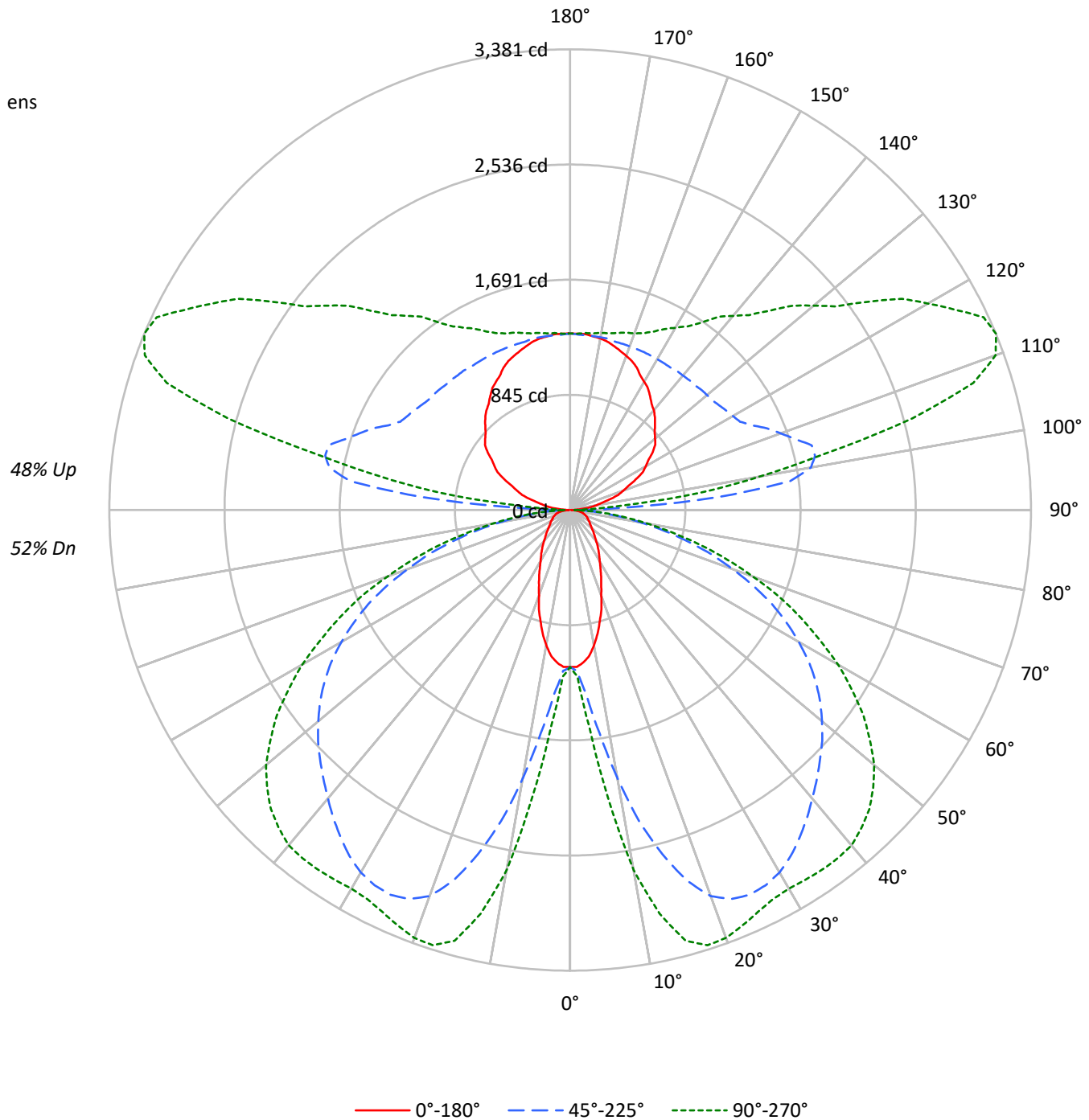
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17314.5 lumens
Efficiency: N/A
Efficacy: 112.7 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: General Diffuse

Input Watts (W): 153.6
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

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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	50	30	10	0
RCR																					
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3564	3564	3564
5°	3483	4120	4790
10°	3160	6007	7941
15°	2687	7850	9590
20°	2188	9099	9773
25°	1826	9524	9574
30°	1541	9587	9556
35°	1363	9430	9803
40°	1188	9226	10059
45°	1077	9077	10098
50°	989	8944	9931
55°	948	8748	9491
60°	971	8367	8796
65°	1012	7787	7841
70°	1081	6796	6624
75°	1203	5546	5169
80°	1323	3851	3483
85°	1199	2047	1783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10098 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	0.9
10°-20°	660.6	3.8
20°-30°	1155.4	6.7
30°-40°	1487.4	8.6
40°-50°	1661.3	9.6
50°-60°	1591.2	9.2
60°-70°	1261.0	7.3
70°-80°	741.5	4.3
80°-90°	210.9	1.2
90°-100°	631.3	3.6
100°-110°	1659.8	9.6
110°-120°	1721.1	9.9
120°-130°	1380.5	8.0
130°-140°	1083.2	6.3
140°-150°	831.4	4.8
150°-160°	598.7	3.5
160°-170°	366.3	2.1
170°-180°	123.8	0.7
0°-30°	1965.0	11.3
0°-40°	3452.4	19.9
0°-60°	6704.9	38.7
0°-90°	8918.3	51.5
90°-120°	4012.2	23.2
90°-150°	7307.3	42.2
90°-180°	8396.0	48.5
0°-180°	17314.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1123	1204	1356	1534	1589	104
15°	841	1552	2616	3171	3271	234
25°	537	1760	3116	3253	3256	247
35°	363	1682	2934	3101	3223	227
45°	248	1341	2593	2971	3105	192
55°	178	852	2201	2556	2627	162
65°	141	452	1634	1838	1864	140
75°	104	278	897	986	989	109
85°	37	85	222	244	248	39
90°	9	24	66	33	33	10
95°	84	327	1087	561	382	93
105°	299	453	1835	2786	2599	317
115°	531	645	1470	2932	3347	525
125°	739	828	1337	2259	2665	656
135°	881	969	1295	1824	2068	681
145°	1021	1087	1279	1556	1678	640
155°	1154	1186	1279	1404	1445	530
165°	1246	1262	1279	1329	1346	352
175°	1295	1295	1287	1304	1304	123
180°	1295	1295	1295	1295	1295	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2
2.5°	1152.2	1152.2	1159.6	1163.3	1170.7	1174.5	1181.8	1189.2	1211.5	1215.2	1222.6
5°	1122.6	1137.4	1185.6	1204.1	1256.0	1326.3	1356.0	1404.1	1504.1	1533.8	1552.3
7.5°	1078.1	1111.5	1230.0	1259.6	1389.3	1574.5	1652.4	1756.0	1915.4	1993.2	2056.2
10°	1007.7	1078.1	1289.2	1359.6	1570.9	1852.4	1996.9	2141.4	2382.2	2489.6	2530.3
12.5°	929.9	1044.7	1352.2	1448.6	1752.4	2163.6	2337.7	2497.1	2771.2	2915.7	2937.9
15°	841.0	996.6	1411.5	1552.3	1945.0	2422.9	2615.6	2812.0	3067.6	3171.3	3197.3
17.5°	763.2	959.6	1467.1	1615.3	2093.2	2656.3	2852.7	3015.7	3223.1	3293.5	3312.1
20°	666.8	900.3	1504.1	1696.8	2248.8	2826.7	3015.7	3141.6	3282.4	3326.9	3334.3
22.5°	596.4	837.3	1526.4	1726.4	2352.6	2930.5	3089.8	3189.9	3286.1	3301.0	3304.7
25°	537.2	766.9	1522.6	1759.8	2441.5	2993.5	3115.7	3189.9	3245.4	3252.8	3252.8
27.5°	481.7	689.1	1507.9	1767.2	2508.2	3008.3	3104.6	3156.5	3182.4	3197.3	3197.3
30°	433.4	615.0	1470.8	1752.4	2537.8	2993.5	3071.3	3097.2	3123.1	3145.4	3156.5
32.5°	396.4	544.6	1415.2	1722.8	2541.5	2956.5	3012.0	3026.9	3063.9	3115.7	3134.3
35°	363.0	474.2	1352.2	1682.0	2519.2	2897.1	2934.2	2949.0	3023.1	3100.9	3126.9
37.5°	329.8	422.4	1270.7	1611.6	2485.9	2826.7	2852.7	2878.6	2993.5	3086.1	3115.7
40°	296.4	377.9	1174.5	1533.8	2434.1	2741.6	2763.7	2804.5	2956.5	3063.9	3093.5
42.5°	270.4	340.9	1070.7	1452.3	2367.3	2645.2	2678.6	2737.8	2912.0	3026.9	3060.1
45°	248.3	303.8	959.6	1341.1	2282.2	2545.2	2593.3	2674.8	2860.1	2971.2	3000.9
47.5°	226.0	277.9	844.7	1226.3	2189.5	2445.2	2508.2	2600.7	2789.7	2897.1	2923.1
50°	207.5	251.9	729.8	1104.1	2089.5	2337.7	2411.8	2508.2	2700.8	2800.8	2834.2
52.5°	192.6	229.7	622.4	981.8	1974.7	2226.6	2311.8	2411.8	2593.3	2689.7	2712.0
55°	177.9	211.2	529.8	852.1	1856.1	2108.0	2200.7	2296.9	2474.8	2556.3	2571.1
57.5°	170.4	196.4	452.0	729.8	1730.1	1974.7	2078.4	2167.3	2334.1	2397.0	2411.8
60°	159.3	185.3	392.7	626.1	1593.0	1848.7	1937.6	2026.5	2167.3	2219.2	2230.3
62.5°	148.2	177.9	348.3	526.1	1452.3	1700.5	1789.4	1870.9	1989.5	2026.5	2041.3
65°	140.8	170.4	314.9	452.0	1307.8	1544.9	1633.8	1704.2	1800.5	1837.5	1845.0
67.5°	133.4	163.0	289.0	389.0	1163.3	1389.3	1456.0	1522.6	1596.8	1633.8	1637.5
70°	122.3	155.6	266.8	344.5	1015.1	1211.5	1267.1	1337.5	1396.7	1415.2	1426.4
72.5°	114.9	144.5	251.9	311.2	863.2	1041.1	1093.0	1133.7	1185.6	1204.1	1204.1
75°	103.8	129.6	237.1	277.9	707.6	852.1	896.6	937.3	978.1	985.5	974.3
77.5°	92.6	114.9	203.8	233.4	552.0	674.3	711.3	733.6	766.9	774.3	778.0
80°	77.8	100.0	159.3	181.5	400.1	496.4	522.4	540.9	570.5	570.5	577.9
82.5°	59.3	77.8	114.9	129.6	270.4	340.9	363.0	374.2	392.7	392.7	392.7
85°	37.0	48.1	74.1	85.2	163.0	207.5	222.3	226.0	240.8	244.5	244.5
87.5°	18.5	25.9	48.1	51.9	85.2	107.4	107.4	114.9	114.9	111.1	107.4
90°	8.7	15.6	22.5	24.3	38.2	56.8	66.1	58.7	44.0	33.0	33.0
92.5°	34.8	93.8	153.0	167.8	235.8	326.6	372.0	326.0	234.1	165.2	158.6
95°	83.5	191.6	299.9	326.9	580.4	918.4	1087.4	970.4	736.3	560.6	540.7
97.5°	144.3	239.8	335.2	359.0	781.8	1345.4	1627.2	1553.2	1405.2	1294.3	1256.4
100°	191.2	277.8	364.3	385.9	855.1	1480.5	1793.2	1798.7	1809.5	1817.6	1772.5
102.5°	231.2	312.0	392.7	412.9	888.6	1523.0	1840.2	1934.5	2123.0	2264.4	2225.8
105°	299.0	367.4	435.8	452.9	913.6	1527.9	1835.0	2046.4	2469.0	2786.0	2765.2
107.5°	368.6	432.3	496.0	512.0	918.3	1459.9	1730.7	2025.5	2615.0	3057.1	3062.2
110°	415.5	473.1	530.6	545.0	911.2	1399.6	1643.8	1973.4	2632.4	3126.7	3148.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	461.6	516.4	571.3	585.0	911.6	1347.0	1564.7	1901.9	2576.5	3082.4	3115.6
115°	531.1	581.7	632.3	644.9	919.9	1286.6	1469.9	1794.8	2444.6	2932.0	2978.1
117.5°	599.8	645.8	691.7	703.2	937.0	1248.8	1404.7	1697.9	2284.3	2724.2	2775.3
120°	639.8	683.1	726.3	737.1	951.0	1236.1	1378.6	1646.5	2182.4	2584.3	2633.9
122.5°	678.9	722.5	766.2	777.1	971.0	1229.4	1358.6	1599.8	2082.4	2444.3	2493.3
125°	738.9	778.7	818.5	828.4	997.9	1223.9	1336.9	1541.9	1951.8	2259.2	2304.3
127.5°	787.6	827.8	868.0	878.0	1024.9	1220.7	1318.7	1494.7	1846.6	2110.6	2148.6
130°	813.7	856.9	900.1	911.0	1044.5	1222.6	1311.7	1468.3	1781.6	2016.6	2051.8
132.5°	840.6	883.9	927.0	937.9	1060.4	1223.9	1305.6	1445.8	1726.3	1936.7	1968.2
135°	880.6	919.9	959.4	969.2	1077.9	1222.8	1295.2	1412.6	1647.5	1823.7	1850.8
137.5°	921.4	960.4	999.5	1009.2	1104.0	1230.3	1293.4	1392.7	1591.3	1740.2	1762.5
140°	955.3	991.2	1027.1	1036.1	1119.9	1231.6	1287.4	1373.2	1544.7	1673.3	1694.1
142.5°	981.3	1014.6	1047.8	1056.1	1133.2	1236.0	1287.4	1362.7	1513.4	1626.4	1644.2
145°	1021.4	1050.3	1079.3	1086.6	1150.6	1236.0	1278.7	1340.3	1463.6	1556.0	1569.6
147.5°	1061.4	1089.6	1117.8	1124.8	1176.1	1244.5	1278.7	1327.2	1424.1	1496.8	1508.1
150°	1087.4	1113.0	1138.5	1144.8	1189.4	1249.0	1278.7	1319.6	1401.5	1462.9	1472.0
152.5°	1114.4	1133.7	1153.0	1157.8	1198.1	1251.9	1278.7	1313.6	1383.6	1436.0	1442.8
155°	1154.4	1168.7	1183.0	1186.5	1217.3	1258.2	1278.7	1306.5	1362.1	1403.8	1408.4
157.5°	1183.9	1197.8	1211.8	1215.2	1236.3	1264.6	1278.7	1300.3	1343.5	1376.0	1379.2
160°	1203.9	1214.7	1225.6	1228.3	1245.1	1267.5	1278.7	1297.2	1334.3	1362.1	1364.0
162.5°	1223.9	1232.0	1240.1	1242.1	1254.3	1270.5	1278.7	1294.3	1325.6	1349.1	1350.8
165°	1245.7	1253.0	1260.3	1262.1	1267.6	1275.0	1278.7	1289.9	1312.2	1329.1	1330.9
167.5°	1265.6	1269.1	1272.6	1273.4	1278.1	1284.3	1287.4	1294.7	1309.3	1320.4	1321.1
170°	1278.7	1282.1	1285.7	1286.5	1286.8	1287.2	1287.4	1294.7	1309.3	1320.4	1320.4
172.5°	1285.6	1286.3	1287.2	1287.4	1287.4	1287.4	1287.4	1293.2	1304.8	1313.4	1312.8
175°	1295.2	1295.2	1295.2	1295.2	1292.6	1289.1	1287.4	1291.0	1298.4	1303.9	1303.9
177.5°	1295.2	1295.2	1295.2	1295.2	1293.2	1290.5	1289.1	1292.0	1297.8	1302.1	1301.4
180°	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2	1295.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1152.2	1152.2
2.5°	1230.0	1222.6
5°	1582.0	1589.4
7.5°	2130.3	2126.5
10°	2649.0	2682.2
12.5°	3026.9	3034.2
15°	3256.5	3271.4
17.5°	3345.4	3349.1
20°	3349.1	3341.8
22.5°	3308.4	3301.0
25°	3260.3	3256.5
27.5°	3215.8	3219.5
30°	3197.3	3208.4
32.5°	3197.3	3215.8
35°	3204.6	3223.1
37.5°	3200.9	3223.1
40°	3186.1	3212.0
42.5°	3145.4	3163.9
45°	3082.4	3104.6
47.5°	3000.9	3015.7
50°	2897.1	2912.0
52.5°	2767.5	2771.2
55°	2611.8	2626.7
57.5°	2445.2	2448.8
60°	2259.9	2271.1
62.5°	2063.6	2063.6
65°	1856.1	1863.5
67.5°	1641.3	1659.8
70°	1422.6	1426.4
72.5°	1207.7	1207.7
75°	985.5	989.2
77.5°	774.3	774.3
80°	574.3	577.9
82.5°	396.4	403.8
85°	248.3	248.3
87.5°	114.9	103.8
90°	33.0	33.0
92.5°	132.4	106.1
95°	461.2	381.6
97.5°	1105.0	953.6
100°	1592.1	1411.7
102.5°	2071.2	1916.7
105°	2682.1	2599.0
107.5°	3082.3	3102.4
110°	3234.8	3321.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3248.5	3381.4
115°	3162.3	3346.6
117.5°	2979.7	3184.1
120°	2832.5	3031.1
122.5°	2689.1	2885.1
125°	2484.7	2665.1
127.5°	2300.9	2453.0
130°	2192.4	2333.1
132.5°	2094.1	2220.1
135°	1959.4	2067.9
137.5°	1851.3	1940.2
140°	1777.2	1860.2
142.5°	1715.7	1787.2
145°	1623.6	1677.6
147.5°	1552.8	1597.7
150°	1508.3	1544.7
152.5°	1470.3	1497.7
155°	1426.5	1444.7
157.5°	1392.0	1404.7
160°	1371.3	1378.6
162.5°	1357.8	1364.8
165°	1338.2	1345.6
167.5°	1324.3	1327.4
170°	1320.4	1320.4
172.5°	1310.1	1307.4
175°	1303.9	1303.9
177.5°	1298.3	1295.2
180°	1295.2	1295.2



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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	5.56	6.48	6.50	7.44	8.68	18.75	19.67	19.69	20.63	21.87
	3H	6.27	7.09	7.22	8.06	9.33	20.60	21.43	21.55	22.39	23.66
	4H	6.57	7.35	7.53	8.32	9.60	21.25	22.03	22.22	23.01	24.28
	6H	6.83	7.54	7.80	8.52	9.81	21.69	22.41	22.67	23.39	24.68
	8H	6.90	7.58	7.87	8.58	9.86	21.82	22.50	22.80	23.50	24.79
	12H	6.91	7.57	7.90	8.56	9.87	21.89	22.54	22.88	23.53	24.85
4H	2H	12.79	13.57	13.76	14.54	15.82	19.03	19.81	20.00	20.79	22.06
	3H	14.36	15.02	15.34	16.02	17.31	21.09	21.74	22.07	22.74	24.04
	4H	14.46	15.06	15.45	16.05	17.37	21.86	22.46	22.85	23.46	24.77
	6H	14.48	14.99	15.47	16.01	17.32	22.41	22.93	23.41	23.95	25.26
	8H	14.45	14.94	15.45	15.95	17.28	22.58	23.06	23.58	24.07	25.40
	12H	14.41	14.85	15.43	15.88	17.21	22.68	23.11	23.70	24.14	25.47
8H	4H	15.91	16.40	16.91	17.41	18.74	21.93	22.41	22.93	23.42	24.75
	6H	16.16	16.56	17.18	17.61	18.94	22.56	22.96	23.59	24.02	25.34
	8H	16.18	16.53	17.21	17.57	18.92	22.79	23.14	23.82	24.18	25.53
	12H	16.15	16.46	17.19	17.49	18.88	22.94	23.25	23.98	24.28	25.67
12H	4H	16.06	16.50	17.08	17.53	18.86	21.88	22.32	22.90	23.35	24.68
	6H	16.42	16.77	17.45	17.81	19.16	22.55	22.90	23.58	23.94	25.29
	8H	16.49	16.80	17.53	17.84	19.23	22.78	23.09	23.82	24.13	25.52