

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: P938126

Luminaire Tested: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938126
REPORT IS A COMBINATION OF REPORTS P933592 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

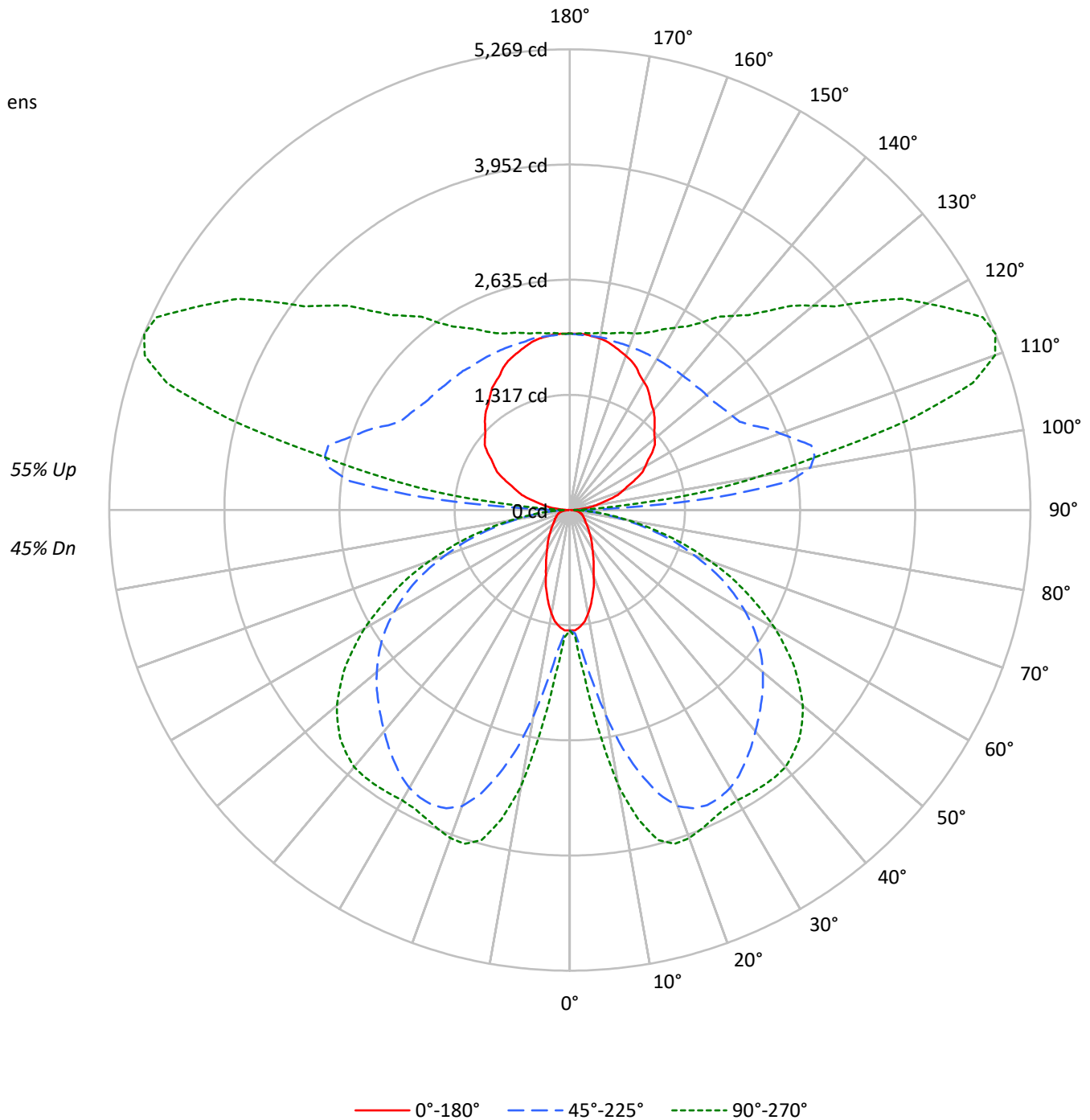
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23742.0 lumens
Efficiency: N/A
Efficacy: 105.2 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): 225.6
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°	4259	4259	4259
5°	4162	4923	5724
10°	3777	7178	9490
15°	3211	9381	11459
20°	2615	10873	11678
25°	2182	11381	11441
30°	1841	11456	11419
35°	1629	11269	11715
40°	1420	11025	12020
45°	1287	10847	12067
50°	1181	10687	11867
55°	1132	10453	11341
60°	1161	9998	10511
65°	1209	9305	9369
70°	1292	8120	7915
75°	1436	6627	6177
80°	1582	4602	4163
85°	1435	2446	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12067 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.1	0.8
10°-20°	789.3	3.3
20°-30°	1380.7	5.8
30°-40°	1777.3	7.5
40°-50°	1985.2	8.4
50°-60°	1901.4	8.0
60°-70°	1506.8	6.3
70°-80°	886.1	3.7
80°-90°	253.9	1.1
90°-100°	983.8	4.1
100°-110°	2586.4	10.9
110°-120°	2681.8	11.3
120°-130°	2151.1	9.1
130°-140°	1687.9	7.1
140°-150°	1295.5	5.5
150°-160°	933.0	3.9
160°-170°	570.9	2.4
170°-180°	192.9	0.8
0°-30°	2348.1	9.9
0°-40°	4125.4	17.4
0°-60°	8012.0	33.7
0°-90°	10658.7	44.9
90°-120°	6252.0	26.3
90°-150°	11386.5	48.0
90°-180°	13083.0	55.1
0°-180°	23742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1341	1439	1620	1833	1899	124
15°	1005	1855	3126	3790	3909	280
25°	642	2103	3723	3887	3891	296
35°	434	2010	3506	3705	3852	271
45°	297	1603	3099	3550	3710	229
55°	212	1018	2630	3055	3139	194
65°	168	540	1952	2196	2227	167
75°	124	332	1071	1178	1182	130
85°	44	102	266	292	297	47
90°	14	38	103	52	52	14
95°	130	509	1694	874	595	144
105°	466	706	2859	4341	4050	494
115°	828	1005	2290	4569	5215	817
125°	1151	1291	2083	3520	4153	1022
135°	1372	1510	2018	2842	3222	1062
145°	1592	1693	1992	2424	2614	997
155°	1799	1849	1992	2188	2251	826
165°	1941	1967	1992	2071	2097	548
175°	2018	2018	2006	2032	2032	192
180°	2018	2018	2018	2018	2018	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9	1376.9
2.5°	1376.9	1376.9	1385.7	1390.1	1398.9	1403.4	1412.3	1421.1	1447.7	1452.1	1460.9
5°	1341.4	1359.1	1416.6	1438.8	1500.8	1584.9	1620.3	1677.9	1797.3	1832.8	1854.9
7.5°	1288.3	1328.1	1469.8	1505.2	1660.2	1881.5	1974.5	2098.5	2288.8	2381.8	2457.0
10°	1204.2	1288.3	1540.6	1624.7	1877.1	2213.5	2386.1	2558.8	2846.6	2974.9	3023.7
12.5°	1111.2	1248.4	1615.9	1731.0	2094.0	2585.4	2793.5	2983.8	3311.5	3484.1	3510.6
15°	1004.9	1190.8	1686.7	1854.9	2324.2	2895.3	3125.5	3360.1	3665.6	3789.6	3820.6
17.5°	912.0	1146.6	1753.1	1930.2	2501.3	3174.2	3408.9	3603.6	3851.5	3935.7	3957.8
20°	796.9	1075.7	1797.3	2027.6	2687.3	3377.8	3603.6	3754.1	3922.4	3975.5	3984.3
22.5°	712.7	1000.5	1823.9	2063.0	2811.2	3501.8	3692.2	3811.7	3926.8	3944.5	3948.9
25°	641.9	916.4	1819.5	2102.8	2917.4	3577.1	3723.1	3811.7	3878.1	3886.9	3886.9
27.5°	575.5	823.5	1801.8	2111.7	2997.1	3594.8	3709.9	3771.8	3802.9	3820.6	3820.6
30°	518.0	734.9	1757.5	2094.0	3032.5	3577.1	3670.0	3701.0	3732.0	3758.6	3771.8
32.5°	473.7	650.8	1691.1	2058.6	3036.9	3532.8	3599.2	3616.9	3661.1	3723.1	3745.3
35°	433.8	566.6	1615.9	2009.9	3010.4	3462.0	3506.2	3524.0	3612.5	3705.4	3736.4
37.5°	394.0	504.6	1518.5	1925.8	2970.6	3377.8	3408.9	3439.8	3577.1	3687.7	3723.1
40°	354.1	451.5	1403.4	1832.8	2908.6	3276.1	3302.6	3351.3	3532.8	3661.1	3696.6
42.5°	323.2	407.3	1279.4	1735.4	2828.9	3160.9	3200.8	3271.6	3479.7	3616.9	3656.8
45°	296.6	363.0	1146.6	1602.6	2727.0	3041.4	3098.9	3196.4	3417.7	3550.5	3585.9
47.5°	270.1	332.1	1009.4	1465.4	2616.4	2921.8	2997.1	3107.8	3333.6	3462.0	3492.9
50°	247.9	301.0	872.1	1319.3	2496.9	2793.5	2882.0	2997.1	3227.3	3346.9	3386.7
52.5°	230.2	274.5	743.8	1173.1	2359.6	2660.7	2762.5	2882.0	3098.9	3214.1	3240.6
55°	212.5	252.4	633.1	1018.2	2217.9	2519.0	2629.7	2744.8	2957.2	3054.6	3072.4
57.5°	203.6	234.7	540.1	872.1	2067.4	2359.6	2483.6	2589.9	2789.0	2864.3	2882.0
60°	190.4	221.3	469.2	748.2	1903.7	2209.1	2315.3	2421.6	2589.9	2651.8	2665.1
62.5°	177.1	212.5	416.1	628.6	1735.4	2032.0	2138.2	2235.6	2377.3	2421.6	2439.3
65°	168.2	203.6	376.3	540.1	1562.8	1846.1	1952.3	2036.5	2151.6	2195.8	2204.7
67.5°	159.4	194.8	345.3	464.9	1390.1	1660.2	1739.8	1819.5	1908.1	1952.3	1956.8
70°	146.1	185.9	318.7	411.7	1213.0	1447.7	1514.0	1598.2	1669.0	1691.1	1704.4
72.5°	137.3	172.7	301.0	371.8	1031.5	1244.0	1306.0	1354.7	1416.6	1438.8	1438.8
75°	123.9	155.0	283.3	332.1	845.5	1018.2	1071.4	1120.0	1168.7	1177.6	1164.3
77.5°	110.7	137.3	243.5	278.9	659.6	805.8	850.0	876.6	916.4	925.2	929.7
80°	93.0	119.6	190.4	217.0	478.1	593.2	624.2	646.4	681.8	681.8	690.7
82.5°	70.8	93.0	137.3	155.0	323.2	407.3	433.8	447.1	469.2	469.2	469.2
85°	44.3	57.6	88.5	101.9	194.8	247.9	265.6	270.1	287.8	292.2	292.2
87.5°	22.1	31.0	57.6	62.0	101.9	128.4	128.4	137.3	137.3	132.8	128.4
90°	13.5	24.3	35.2	37.9	59.6	88.4	102.9	91.5	68.6	51.5	51.5
92.5°	54.2	146.2	238.4	261.4	367.6	509.0	579.7	508.0	364.8	257.3	247.1
95°	130.0	298.6	467.1	509.3	904.3	1431.1	1694.4	1512.0	1147.2	873.7	842.6
97.5°	224.8	373.5	522.3	559.4	1218.1	2096.5	2535.6	2420.3	2189.8	2016.8	1957.8
100°	298.0	432.9	567.7	601.4	1332.4	2307.1	2794.3	2802.8	2819.6	2832.3	2762.0
102.5°	360.3	486.2	611.9	643.4	1384.8	2373.2	2867.5	3014.4	3308.1	3528.5	3468.3
105°	465.9	572.5	679.1	705.7	1423.6	2380.7	2859.3	3188.6	3847.2	4341.2	4308.8
107.5°	574.3	673.6	773.0	797.8	1430.8	2274.9	2696.9	3156.2	4074.8	4763.7	4771.6
110°	647.5	737.1	826.9	849.3	1419.9	2180.9	2561.3	3074.9	4101.9	4872.1	4905.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	719.3	804.7	890.2	911.5	1420.4	2098.9	2438.1	2963.7	4014.8	4803.1	4854.9
115°	827.6	906.4	985.3	1005.0	1433.5	2004.8	2290.5	2796.8	3809.3	4568.8	4640.5
117.5°	934.6	1006.2	1077.9	1095.8	1460.1	1945.9	2188.9	2645.8	3559.6	4245.0	4324.6
120°	996.9	1064.3	1131.8	1148.6	1481.8	1926.1	2148.3	2565.8	3400.8	4027.0	4104.3
122.5°	1057.9	1125.9	1193.9	1210.9	1513.0	1915.8	2117.1	2493.1	3244.9	3808.9	3885.2
125°	1151.3	1213.3	1275.3	1290.9	1555.0	1907.1	2083.2	2402.5	3041.3	3520.3	3590.6
127.5°	1227.2	1289.8	1352.4	1368.0	1597.0	1902.2	2054.8	2328.9	2877.4	3288.7	3348.0
130°	1267.9	1335.3	1402.7	1419.5	1627.7	1905.2	2044.0	2288.0	2776.3	3142.5	3197.2
132.5°	1309.8	1377.2	1444.7	1461.5	1652.5	1907.1	2034.5	2253.0	2690.1	3017.8	3066.9
135°	1372.1	1433.5	1494.9	1510.3	1679.6	1905.4	2018.2	2201.3	2567.3	2841.8	2884.1
137.5°	1435.8	1496.6	1557.4	1572.5	1720.2	1917.1	2015.5	2170.2	2479.6	2711.7	2746.3
140°	1488.6	1544.5	1600.5	1614.6	1745.0	1919.0	2006.0	2139.6	2406.9	2607.4	2639.7
142.5°	1529.2	1581.0	1632.8	1645.7	1765.8	1926.0	2006.0	2123.4	2358.2	2534.3	2562.1
145°	1591.5	1636.7	1681.9	1693.1	1792.9	1926.0	1992.5	2088.5	2280.5	2424.5	2445.6
147.5°	1653.8	1697.8	1741.7	1752.7	1832.7	1939.2	1992.5	2068.0	2219.2	2332.4	2349.9
150°	1694.4	1734.2	1774.0	1783.9	1853.4	1946.1	1992.5	2056.3	2183.9	2279.6	2293.7
152.5°	1736.5	1766.6	1796.7	1804.2	1867.0	1950.7	1992.5	2047.0	2155.9	2237.6	2248.4
155°	1798.7	1821.1	1843.3	1848.9	1896.8	1960.6	1992.5	2035.9	2122.5	2187.5	2194.6
157.5°	1844.9	1866.5	1888.2	1893.6	1926.6	1970.5	1992.5	2026.2	2093.6	2144.2	2149.1
160°	1876.0	1892.8	1909.8	1913.9	1940.1	1975.1	1992.5	2021.4	2079.2	2122.5	2125.4
162.5°	1907.1	1919.8	1932.4	1935.6	1954.6	1979.9	1992.5	2016.9	2065.7	2102.2	2104.9
165°	1941.0	1952.4	1963.8	1966.7	1975.3	1986.8	1992.5	2010.0	2044.8	2071.0	2073.9
167.5°	1972.2	1977.6	1983.0	1984.3	1991.6	2001.2	2006.0	2017.5	2040.3	2057.5	2058.7
170°	1992.5	1997.9	2003.3	2004.6	2005.1	2005.7	2006.0	2017.5	2040.3	2057.5	2057.5
172.5°	2003.3	2004.5	2005.8	2006.0	2006.0	2006.0	2006.0	2015.1	2033.1	2046.7	2045.6
175°	2018.2	2018.2	2018.2	2018.2	2014.1	2008.7	2006.0	2011.8	2023.2	2031.8	2031.8
177.5°	2018.2	2018.2	2018.2	2018.2	2015.1	2010.8	2008.7	2013.3	2022.2	2029.0	2027.8
180°	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2	2018.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1376.9	1376.9
2.5°	1469.8	1460.9
5°	1890.4	1899.2
7.5°	2545.6	2541.1
10°	3165.3	3205.2
12.5°	3616.9	3625.7
15°	3891.4	3909.1
17.5°	3997.7	4002.0
20°	4002.0	3993.2
22.5°	3953.4	3944.5
25°	3895.8	3891.4
27.5°	3842.7	3847.2
30°	3820.6	3833.8
32.5°	3820.6	3842.7
35°	3829.4	3851.5
37.5°	3825.0	3851.5
40°	3807.3	3838.3
42.5°	3758.6	3780.7
45°	3683.3	3709.9
47.5°	3585.9	3603.6
50°	3462.0	3479.7
52.5°	3307.0	3311.5
55°	3121.1	3138.8
57.5°	2921.8	2926.3
60°	2700.5	2713.8
62.5°	2465.9	2465.9
65°	2217.9	2226.8
67.5°	1961.2	1983.4
70°	1700.0	1704.4
72.5°	1443.2	1443.2
75°	1177.6	1182.0
77.5°	925.2	925.2
80°	686.2	690.7
82.5°	473.7	482.6
85°	296.6	296.6
87.5°	137.3	123.9
90°	51.5	51.5
92.5°	206.1	165.3
95°	718.6	594.6
97.5°	1721.8	1485.9
100°	2480.8	2199.7
102.5°	3227.5	2986.7
105°	4179.4	4050.0
107.5°	4802.9	4834.2
110°	5040.7	5175.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5061.9	5269.0
115°	4927.7	5214.9
117.5°	4643.1	4961.5
120°	4413.7	4723.1
122.5°	4190.4	4495.6
125°	3871.7	4152.9
127.5°	3585.2	3822.4
130°	3416.4	3635.5
132.5°	3263.2	3459.4
135°	3053.2	3222.3
137.5°	2884.8	3023.3
140°	2769.2	2898.6
142.5°	2673.5	2784.8
145°	2529.9	2614.2
147.5°	2419.7	2489.6
150°	2350.4	2407.0
152.5°	2291.1	2333.8
155°	2222.9	2251.2
157.5°	2169.0	2188.9
160°	2136.8	2148.3
162.5°	2115.7	2126.5
165°	2085.3	2096.8
167.5°	2063.5	2068.3
170°	2057.5	2057.5
172.5°	2041.3	2037.2
175°	2031.8	2031.8
177.5°	2023.0	2018.2
180°	2018.2	2018.2



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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	6.41	6.55	7.42	8.76	18.75	19.60	19.74	20.61	21.95
	3H	6.26	7.03	7.27	8.05	9.41	20.60	21.36	21.60	22.38	23.74
	4H	6.56	7.29	7.58	8.31	9.67	21.24	21.97	22.26	22.99	24.36
	6H	6.81	7.48	7.84	8.51	9.89	21.68	22.35	22.70	23.37	24.75
	8H	6.88	7.52	7.91	8.56	9.93	21.80	22.44	22.83	23.48	24.86
	12H	6.90	7.50	7.93	8.54	9.94	21.87	22.48	22.91	23.51	24.91
4H	2H	12.78	13.51	13.80	14.53	15.89	19.02	19.75	20.05	20.77	22.14
	3H	14.35	14.95	15.38	16.00	17.38	21.07	21.68	22.10	22.73	24.11
	4H	14.44	15.00	15.48	16.04	17.44	21.84	22.40	22.88	23.44	24.84
	6H	14.45	14.93	15.50	16.00	17.39	22.39	22.87	23.44	23.93	25.33
	8H	14.43	14.88	15.48	15.93	17.35	22.55	23.00	23.60	24.06	25.47
	12H	14.38	14.79	15.45	15.86	17.28	22.65	23.05	23.72	24.12	25.54
8H	4H	15.89	16.34	16.94	17.39	18.81	21.90	22.35	22.95	23.41	24.82
	6H	16.13	16.50	17.20	17.60	19.01	22.54	22.91	23.61	24.01	25.42
	8H	16.15	16.48	17.23	17.56	18.99	22.76	23.09	23.84	24.17	25.60
	12H	16.12	16.40	17.20	17.48	18.95	22.91	23.19	23.99	24.27	25.74
12H	4H	16.03	16.44	17.10	17.51	18.93	21.85	22.26	22.92	23.33	24.75
	6H	16.39	16.72	17.47	17.80	19.23	22.52	22.85	23.60	23.93	25.36
	8H	16.46	16.75	17.54	17.83	19.30	22.75	23.04	23.84	24.12	25.59