

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: P938330

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938330
REPORT IS A COMBINATION OF REPORTS P933622 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

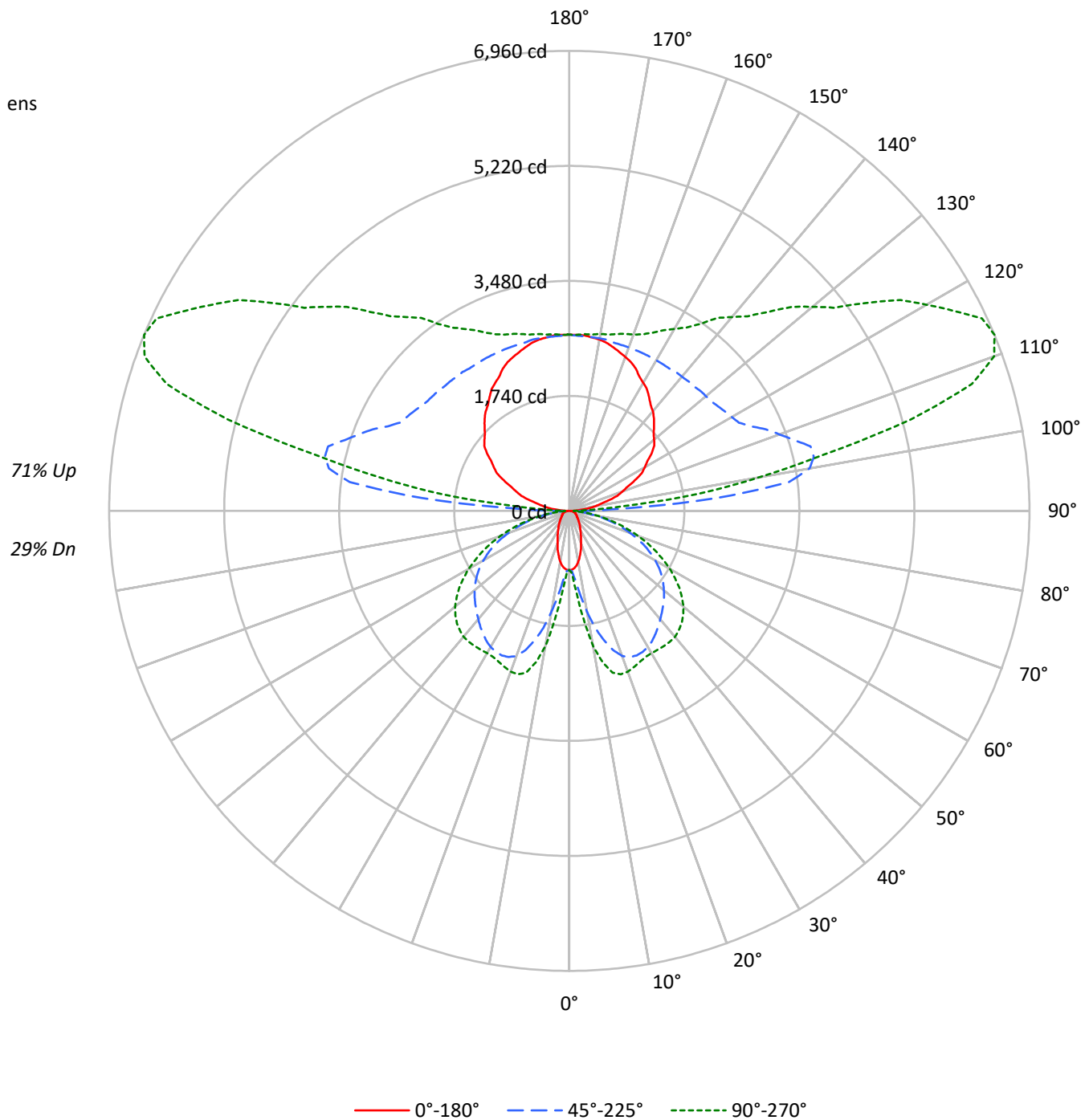
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24193.5 lumens
Efficiency: N/A
Efficacy: 126.8 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: Semi-Indirect

Input Watts (W): 190.8
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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CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-6500K

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2697	3190	3709
10°	2447	4652	6149
15°	2081	6079	7425
20°	1694	7046	7568
25°	1414	7375	7414
30°	1193	7423	7400
35°	1055	7302	7591
40°	920	7144	7789
45°	834	7029	7819
50°	765	6925	7690
55°	734	6773	7349
60°	752	6479	6811
65°	784	6030	6071
70°	837	5262	5129
75°	931	4294	4002
80°	1024	2982	2697
85°	930	1585	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	0.5
10°-20°	511.5	2.1
20°-30°	894.7	3.7
30°-40°	1151.7	4.8
40°-50°	1286.4	5.3
50°-60°	1232.1	5.1
60°-70°	976.4	4.0
70°-80°	574.1	2.4
80°-90°	169.7	0.7
90°-100°	1299.5	5.4
100°-110°	3416.4	14.1
110°-120°	3542.4	14.6
120°-130°	2841.4	11.7
130°-140°	2229.5	9.2
140°-150°	1711.2	7.1
150°-160°	1232.4	5.1
160°-170°	754.0	3.1
170°-180°	254.8	1.1
0°-30°	1521.5	6.3
0°-40°	2673.2	11.0
0°-60°	5191.7	21.5
0°-90°	6911.9	28.6
90°-120°	8258.2	34.1
90°-150°	15040.4	62.2
90°-180°	17282.0	71.4
0°-180°	24193.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	869	932	1050	1188	1231	80
15°	651	1202	2025	2456	2533	181
25°	416	1363	2413	2519	2522	192
35°	281	1302	2272	2401	2496	176
45°	192	1038	2008	2301	2404	149
55°	138	660	1704	1979	2034	125
65°	109	350	1265	1423	1443	108
75°	80	215	694	763	766	84
85°	29	66	172	189	192	30
90°	18	50	136	68	68	17
95°	172	673	2238	1154	785	191
105°	616	932	3777	5734	5350	652
115°	1093	1328	3026	6035	6888	1080
125°	1521	1705	2752	4650	5486	1350
135°	1812	1995	2666	3754	4256	1402
145°	2102	2236	2632	3203	3453	1317
155°	2376	2442	2632	2890	2974	1092
165°	2564	2598	2632	2736	2770	724
175°	2666	2666	2650	2684	2684	253
180°	2666	2666	2666	2666	2666	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1	892.1
2.5°	892.1	892.1	897.9	900.7	906.5	909.3	915.1	920.8	938.0	940.9	946.6
5°	869.2	880.7	917.9	932.3	972.4	1027.0	1049.9	1087.3	1164.7	1187.7	1202.0
7.5°	834.8	860.6	952.4	975.3	1075.7	1219.2	1279.5	1359.8	1483.2	1543.4	1592.2
10°	780.3	834.8	998.3	1052.8	1216.4	1434.4	1546.3	1658.1	1844.6	1927.8	1959.3
12.5°	720.0	808.9	1047.0	1121.7	1356.9	1675.3	1810.2	1933.5	2145.8	2257.7	2274.9
15°	651.2	771.6	1093.0	1202.0	1506.1	1876.1	2025.3	2177.3	2375.3	2455.6	2475.7
17.5°	590.9	743.0	1136.1	1250.8	1620.8	2056.9	2208.9	2335.1	2495.8	2550.3	2564.6
20°	516.3	697.1	1164.7	1313.9	1741.3	2188.8	2335.1	2432.7	2541.7	2576.1	2581.8
22.5°	461.8	648.3	1182.0	1336.9	1821.6	2269.1	2392.5	2469.9	2544.5	2556.0	2558.9
25°	415.9	593.8	1179.1	1362.7	1890.5	2317.9	2412.6	2469.9	2513.0	2518.7	2518.7
27.5°	372.9	533.6	1167.6	1368.4	1942.1	2329.4	2404.0	2444.1	2464.2	2475.7	2475.7
30°	335.6	476.2	1138.9	1356.9	1965.1	2317.9	2378.1	2398.2	2418.3	2435.5	2444.1
32.5°	306.9	421.7	1095.9	1334.0	1967.9	2289.2	2332.3	2343.7	2372.4	2412.6	2426.9
35°	281.1	367.2	1047.0	1302.4	1950.7	2243.3	2272.0	2283.5	2340.9	2401.1	2421.2
37.5°	255.3	327.0	983.9	1247.9	1924.9	2188.8	2208.9	2229.0	2317.9	2389.6	2412.6
40°	229.5	292.6	909.3	1187.7	1884.8	2122.8	2140.1	2171.6	2289.2	2372.4	2395.4
42.5°	209.4	263.9	829.0	1124.6	1833.1	2048.3	2074.1	2120.0	2254.8	2343.7	2369.5
45°	192.2	235.2	743.0	1038.4	1767.1	1970.8	2008.1	2071.2	2214.6	2300.7	2323.6
47.5°	175.0	215.1	654.0	949.5	1695.4	1893.4	1942.1	2013.8	2160.1	2243.3	2263.4
50°	160.6	195.1	565.1	854.8	1618.0	1810.2	1867.5	1942.1	2091.3	2168.7	2194.6
52.5°	149.2	177.9	481.9	760.2	1529.0	1724.1	1790.1	1867.5	2008.1	2082.7	2099.9
55°	137.7	163.5	410.2	659.8	1437.3	1632.3	1704.0	1778.6	1916.3	1979.4	1990.9
57.5°	132.0	152.0	350.0	565.1	1339.7	1529.0	1609.4	1678.2	1807.3	1856.1	1867.5
60°	123.3	143.4	304.1	484.8	1233.6	1431.5	1500.4	1569.2	1678.2	1718.4	1727.0
62.5°	114.7	137.7	269.6	407.3	1124.6	1316.8	1385.6	1448.7	1540.5	1569.2	1580.7
65°	109.0	132.0	243.8	350.0	1012.6	1196.3	1265.1	1319.6	1394.2	1422.9	1428.6
67.5°	103.3	126.2	223.7	301.2	900.7	1075.7	1127.4	1179.1	1236.5	1265.1	1268.0
70°	94.7	120.5	206.5	266.8	786.0	938.0	981.1	1035.6	1081.5	1095.9	1104.5
72.5°	88.9	111.9	195.1	241.0	668.4	806.1	846.2	877.8	917.9	932.3	932.3
75°	80.3	100.4	183.6	215.1	547.9	659.8	694.2	725.8	757.3	763.0	754.4
77.5°	71.7	88.9	157.8	180.7	427.4	522.1	550.8	568.0	593.8	599.5	602.4
80°	60.2	77.5	123.3	140.6	309.8	384.4	404.5	418.8	441.8	441.8	447.5
82.5°	45.9	60.2	88.9	100.4	209.4	263.9	281.1	289.7	304.1	304.1	304.1
85°	28.7	37.3	57.4	66.0	126.2	160.6	172.1	175.0	186.5	189.3	189.3
87.5°	14.3	20.1	37.3	40.2	66.0	83.2	83.2	88.9	88.9	86.1	83.2
90°	17.9	32.2	46.6	50.1	78.7	116.8	136.0	120.9	90.6	68.0	68.0
92.5°	71.5	193.2	314.9	345.3	485.5	672.3	765.7	671.1	481.8	339.9	326.4
95°	171.7	394.3	617.0	672.7	1194.6	1890.4	2238.3	1997.3	1515.5	1154.0	1113.1
97.5°	297.0	493.4	689.8	738.9	1609.1	2769.2	3349.3	3197.0	2892.5	2664.0	2586.1
100°	393.6	571.7	749.8	794.4	1760.0	3047.3	3691.0	3702.1	3724.4	3741.1	3648.3
102.5°	475.9	642.1	808.3	849.9	1829.1	3134.8	3787.7	3981.7	4369.7	4660.8	4581.2
105°	615.5	756.3	897.0	932.2	1880.4	3144.7	3776.9	4211.8	5081.8	5734.2	5691.5
107.5°	758.6	889.8	1021.0	1053.8	1889.9	3004.7	3562.2	4168.9	5382.3	6292.4	6302.7
110°	855.2	973.7	1092.2	1121.8	1875.7	2880.7	3383.3	4061.6	5418.2	6435.6	6480.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	950.1	1063.0	1175.9	1204.1	1876.2	2772.4	3220.5	3914.7	5303.0	6344.3	6412.7
115°	1093.2	1197.3	1301.6	1327.6	1893.5	2648.2	3025.5	3694.3	5031.7	6034.8	6129.7
117.5°	1234.5	1329.1	1423.8	1447.4	1928.6	2570.3	2891.2	3494.8	4701.9	5607.2	5712.4
120°	1316.8	1405.9	1494.9	1517.2	1957.3	2544.1	2837.6	3389.0	4491.9	5319.1	5421.3
122.5°	1397.3	1487.2	1577.0	1599.5	1998.5	2530.5	2796.5	3293.0	4286.2	5031.1	5131.9
125°	1520.8	1602.7	1684.6	1705.1	2054.0	2519.2	2751.7	3173.6	4017.3	4650.0	4742.8
127.5°	1620.9	1703.6	1786.4	1807.0	2109.4	2512.6	2714.2	3076.4	3800.8	4344.1	4422.4
130°	1674.7	1763.7	1852.7	1875.0	2149.9	2516.5	2699.8	3022.2	3667.2	4150.8	4223.2
132.5°	1730.1	1819.2	1908.2	1930.5	2182.7	2519.1	2687.3	2976.0	3553.3	3986.3	4051.1
135°	1812.4	1893.5	1974.6	1994.9	2218.6	2516.8	2665.9	2907.6	3391.0	3753.6	3809.5
137.5°	1896.5	1976.8	2057.2	2077.2	2272.2	2532.2	2662.2	2866.6	3275.3	3581.9	3627.6
140°	1966.3	2040.2	2114.2	2132.7	2305.0	2534.8	2649.7	2826.2	3179.3	3444.1	3486.9
142.5°	2020.0	2088.3	2156.7	2173.8	2332.4	2544.0	2649.7	2804.8	3114.9	3347.5	3384.3
145°	2102.3	2162.0	2221.5	2236.4	2368.2	2544.0	2631.8	2758.6	3012.3	3202.6	3230.4
147.5°	2184.5	2242.6	2300.6	2315.1	2420.7	2561.4	2631.8	2731.7	2931.2	3080.9	3104.0
150°	2238.3	2290.8	2343.2	2356.3	2448.1	2570.6	2631.8	2716.2	2884.7	3011.1	3029.8
152.5°	2293.7	2333.5	2373.2	2383.1	2466.0	2576.6	2631.8	2703.8	2847.7	2955.7	2969.8
155°	2376.0	2405.5	2434.8	2442.2	2505.4	2589.7	2631.8	2689.1	2803.7	2889.5	2898.9
157.5°	2436.9	2465.4	2494.0	2501.2	2544.7	2602.8	2631.8	2676.4	2765.4	2832.2	2838.8
160°	2478.0	2500.3	2522.5	2528.1	2562.7	2608.8	2631.8	2670.0	2746.3	2803.6	2807.4
162.5°	2519.1	2535.8	2552.5	2556.7	2581.7	2615.1	2631.8	2664.0	2728.5	2776.8	2780.3
165°	2563.8	2578.9	2594.1	2597.9	2609.2	2624.3	2631.8	2654.9	2701.0	2735.6	2739.4
167.5°	2605.1	2612.2	2619.3	2621.1	2630.7	2643.4	2649.7	2664.8	2695.0	2717.7	2719.3
170°	2631.8	2639.0	2646.2	2648.0	2648.6	2649.3	2649.7	2664.8	2695.0	2717.7	2717.7
172.5°	2646.2	2647.7	2649.3	2649.7	2649.7	2649.7	2649.7	2661.7	2685.6	2703.4	2702.0
175°	2665.9	2665.9	2665.9	2665.9	2660.5	2653.3	2649.7	2657.3	2672.4	2683.7	2683.7
177.5°	2665.9	2665.9	2665.9	2665.9	2661.7	2656.1	2653.3	2659.3	2671.2	2680.1	2678.5
180°	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9	2665.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	892.1	892.1
2.5°	952.4	946.6
5°	1225.0	1230.7
7.5°	1649.5	1646.7
10°	2051.1	2076.9
12.5°	2343.7	2349.5
15°	2521.6	2533.1
17.5°	2590.4	2593.3
20°	2593.3	2587.6
22.5°	2561.7	2556.0
25°	2524.4	2521.6
27.5°	2490.0	2492.9
30°	2475.7	2484.3
32.5°	2475.7	2490.0
35°	2481.4	2495.8
37.5°	2478.5	2495.8
40°	2467.1	2487.2
42.5°	2435.5	2449.9
45°	2386.8	2404.0
47.5°	2323.6	2335.1
50°	2243.3	2254.8
52.5°	2142.9	2145.8
55°	2022.4	2033.9
57.5°	1893.4	1896.2
60°	1749.9	1758.5
62.5°	1597.9	1597.9
65°	1437.3	1443.0
67.5°	1270.9	1285.2
70°	1101.6	1104.5
72.5°	935.2	935.2
75°	763.0	765.9
77.5°	599.5	599.5
80°	444.6	447.5
82.5°	306.9	312.7
85°	192.2	192.2
87.5°	88.9	80.3
90°	68.0	68.0
92.5°	272.3	218.3
95°	949.2	785.4
97.5°	2274.4	1962.7
100°	3277.0	2905.6
102.5°	4263.2	3945.1
105°	5520.6	5349.6
107.5°	6344.1	6385.5
110°	6658.3	6836.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6686.3	6959.8
115°	6508.9	6888.2
117.5°	6133.0	6553.7
120°	5830.0	6238.8
122.5°	5535.1	5938.2
125°	5114.2	5485.6
127.5°	4735.7	5049.0
130°	4512.7	4802.1
132.5°	4310.2	4569.5
135°	4032.9	4256.4
137.5°	3810.5	3993.3
140°	3657.8	3828.8
142.5°	3531.4	3678.5
145°	3341.8	3453.1
147.5°	3196.3	3288.4
150°	3104.6	3179.3
152.5°	3026.3	3082.7
155°	2936.2	2973.6
157.5°	2865.0	2891.2
160°	2822.5	2837.6
162.5°	2794.7	2809.0
165°	2754.5	2769.6
167.5°	2725.6	2732.0
170°	2717.7	2717.7
172.5°	2696.5	2690.9
175°	2683.7	2683.7
177.5°	2672.2	2665.9
180°	2665.9	2665.9



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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	2.15	2.86	3.26	3.98	5.52	15.34	16.06	16.46	17.17	18.72
	3H	2.84	3.48	3.97	4.61	6.17	17.17	17.82	18.30	18.94	20.50
	4H	3.13	3.74	4.27	4.87	6.43	17.81	18.43	18.95	19.55	21.11
	6H	3.37	3.94	4.52	5.06	6.64	18.24	18.80	19.38	19.93	21.51
	8H	3.44	3.97	4.58	5.11	6.69	18.36	18.90	19.51	20.04	21.61
	12H	3.45	3.96	4.60	5.09	6.69	18.43	18.93	19.58	20.07	21.66
4H	2H	9.35	9.96	10.49	11.09	12.65	15.59	16.21	16.74	17.33	18.90
	3H	10.91	11.42	12.05	12.57	14.14	17.63	18.14	18.78	19.29	20.87
	4H	10.99	11.46	12.14	12.60	14.20	18.40	18.87	19.55	20.00	21.60
	6H	11.00	11.40	12.15	12.56	14.15	18.93	19.33	20.09	20.49	22.08
	8H	10.97	11.34	12.12	12.50	14.10	19.09	19.47	20.25	20.62	22.23
	12H	10.92	11.26	12.09	12.42	14.03	19.18	19.52	20.35	20.69	22.30
8H	4H	12.43	12.81	13.59	13.96	15.56	18.44	18.82	19.60	19.97	21.58
	6H	12.66	12.98	13.84	14.17	15.77	19.07	19.38	20.25	20.58	22.18
	8H	12.68	12.95	13.86	14.12	15.75	19.29	19.56	20.47	20.73	22.36
	12H	12.64	12.88	13.83	14.05	15.71	19.43	19.67	20.62	20.84	22.50
12H	4H	12.57	12.91	13.74	14.07	15.68	18.39	18.73	19.56	19.89	21.51
	6H	12.92	13.19	14.11	14.37	15.99	19.05	19.32	20.23	20.50	22.12
	8H	12.98	13.22	14.17	14.39	16.05	19.28	19.52	20.46	20.69	22.34