

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: P937913

Luminaire Tested: SQ4-FB-125U-075D-835-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937913
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

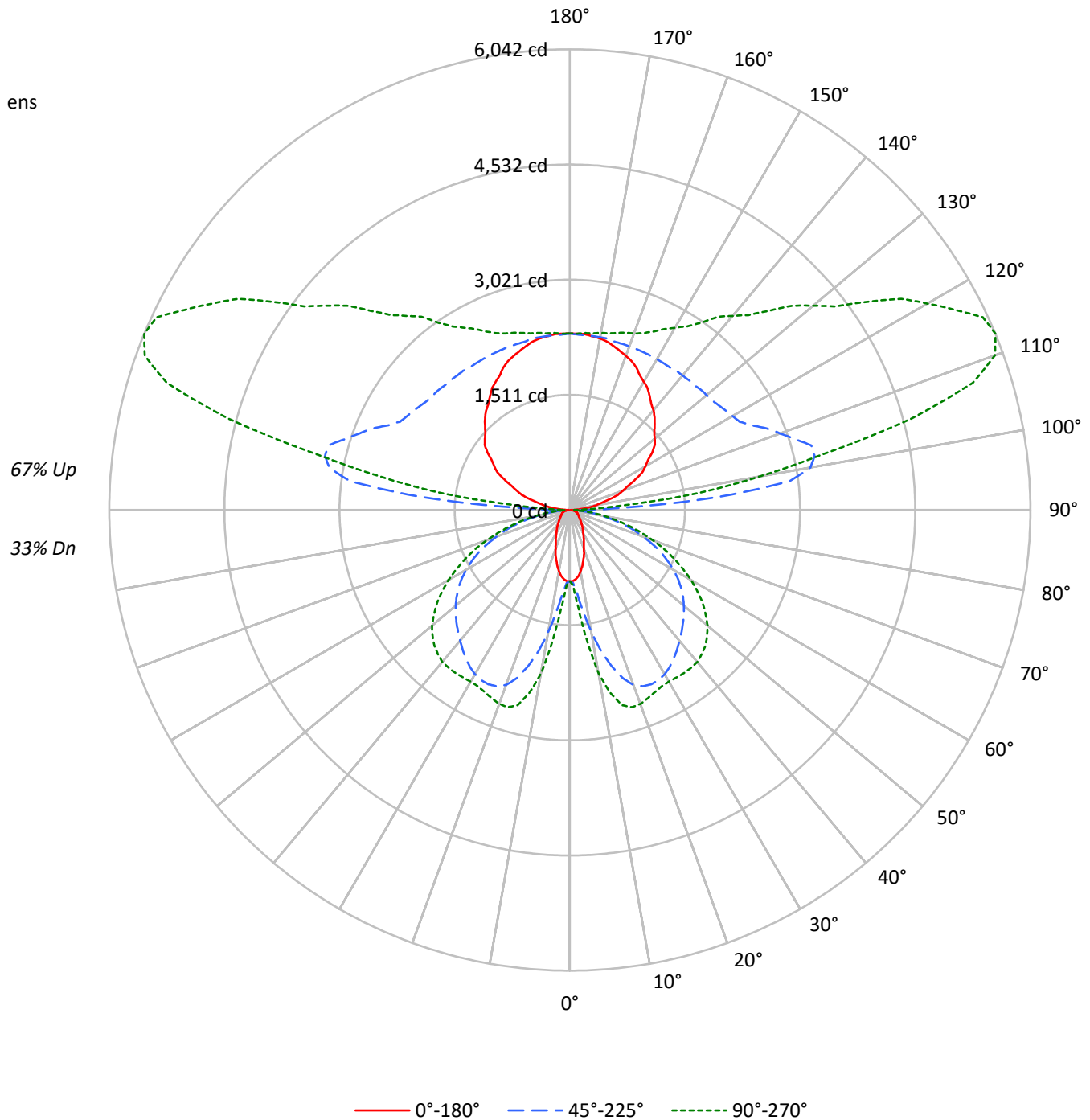
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22230.0 lumens
Efficiency: N/A
Efficacy: 133.3 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): 166.8
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33				33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27				27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22				22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18				18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15				15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13				13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11				11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10				10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8				8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7				7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2886	2886	2886
5°	2820	3336	3879
10°	2559	4865	6431
15°	2176	6357	7765
20°	1772	7369	7914
25°	1479	7713	7753
30°	1248	7764	7739
35°	1104	7637	7939
40°	962	7471	8146
45°	872	7351	8178
50°	800	7243	8042
55°	767	7084	7686
60°	787	6776	7123
65°	820	6306	6350
70°	875	5503	5364
75°	974	4491	4186
80°	1072	3118	2820
85°	972	1657	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8178 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	0.5
10°-20°	534.9	2.4
20°-30°	935.6	4.2
30°-40°	1204.5	5.4
40°-50°	1345.3	6.1
50°-60°	1288.5	5.8
60°-70°	1021.2	4.6
70°-80°	600.4	2.7
80°-90°	175.6	0.8
90°-100°	1128.1	5.1
100°-110°	2966.0	13.3
110°-120°	3075.4	13.8
120°-130°	2466.8	11.1
130°-140°	1935.6	8.7
140°-150°	1485.6	6.7
150°-160°	1069.9	4.8
160°-170°	654.6	2.9
170°-180°	221.2	1.0
0°-30°	1591.3	7.2
0°-40°	2795.7	12.6
0°-60°	5429.6	24.4
0°-90°	7226.8	32.5
90°-120°	7169.4	32.3
90°-150°	13057.5	58.7
90°-180°	15003.0	67.5
0°-180°	22230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	909	975	1098	1242	1287	84
15°	681	1257	2118	2568	2649	190
25°	435	1425	2523	2634	2637	200
35°	294	1362	2376	2511	2610	184
45°	201	1086	2100	2406	2514	155
55°	144	690	1782	2070	2127	131
65°	114	366	1323	1488	1509	113
75°	84	225	726	798	801	88
85°	30	69	180	198	201	32
90°	16	44	118	59	59	15
95°	149	584	1943	1002	682	166
105°	534	809	3279	4978	4644	566
115°	949	1152	2627	5239	5980	937
125°	1320	1480	2389	4037	4762	1172
135°	1574	1732	2314	3259	3695	1217
145°	1825	1942	2285	2780	2998	1143
155°	2063	2120	2285	2508	2582	948
165°	2226	2255	2285	2375	2404	628
175°	2314	2314	2300	2330	2330	220
180°	2314	2314	2314	2314	2314	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	933.0	933.0	939.0	942.0	948.0	951.0	957.0	963.0	981.0	984.0	990.0
5°	909.0	921.0	960.0	975.0	1017.0	1074.0	1098.0	1137.1	1218.1	1242.1	1257.1
7.5°	873.0	900.0	996.0	1020.0	1125.0	1275.1	1338.1	1422.1	1551.1	1614.1	1665.1
10°	816.0	873.0	1044.0	1101.0	1272.1	1500.1	1617.1	1734.1	1929.1	2016.1	2049.1
12.5°	753.0	846.0	1095.0	1173.1	1419.1	1752.1	1893.1	2022.1	2244.1	2361.1	2379.1
15°	681.0	807.0	1143.1	1257.1	1575.1	1962.1	2118.1	2277.1	2484.1	2568.1	2589.1
17.5°	618.0	777.0	1188.1	1308.1	1695.1	2151.1	2310.1	2442.1	2610.1	2667.1	2682.1
20°	540.0	729.0	1218.1	1374.1	1821.1	2289.1	2442.1	2544.1	2658.1	2694.1	2700.1
22.5°	483.0	678.0	1236.1	1398.1	1905.1	2373.1	2502.1	2583.1	2661.1	2673.1	2676.1
25°	435.0	621.0	1233.1	1425.1	1977.1	2424.1	2523.1	2583.1	2628.1	2634.1	2634.1
27.5°	390.0	558.0	1221.1	1431.1	2031.1	2436.1	2514.1	2556.1	2577.1	2589.1	2589.1
30°	351.0	498.0	1191.1	1419.1	2055.1	2424.1	2487.1	2508.1	2529.1	2547.1	2556.1
32.5°	321.0	441.0	1146.1	1395.1	2058.1	2394.1	2439.1	2451.1	2481.1	2523.1	2538.1
35°	294.0	384.0	1095.0	1362.1	2040.1	2346.1	2376.1	2388.1	2448.1	2511.1	2532.1
37.5°	267.0	342.0	1029.0	1305.1	2013.1	2289.1	2310.1	2331.1	2424.1	2499.1	2523.1
40°	240.0	306.0	951.0	1242.1	1971.1	2220.1	2238.1	2271.1	2394.1	2481.1	2505.1
42.5°	219.0	276.0	867.0	1176.1	1917.1	2142.1	2169.1	2217.1	2358.1	2451.1	2478.1
45°	201.0	246.0	777.0	1086.0	1848.1	2061.1	2100.1	2166.1	2316.1	2406.1	2430.1
47.5°	183.0	225.0	684.0	993.0	1773.1	1980.1	2031.1	2106.1	2259.1	2346.1	2367.1
50°	168.0	204.0	591.0	894.0	1692.1	1893.1	1953.1	2031.1	2187.1	2268.1	2295.1
52.5°	156.0	186.0	504.0	795.0	1599.1	1803.1	1872.1	1953.1	2100.1	2178.1	2196.1
55°	144.0	171.0	429.0	690.0	1503.1	1707.1	1782.1	1860.1	2004.1	2070.1	2082.1
57.5°	138.0	159.0	366.0	591.0	1401.1	1599.1	1683.1	1755.1	1890.1	1941.1	1953.1
60°	129.0	150.0	318.0	507.0	1290.1	1497.1	1569.1	1641.1	1755.1	1797.1	1806.1
62.5°	120.0	144.0	282.0	426.0	1176.1	1377.1	1449.1	1515.1	1611.1	1641.1	1653.1
65°	114.0	138.0	255.0	366.0	1059.0	1251.1	1323.1	1380.1	1458.1	1488.1	1494.1
67.5°	108.0	132.0	234.0	315.0	942.0	1125.0	1179.1	1233.1	1293.1	1323.1	1326.1
70°	99.0	126.0	216.0	279.0	822.0	981.0	1026.0	1083.0	1131.0	1146.1	1155.1
72.5°	93.0	117.0	204.0	252.0	699.0	843.0	885.0	918.0	960.0	975.0	975.0
75°	84.0	105.0	192.0	225.0	573.0	690.0	726.0	759.0	792.0	798.0	789.0
77.5°	75.0	93.0	165.0	189.0	447.0	546.0	576.0	594.0	621.0	627.0	630.0
80°	63.0	81.0	129.0	147.0	324.0	402.0	423.0	438.0	462.0	462.0	468.0
82.5°	48.0	63.0	93.0	105.0	219.0	276.0	294.0	303.0	318.0	318.0	318.0
85°	30.0	39.0	60.0	69.0	132.0	168.0	180.0	183.0	195.0	198.0	198.0
87.5°	15.0	21.0	39.0	42.0	69.0	87.0	87.0	93.0	93.0	90.0	87.0
90°	15.5	27.9	40.4	43.5	68.3	101.4	118.0	104.9	78.7	59.0	59.0
92.5°	62.1	167.7	273.4	299.8	421.5	583.7	664.8	582.6	418.3	295.1	283.4
95°	149.1	342.4	535.7	584.0	1037.0	1641.1	1943.1	1733.9	1315.6	1001.9	966.3
97.5°	257.8	428.3	598.9	641.5	1396.9	2404.1	2907.7	2775.5	2511.1	2312.8	2245.1
100°	341.7	496.4	651.0	689.7	1527.9	2645.6	3204.4	3214.1	3233.4	3247.9	3167.3
102.5°	413.2	557.5	701.7	737.8	1588.0	2721.5	3288.3	3456.7	3793.6	4046.3	3977.3
105°	534.3	656.5	778.7	809.3	1632.5	2730.1	3278.9	3656.5	4411.8	4978.2	4941.1
107.5°	658.6	772.5	886.4	914.9	1640.8	2608.7	3092.6	3619.3	4672.7	5462.8	5471.8
110°	742.5	845.3	948.2	973.9	1628.3	2500.9	2937.2	3526.1	4703.8	5587.1	5625.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	824.8	922.8	1020.8	1045.3	1628.8	2406.9	2795.9	3398.6	4603.9	5507.9	5567.3
115°	949.0	1039.4	1129.9	1152.5	1643.9	2299.0	2626.6	3207.2	4368.3	5239.2	5321.5
117.5°	1071.8	1153.9	1236.1	1256.6	1674.4	2231.5	2510.1	3034.1	4082.0	4867.9	4959.2
120°	1143.2	1220.5	1297.9	1317.2	1699.3	2208.8	2463.5	2942.3	3899.8	4617.9	4706.6
122.5°	1213.1	1291.1	1369.1	1388.6	1735.0	2196.9	2427.8	2858.9	3721.1	4367.8	4455.3
125°	1320.3	1391.4	1462.5	1480.3	1783.2	2187.0	2388.9	2755.1	3487.6	4036.9	4117.5
127.5°	1407.3	1479.1	1550.9	1568.8	1831.3	2181.3	2356.3	2670.7	3299.6	3771.3	3839.3
130°	1453.9	1531.2	1608.5	1627.8	1866.5	2184.8	2343.9	2623.8	3183.7	3603.6	3666.4
132.5°	1502.0	1579.3	1656.7	1676.0	1895.0	2187.0	2333.0	2583.6	3084.8	3460.7	3517.0
135°	1573.5	1643.9	1714.3	1731.9	1926.1	2185.0	2314.4	2524.3	2944.0	3258.8	3307.3
137.5°	1646.5	1716.2	1785.9	1803.3	1972.6	2198.4	2311.3	2488.7	2843.5	3109.6	3149.3
140°	1707.0	1771.2	1835.4	1851.5	2001.1	2200.6	2300.4	2453.6	2760.1	2990.0	3027.1
142.5°	1753.6	1813.0	1872.4	1887.2	2024.9	2208.6	2300.4	2435.0	2704.3	2906.2	2938.1
145°	1825.1	1876.9	1928.7	1941.6	2056.0	2208.6	2284.9	2395.0	2615.2	2780.3	2804.5
147.5°	1896.5	1946.9	1997.3	2009.9	2101.6	2223.8	2284.9	2371.5	2544.8	2674.7	2694.7
150°	1943.1	1988.7	2034.3	2045.7	2125.4	2231.7	2284.9	2358.1	2504.4	2614.1	2630.3
152.5°	1991.3	2025.8	2060.4	2069.0	2141.0	2236.9	2284.9	2347.4	2472.3	2566.0	2578.3
155°	2062.7	2088.3	2113.8	2120.2	2175.1	2248.3	2284.9	2334.6	2434.0	2508.5	2516.6
157.5°	2115.6	2140.4	2165.3	2171.5	2209.3	2259.7	2284.9	2323.5	2400.8	2458.8	2464.5
160°	2151.3	2170.6	2190.0	2194.8	2224.8	2264.9	2284.9	2318.0	2384.3	2434.0	2437.3
162.5°	2187.0	2201.5	2216.0	2219.6	2241.4	2270.4	2284.9	2312.9	2368.8	2410.7	2413.8
165°	2225.8	2238.9	2252.0	2255.3	2265.2	2278.3	2284.9	2304.9	2344.9	2374.9	2378.2
167.5°	2261.6	2267.8	2274.0	2275.5	2283.8	2294.9	2300.4	2313.5	2339.7	2359.4	2360.8
170°	2284.9	2291.1	2297.3	2298.8	2299.3	2300.0	2300.4	2313.5	2339.7	2359.4	2359.4
172.5°	2297.3	2298.7	2300.1	2300.4	2300.4	2300.4	2300.4	2310.8	2331.5	2347.0	2345.8
175°	2314.4	2314.4	2314.4	2314.4	2309.7	2303.5	2300.4	2307.0	2320.1	2329.9	2329.9
177.5°	2314.4	2314.4	2314.4	2314.4	2310.8	2305.9	2303.5	2308.7	2319.0	2326.8	2325.4
180°	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4	2314.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	933.0	933.0
2.5°	996.0	990.0
5°	1281.1	1287.1
7.5°	1725.1	1722.1
10°	2145.1	2172.1
12.5°	2451.1	2457.1
15°	2637.1	2649.1
17.5°	2709.1	2712.1
20°	2712.1	2706.1
22.5°	2679.1	2673.1
25°	2640.1	2637.1
27.5°	2604.1	2607.1
30°	2589.1	2598.1
32.5°	2589.1	2604.1
35°	2595.1	2610.1
37.5°	2592.1	2610.1
40°	2580.1	2601.1
42.5°	2547.1	2562.1
45°	2496.1	2514.1
47.5°	2430.1	2442.1
50°	2346.1	2358.1
52.5°	2241.1	2244.1
55°	2115.1	2127.1
57.5°	1980.1	1983.1
60°	1830.1	1839.1
62.5°	1671.1	1671.1
65°	1503.1	1509.1
67.5°	1329.1	1344.1
70°	1152.1	1155.1
72.5°	978.0	978.0
75°	798.0	801.0
77.5°	627.0	627.0
80°	465.0	468.0
82.5°	321.0	327.0
85°	201.0	201.0
87.5°	93.0	84.0
90°	59.0	59.0
92.5°	236.4	189.5
95°	824.1	681.9
97.5°	1974.5	1703.9
100°	2844.9	2522.5
102.5°	3701.1	3425.0
105°	4792.7	4644.3
107.5°	5507.7	5543.6
110°	5780.4	5935.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5804.7	6042.2
115°	5650.8	5980.1
117.5°	5324.4	5689.6
120°	5061.4	5416.2
122.5°	4805.3	5155.3
125°	4439.9	4762.3
127.5°	4111.3	4383.3
130°	3917.7	4169.0
132.5°	3742.0	3967.0
135°	3501.2	3695.2
137.5°	3308.1	3466.9
140°	3175.6	3324.0
142.5°	3065.8	3193.5
145°	2901.1	2997.8
147.5°	2774.8	2854.9
150°	2695.3	2760.2
152.5°	2627.3	2676.3
155°	2549.1	2581.5
157.5°	2487.3	2510.1
160°	2450.4	2463.5
162.5°	2426.2	2438.6
165°	2391.3	2404.5
167.5°	2366.3	2371.8
170°	2359.4	2359.4
172.5°	2340.9	2336.1
175°	2329.9	2329.9
177.5°	2319.9	2314.4
180°	2314.4	2314.4



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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	2.83	3.58	3.92	4.67	6.16	16.02	16.77	17.11	17.86	19.36
	3H	3.53	4.20	4.62	5.29	6.81	17.86	18.53	18.95	19.63	21.14
	4H	3.82	4.45	4.93	5.55	7.08	18.50	19.14	19.61	20.24	21.76
	6H	4.06	4.65	5.18	5.75	7.29	18.93	19.52	20.05	20.62	22.15
	8H	4.13	4.68	5.25	5.80	7.33	19.05	19.61	20.17	20.73	22.25
	12H	4.14	4.67	5.27	5.78	7.33	19.12	19.65	20.24	20.76	22.31
4H	2H	10.04	10.68	11.15	11.78	13.30	16.28	16.92	17.40	18.02	19.54
	3H	11.60	12.13	12.72	13.25	14.79	18.32	18.85	19.44	19.98	21.51
	4H	11.68	12.17	12.81	13.29	14.84	19.09	19.58	20.21	20.69	22.25
	6H	11.69	12.11	12.82	13.25	14.79	19.62	20.04	20.76	21.18	22.73
	8H	11.66	12.05	12.79	13.19	14.75	19.79	20.18	20.92	21.31	22.87
	12H	11.61	11.97	12.76	13.11	14.68	19.88	20.23	21.02	21.37	22.94
8H	4H	13.12	13.51	14.25	14.65	16.21	19.14	19.53	20.27	20.66	22.22
	6H	13.36	13.68	14.51	14.86	16.42	19.76	20.09	20.92	21.26	22.82
	8H	13.38	13.66	14.54	14.81	16.39	19.99	20.27	21.15	21.42	23.00
	12H	13.34	13.59	14.50	14.74	16.35	20.13	20.38	21.29	21.53	23.14
12H	4H	13.26	13.62	14.41	14.76	16.33	19.08	19.44	20.23	20.58	22.15
	6H	13.62	13.90	14.78	15.05	16.63	19.75	20.03	20.91	21.18	22.76
	8H	13.68	13.93	14.85	15.08	16.69	19.97	20.22	21.14	21.37	22.99