

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: P937917

Luminaire Tested: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937917
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-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

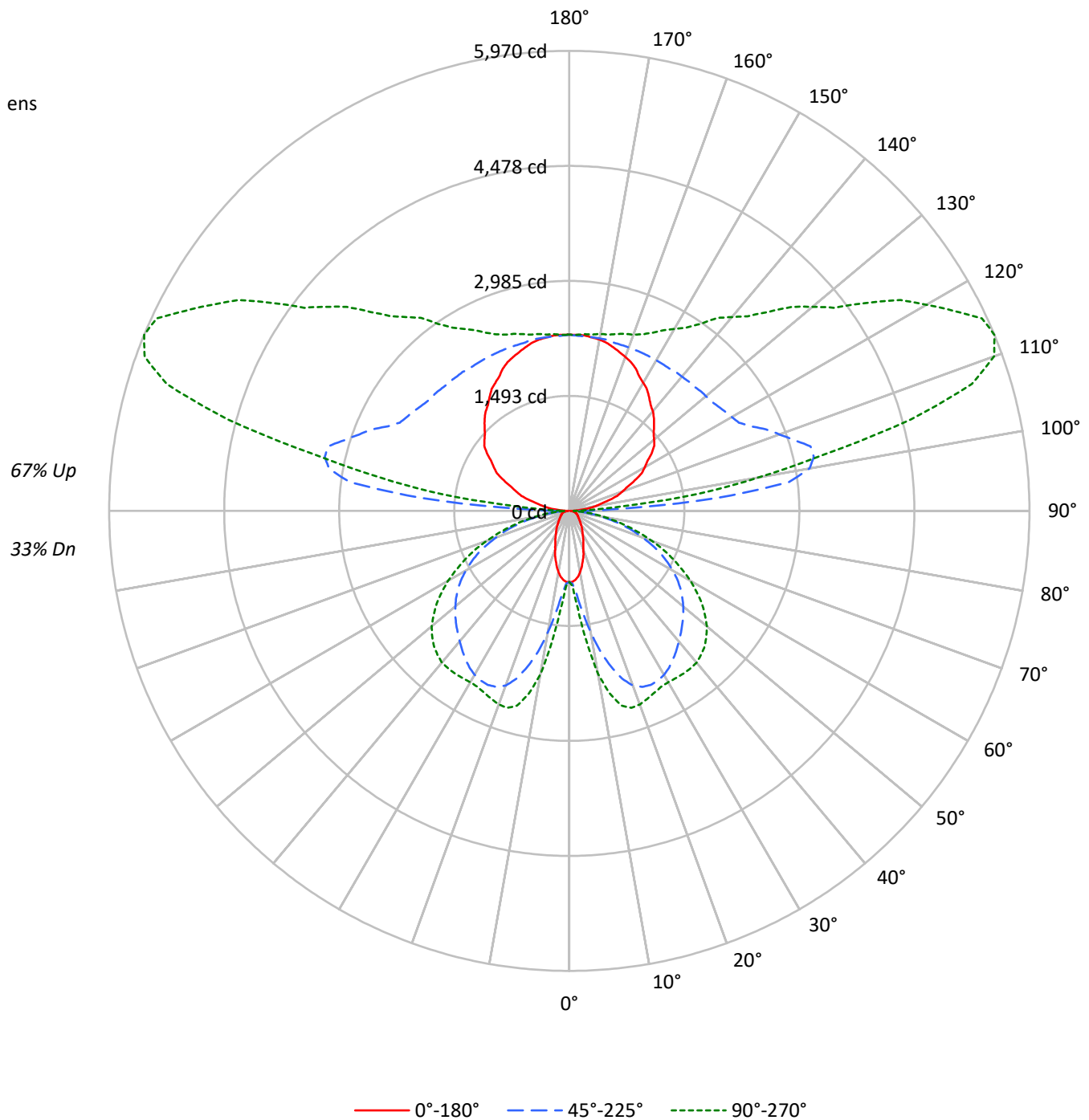
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21963.2 lumens
Efficiency: N/A
Efficacy: 131.7 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: 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

TEST NUMBER: P937917
CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P937917

CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2851	2851	2851
5°	2786	3296	3833
10°	2528	4806	6354
15°	2150	6281	7672
20°	1751	7280	7819
25°	1461	7620	7660
30°	1233	7671	7646
35°	1091	7545	7844
40°	951	7381	8048
45°	862	7263	8079
50°	791	7156	7946
55°	758	6999	7594
60°	778	6695	7037
65°	810	6231	6273
70°	865	5437	5300
75°	962	4437	4136
80°	1058	3081	2787
85°	959	1637	1426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8079 cd/sqm



TEST NUMBER: P937917

CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	0.5
10°-20°	528.5	2.4
20°-30°	924.4	4.2
30°-40°	1190.0	5.4
40°-50°	1329.2	6.1
50°-60°	1273.1	5.8
60°-70°	1008.9	4.6
70°-80°	593.2	2.7
80°-90°	173.5	0.8
90°-100°	1114.6	5.1
100°-110°	2930.4	13.3
110°-120°	3038.5	13.8
120°-130°	2437.2	11.1
130°-140°	1912.4	8.7
140°-150°	1467.8	6.7
150°-160°	1057.1	4.8
160°-170°	646.8	2.9
170°-180°	218.5	1.0
0°-30°	1572.2	7.2
0°-40°	2762.2	12.6
0°-60°	5364.4	24.4
0°-90°	7140.1	32.5
90°-120°	7083.4	32.3
90°-150°	12900.8	58.7
90°-180°	14823.0	67.5
0°-180°	21963.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	898	963	1085	1227	1272	83
15°	673	1242	2093	2537	2617	187
25°	430	1408	2493	2602	2606	198
35°	290	1346	2348	2481	2579	181
45°	199	1073	2075	2377	2484	154
55°	142	682	1761	2045	2102	130
65°	113	362	1307	1470	1491	112
75°	83	222	717	788	791	87
85°	30	68	178	196	199	31
90°	15	43	117	58	58	15
95°	147	577	1920	990	674	164
105°	528	800	3240	4918	4589	560
115°	938	1139	2595	5176	5908	926
125°	1304	1462	2360	3988	4705	1158
135°	1555	1711	2287	3220	3651	1203
145°	1803	1918	2258	2747	2962	1130
155°	2038	2095	2258	2478	2550	936
165°	2199	2228	2258	2346	2376	621
175°	2287	2287	2273	2302	2302	217
180°	2287	2287	2287	2287	2287	



TEST NUMBER: P937917

CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8	921.8
2.5°	921.8	921.8	927.7	930.7	936.6	939.6	945.5	951.4	969.2	972.2	978.1
5°	898.1	909.9	948.5	963.3	1004.8	1061.1	1084.8	1123.5	1203.5	1227.2	1242.0
7.5°	862.5	889.2	984.0	1007.8	1111.5	1259.8	1322.0	1405.0	1532.5	1594.7	1645.1
10°	806.2	862.5	1031.5	1087.8	1256.8	1482.1	1597.7	1713.3	1906.0	1991.9	2024.5
12.5°	744.0	835.8	1081.9	1159.0	1402.1	1731.1	1870.4	1997.8	2217.2	2332.8	2350.6
15°	672.8	797.3	1129.4	1242.0	1556.2	1938.6	2092.7	2249.8	2454.3	2537.3	2558.0
17.5°	610.6	767.7	1173.8	1292.4	1674.8	2125.3	2282.4	2412.8	2578.8	2635.1	2649.9
20°	533.5	720.3	1203.5	1357.6	1799.2	2261.6	2412.8	2513.6	2626.2	2661.8	2667.7
22.5°	477.2	669.9	1221.3	1381.3	1882.2	2344.6	2472.1	2552.1	2629.2	2641.0	2644.0
25°	429.8	613.5	1218.3	1408.0	1953.4	2395.0	2492.8	2552.1	2596.6	2602.5	2602.5
27.5°	385.3	551.3	1206.4	1413.9	2006.7	2406.9	2483.9	2525.4	2546.2	2558.0	2558.0
30°	346.8	492.0	1176.8	1402.1	2030.4	2395.0	2457.3	2478.0	2498.8	2516.5	2525.4
32.5°	317.1	435.7	1132.3	1378.4	2033.4	2365.4	2409.8	2421.7	2451.3	2492.8	2507.6
35°	290.5	379.4	1081.9	1345.8	2015.6	2317.9	2347.6	2359.4	2418.7	2481.0	2501.7
37.5°	263.8	337.9	1016.7	1289.4	1988.9	2261.6	2282.4	2303.1	2395.0	2469.1	2492.8
40°	237.1	302.3	939.6	1227.2	1947.4	2193.5	2211.2	2243.8	2365.4	2451.3	2475.0
42.5°	216.4	272.7	856.6	1162.0	1894.1	2116.4	2143.1	2190.5	2329.8	2421.7	2448.4
45°	198.6	243.0	767.7	1073.0	1825.9	2036.4	2074.9	2140.1	2288.3	2377.2	2400.9
47.5°	180.8	222.3	675.8	981.1	1751.8	1956.3	2006.7	2080.8	2232.0	2317.9	2338.7
50°	166.0	201.6	583.9	883.3	1671.8	1870.4	1929.7	2006.7	2160.9	2240.9	2267.6
52.5°	154.1	183.8	498.0	785.5	1579.9	1781.5	1849.6	1929.7	2074.9	2152.0	2169.7
55°	142.3	168.9	423.9	681.7	1485.1	1686.6	1760.7	1837.8	1980.1	2045.3	2057.1
57.5°	136.3	157.1	361.6	583.9	1384.3	1579.9	1662.9	1734.0	1867.4	1917.8	1929.7
60°	127.5	148.2	314.2	500.9	1274.6	1479.1	1550.3	1621.4	1734.0	1775.5	1784.4
62.5°	118.6	142.3	278.6	420.9	1162.0	1360.6	1431.7	1496.9	1591.8	1621.4	1633.3
65°	112.6	136.3	251.9	361.6	1046.3	1236.1	1307.2	1363.5	1440.6	1470.2	1476.2
67.5°	106.7	130.4	231.2	311.2	930.7	1111.5	1165.0	1218.3	1277.6	1307.2	1310.2
70°	97.8	124.5	213.4	275.7	812.1	969.2	1013.7	1070.0	1117.4	1132.3	1141.2
72.5°	91.9	115.6	201.6	249.0	690.6	832.9	874.4	907.0	948.5	963.3	963.3
75°	83.0	103.7	189.7	222.3	566.1	681.7	717.3	749.9	782.5	788.4	779.5
77.5°	74.1	91.9	163.0	186.7	441.6	539.4	569.1	586.9	613.5	619.5	622.4
80°	62.2	80.0	127.5	145.2	320.1	397.2	417.9	432.7	456.5	456.5	462.4
82.5°	47.4	62.2	91.9	103.7	216.4	272.7	290.5	299.4	314.2	314.2	314.2
85°	29.6	38.5	59.3	68.2	130.4	166.0	177.8	180.8	192.7	195.6	195.6
87.5°	14.8	20.7	38.5	41.5	68.2	86.0	86.0	91.9	91.9	88.9	86.0
90°	15.3	27.6	39.9	43.0	67.5	100.2	116.6	103.6	77.8	58.3	58.3
92.5°	61.4	165.7	270.1	296.2	416.4	576.7	656.8	575.6	413.3	291.6	280.0
95°	147.3	338.3	529.3	577.0	1024.6	1621.4	1919.8	1713.1	1299.8	989.9	954.7
97.5°	254.7	423.2	591.7	633.8	1380.1	2375.3	2872.8	2742.2	2481.0	2285.0	2218.2
100°	337.6	490.4	643.2	681.4	1509.6	2613.9	3165.9	3175.5	3194.6	3208.9	3129.3
102.5°	408.2	550.8	693.3	728.9	1568.9	2688.8	3248.8	3415.2	3748.1	3997.7	3929.6
105°	527.9	648.6	769.4	799.6	1612.9	2697.3	3239.6	3612.6	4358.9	4918.5	4881.8
107.5°	650.7	763.2	875.8	903.9	1621.1	2577.4	3055.5	3575.9	4616.6	5397.2	5406.1
110°	733.6	835.2	936.8	962.2	1608.8	2470.9	2902.0	3483.8	4647.4	5520.1	5558.3



TEST NUMBER: P937917

CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	814.9	911.7	1008.6	1032.8	1609.3	2378.0	2762.3	3357.8	4548.7	5441.8	5500.5
115°	937.6	1026.9	1116.3	1138.7	1624.2	2271.4	2595.1	3168.7	4315.9	5176.3	5257.6
117.5°	1058.9	1140.1	1221.3	1241.5	1654.3	2204.7	2480.0	2997.7	4033.0	4809.5	4899.7
120°	1129.5	1205.9	1282.3	1301.4	1678.9	2182.3	2433.9	2907.0	3853.0	4562.5	4650.1
122.5°	1198.5	1275.6	1352.7	1371.9	1714.2	2170.5	2398.7	2824.6	3676.4	4315.4	4401.8
125°	1304.5	1374.7	1445.0	1462.5	1761.8	2160.8	2360.2	2722.0	3445.7	3988.5	4068.1
127.5°	1390.4	1461.4	1532.3	1550.0	1809.3	2155.1	2328.0	2638.7	3260.0	3726.0	3793.2
130°	1436.5	1512.8	1589.2	1608.3	1844.1	2158.6	2315.8	2592.3	3145.5	3560.4	3622.4
132.5°	1484.0	1560.3	1636.8	1655.9	1872.3	2160.8	2305.0	2552.6	3047.8	3419.2	3474.8
135°	1554.6	1624.2	1693.7	1711.1	1903.0	2158.8	2286.6	2494.0	2908.7	3219.7	3267.6
137.5°	1626.7	1695.6	1764.5	1781.7	1948.9	2172.0	2283.6	2458.8	2809.4	3072.3	3111.5
140°	1686.5	1749.9	1813.4	1829.3	1977.1	2174.2	2272.8	2424.2	2727.0	2954.1	2990.8
142.5°	1732.6	1791.2	1849.9	1864.6	2000.6	2182.1	2272.8	2405.8	2671.8	2871.3	2902.8
145°	1803.2	1854.4	1905.6	1918.3	2031.3	2182.1	2257.5	2366.3	2583.8	2746.9	2770.8
147.5°	1873.7	1923.5	1973.3	1985.8	2076.4	2197.1	2257.5	2343.0	2514.3	2642.6	2662.4
150°	1919.8	1964.8	2009.9	2021.2	2099.9	2204.9	2257.5	2329.8	2474.3	2582.7	2598.7
152.5°	1967.4	2001.5	2035.7	2044.2	2115.3	2210.1	2257.5	2319.2	2442.6	2535.2	2547.4
155°	2037.9	2063.2	2088.4	2094.8	2149.0	2221.3	2257.5	2306.6	2404.8	2478.4	2486.4
157.5°	2090.2	2114.7	2139.3	2145.4	2182.8	2232.6	2257.5	2295.6	2372.0	2429.3	2434.9
160°	2125.5	2144.6	2163.7	2168.5	2198.1	2237.7	2257.5	2290.2	2355.7	2404.8	2408.1
162.5°	2160.8	2175.1	2189.4	2193.0	2214.5	2243.2	2257.5	2285.1	2340.4	2381.8	2384.8
165°	2199.1	2212.0	2225.0	2228.2	2238.0	2251.0	2257.5	2277.2	2316.8	2346.4	2349.7
167.5°	2234.5	2240.6	2246.7	2248.2	2256.4	2267.4	2272.8	2285.7	2311.6	2331.1	2332.5
170°	2257.5	2263.6	2269.7	2271.2	2271.7	2272.4	2272.8	2285.7	2311.6	2331.1	2331.1
172.5°	2269.7	2271.1	2272.5	2272.8	2272.8	2272.8	2272.8	2283.1	2303.5	2318.8	2317.7
175°	2286.6	2286.6	2286.6	2286.6	2282.0	2275.9	2272.8	2279.3	2292.3	2301.9	2301.9
177.5°	2286.6	2286.6	2286.6	2286.6	2283.1	2278.2	2275.9	2281.0	2291.2	2298.9	2297.5
180°	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6	2286.6



TEST NUMBER: P937917

CATALOG NUMBER: SQ4-FB-125U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	921.8	921.8
2.5°	984.0	978.1
5°	1265.7	1271.7
7.5°	1704.4	1701.4
10°	2119.4	2146.0
12.5°	2421.7	2427.6
15°	2605.5	2617.3
17.5°	2676.6	2679.6
20°	2679.6	2673.6
22.5°	2647.0	2641.0
25°	2608.4	2605.5
27.5°	2572.9	2575.8
30°	2558.0	2566.9
32.5°	2558.0	2572.9
35°	2564.0	2578.8
37.5°	2561.0	2578.8
40°	2549.1	2569.9
42.5°	2516.5	2531.4
45°	2466.1	2483.9
47.5°	2400.9	2412.8
50°	2317.9	2329.8
52.5°	2214.2	2217.2
55°	2089.7	2101.6
57.5°	1956.3	1959.3
60°	1808.1	1817.0
62.5°	1651.0	1651.0
65°	1485.1	1491.0
67.5°	1313.2	1328.0
70°	1138.3	1141.2
72.5°	966.3	966.3
75°	788.4	791.4
77.5°	619.5	619.5
80°	459.4	462.4
82.5°	317.1	323.1
85°	198.6	198.6
87.5°	91.9	83.0
90°	58.3	58.3
92.5°	233.6	187.2
95°	814.2	673.7
97.5°	1950.8	1683.5
100°	2810.8	2492.2
102.5°	3656.7	3383.9
105°	4735.2	4588.6
107.5°	5441.6	5477.1
110°	5711.0	5863.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5735.0	5969.7
115°	5583.0	5908.3
117.5°	5260.5	5621.3
120°	5000.7	5351.2
122.5°	4747.6	5093.4
125°	4386.6	4705.2
127.5°	4062.0	4330.7
130°	3870.7	4119.0
132.5°	3697.1	3919.4
135°	3459.2	3650.9
137.5°	3268.4	3425.3
140°	3137.5	3284.1
142.5°	3029.0	3155.2
145°	2866.3	2961.8
147.5°	2741.5	2820.6
150°	2663.0	2727.1
152.5°	2595.8	2644.2
155°	2518.5	2550.5
157.5°	2457.5	2480.0
160°	2421.0	2433.9
162.5°	2397.1	2409.3
165°	2362.6	2375.6
167.5°	2337.9	2343.3
170°	2331.1	2331.1
172.5°	2312.8	2308.1
175°	2301.9	2301.9
177.5°	2292.1	2286.6
180°	2286.6	2286.6



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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	2.79	3.53	3.88	4.62	6.12	15.98	16.73	17.07	17.82	19.32
	3H	3.48	4.15	4.58	5.25	6.77	17.82	18.49	18.91	19.58	21.10
	4H	3.78	4.41	4.88	5.51	7.03	18.46	19.10	19.57	20.20	21.72
	6H	4.02	4.61	5.14	5.71	7.24	18.89	19.47	20.00	20.58	22.11
	8H	4.08	4.64	5.20	5.76	7.29	19.01	19.57	20.13	20.68	22.21
	12H	4.10	4.63	5.22	5.74	7.29	19.07	19.60	20.20	20.72	22.27
4H	2H	10.00	10.63	11.11	11.73	13.25	16.24	16.88	17.35	17.98	19.50
	3H	11.55	12.08	12.67	13.21	14.75	18.28	18.81	19.40	19.94	21.47
	4H	11.64	12.13	12.77	13.25	14.80	19.04	19.53	20.17	20.65	22.20
	6H	11.65	12.07	12.78	13.21	14.75	19.58	20.00	20.71	21.14	22.69
	8H	11.62	12.01	12.75	13.14	14.71	19.74	20.14	20.88	21.27	22.83
	12H	11.57	11.93	12.72	13.07	14.64	19.83	20.19	20.98	21.33	22.90
8H	4H	13.08	13.47	14.21	14.60	16.17	19.09	19.49	20.23	20.62	22.18
	6H	13.32	13.64	14.47	14.81	16.37	19.72	20.05	20.88	21.22	22.78
	8H	13.33	13.62	14.49	14.77	16.35	19.94	20.23	21.10	21.38	22.96
	12H	13.30	13.55	14.46	14.70	16.31	20.09	20.34	21.25	21.49	23.10
12H	4H	13.22	13.57	14.37	14.72	16.29	19.04	19.40	20.19	20.54	22.11
	6H	13.58	13.86	14.74	15.01	16.59	19.70	19.99	20.86	21.14	22.72
	8H	13.64	13.89	14.80	15.04	16.65	19.93	20.18	21.10	21.33	22.94