

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: P938026

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938026
REPORT IS A COMBINATION OF REPORTS P933591 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

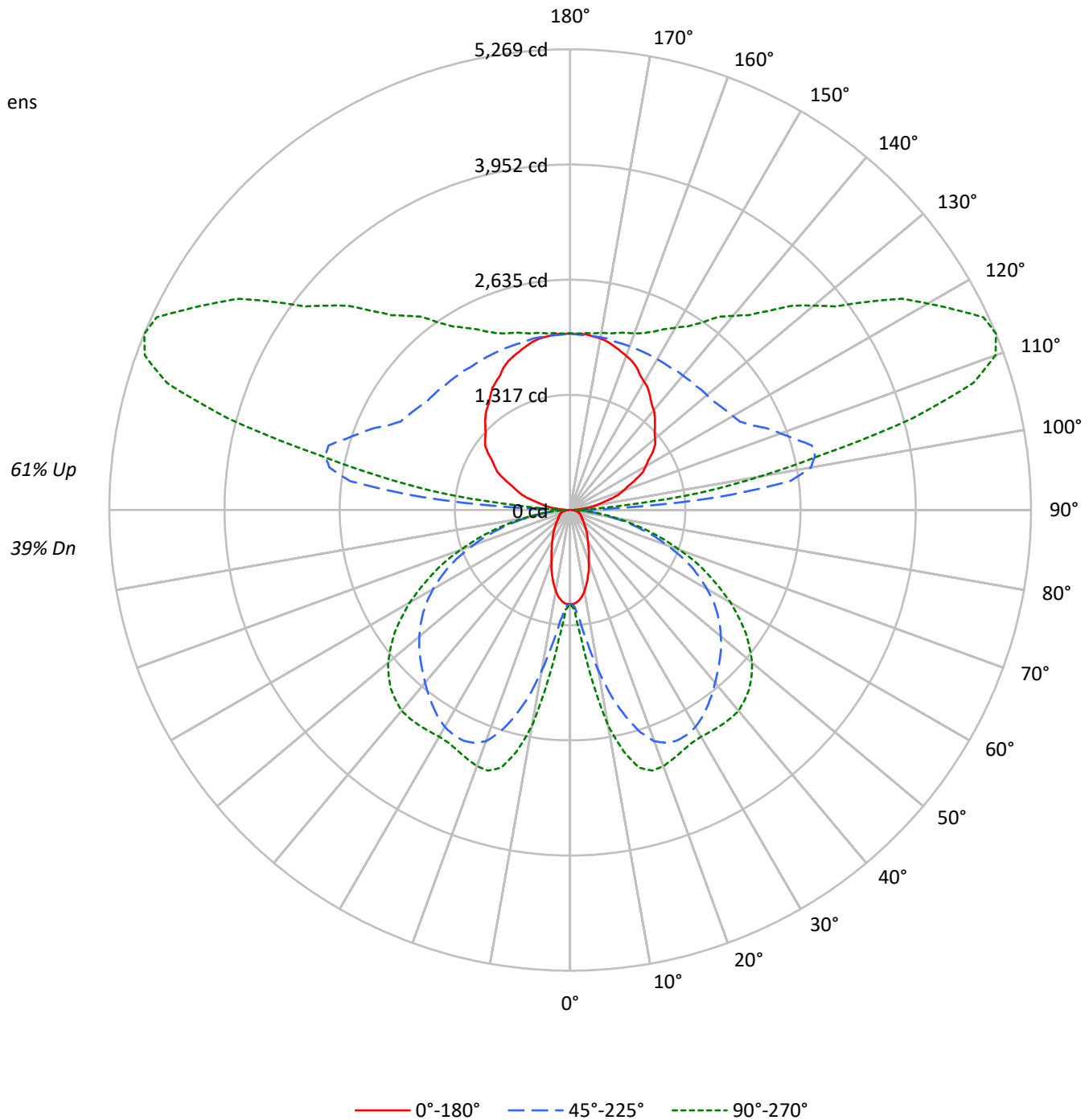
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21406.7 lumens
Efficiency: N/A
Efficacy: 110.8 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): 193.2
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	50	30	10	0
RCR																					
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3249	3844	4469
10°	2948	5605	7409
15°	2507	7324	8946
20°	2042	8489	9118
25°	1704	8886	8933
30°	1437	8944	8916
35°	1271	8798	9146
40°	1109	8607	9385
45°	1005	8469	9421
50°	922	8344	9265
55°	884	8161	8855
60°	906	7806	8206
65°	944	7265	7315
70°	1009	6340	6180
75°	1122	5174	4823
80°	1235	3593	3250
85°	1118	1910	1663

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	0.6
10°-20°	616.3	2.9
20°-30°	1077.9	5.0
30°-40°	1387.6	6.5
40°-50°	1549.9	7.2
50°-60°	1484.5	6.9
60°-70°	1176.4	5.5
70°-80°	691.8	3.2
80°-90°	199.9	0.9
90°-100°	983.8	4.6
100°-110°	2586.4	12.1
110°-120°	2681.8	12.5
120°-130°	2151.1	10.0
130°-140°	1687.9	7.9
140°-150°	1295.5	6.1
150°-160°	933.0	4.4
160°-170°	570.9	2.7
170°-180°	192.9	0.9
0°-30°	1833.3	8.6
0°-40°	3220.9	15.0
0°-60°	6255.3	29.2
0°-90°	8323.4	38.9
90°-120°	6252.0	29.2
90°-150°	11386.5	53.2
90°-180°	13083.0	61.1
0°-180°	21406.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1047	1123	1265	1431	1483	97
15°	785	1448	2440	2959	3052	218
25°	501	1642	2907	3035	3038	231
35°	339	1569	2738	2893	3007	212
45°	232	1251	2420	2772	2896	179
55°	166	795	2053	2385	2451	151
65°	131	422	1524	1714	1739	130
75°	97	259	836	919	923	101
85°	34	80	207	228	232	37
90°	14	38	103	52	52	13
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°	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0
2.5°	1075.0	1075.0	1081.8	1085.3	1092.2	1095.7	1102.6	1109.5	1130.2	1133.7	1140.6
5°	1047.3	1061.1	1106.1	1123.4	1171.8	1237.4	1265.1	1310.0	1403.3	1430.9	1448.2
7.5°	1005.8	1036.9	1147.5	1175.2	1296.1	1468.9	1541.6	1638.3	1787.0	1859.5	1918.3
10°	940.1	1005.8	1202.8	1268.5	1465.5	1728.2	1863.0	1997.8	2222.5	2322.7	2360.7
12.5°	867.6	974.7	1261.6	1351.5	1634.9	2018.5	2181.0	2329.6	2585.4	2720.2	2740.9
15°	784.6	929.8	1316.9	1448.2	1814.6	2260.5	2440.2	2623.4	2861.9	2958.6	2982.9
17.5°	712.0	895.2	1368.7	1507.0	1952.8	2478.2	2661.4	2813.5	3007.0	3072.7	3090.1
20°	622.1	839.9	1403.3	1583.0	2098.0	2637.2	2813.5	2931.0	3062.3	3103.8	3110.7
22.5°	556.4	781.2	1424.0	1610.6	2194.8	2734.0	2882.6	2976.0	3065.8	3079.7	3083.1
25°	501.2	715.5	1420.5	1641.8	2277.8	2792.8	2906.8	2976.0	3027.8	3034.7	3034.7
27.5°	449.4	642.9	1406.8	1648.7	2340.0	2806.6	2896.5	2944.9	2969.0	2982.9	2982.9
30°	404.4	573.8	1372.1	1634.9	2367.7	2792.8	2865.3	2889.6	2913.7	2934.5	2944.9
32.5°	369.8	508.0	1320.3	1607.2	2371.1	2758.2	2810.0	2823.9	2858.4	2906.8	2924.1
35°	338.7	442.4	1261.6	1569.2	2350.3	2702.9	2737.5	2751.3	2820.4	2893.0	2917.2
37.5°	307.7	394.1	1185.5	1503.6	2319.3	2637.2	2661.4	2685.6	2792.8	2879.2	2906.8
40°	276.5	352.6	1095.7	1430.9	2270.9	2557.8	2578.4	2616.5	2758.2	2858.4	2886.1
42.5°	252.3	318.0	998.9	1354.9	2208.6	2467.9	2499.0	2554.3	2716.7	2823.9	2855.0
45°	231.6	283.4	895.2	1251.2	2129.2	2374.5	2419.5	2495.5	2668.3	2772.0	2799.7
47.5°	210.9	259.3	788.1	1144.1	2042.7	2281.2	2340.0	2426.3	2602.7	2702.9	2727.1
50°	193.6	235.0	680.9	1030.0	1949.4	2181.0	2250.1	2340.0	2519.7	2613.0	2644.2
52.5°	179.7	214.3	580.7	916.0	1842.3	2077.3	2156.8	2250.1	2419.5	2509.4	2530.1
55°	165.9	197.0	494.3	794.9	1731.7	1966.7	2053.1	2142.9	2308.9	2384.9	2398.7
57.5°	159.0	183.2	421.7	680.9	1614.1	1842.3	1939.1	2022.0	2177.6	2236.2	2250.1
60°	148.6	172.8	366.3	584.1	1486.2	1724.7	1807.7	1890.7	2022.0	2070.4	2080.8
62.5°	138.2	165.9	324.9	490.8	1354.9	1586.5	1669.4	1745.5	1856.1	1890.7	1904.4
65°	131.3	159.0	293.8	421.7	1220.1	1441.3	1524.2	1590.0	1679.8	1714.3	1721.3
67.5°	124.4	152.1	269.6	362.9	1085.3	1296.1	1358.4	1420.5	1489.7	1524.2	1527.7
70°	114.1	145.2	248.9	321.4	947.0	1130.2	1182.1	1247.8	1303.1	1320.3	1330.7
72.5°	107.2	134.8	235.0	290.3	805.3	971.3	1019.7	1057.7	1106.1	1123.4	1123.4
75°	96.8	121.0	221.2	259.3	660.1	794.9	836.5	874.5	912.5	919.4	909.0
77.5°	86.4	107.2	190.1	217.7	515.0	629.1	663.6	684.4	715.5	722.4	725.9
80°	72.6	93.3	148.6	169.3	373.3	463.1	487.4	504.6	532.3	532.3	539.2
82.5°	55.3	72.6	107.2	121.0	252.3	318.0	338.7	349.1	366.3	366.3	366.3
85°	34.5	44.9	69.2	79.5	152.1	193.6	207.4	210.9	224.6	228.1	228.1
87.5°	17.3	24.2	44.9	48.4	79.5	100.2	100.2	107.2	107.2	103.7	100.2
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°	1075.0	1075.0
2.5°	1147.5	1140.6
5°	1475.9	1482.8
7.5°	1987.5	1984.0
10°	2471.3	2502.4
12.5°	2823.9	2830.8
15°	3038.2	3052.0
17.5°	3121.1	3124.6
20°	3124.6	3117.7
22.5°	3086.6	3079.7
25°	3041.7	3038.2
27.5°	3000.1	3003.6
30°	2982.9	2993.3
32.5°	2982.9	3000.1
35°	2989.8	3007.0
37.5°	2986.3	3007.0
40°	2972.5	2996.7
42.5°	2934.5	2951.7
45°	2875.7	2896.5
47.5°	2799.7	2813.5
50°	2702.9	2716.7
52.5°	2581.9	2585.4
55°	2436.7	2450.6
57.5°	2281.2	2284.6
60°	2108.4	2118.8
62.5°	1925.2	1925.2
65°	1731.7	1738.6
67.5°	1531.2	1548.5
70°	1327.2	1330.7
72.5°	1126.8	1126.8
75°	919.4	922.9
77.5°	722.4	722.4
80°	535.8	539.2
82.5°	369.8	376.7
85°	231.6	231.6
87.5°	107.2	96.8
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	4.07	4.87	5.11	5.92	7.34	17.27	18.06	18.31	19.11	20.53
	3H	4.77	5.49	5.82	6.55	7.99	19.11	19.82	20.15	20.88	22.32
	4H	5.07	5.75	6.13	6.81	8.25	19.75	20.43	20.81	21.49	22.94
	6H	5.32	5.94	6.39	7.01	8.46	20.18	20.81	21.25	21.87	23.33
	8H	5.38	5.98	6.46	7.06	8.51	20.30	20.90	21.38	21.98	23.43
	12H	5.40	5.96	6.48	7.04	8.52	20.37	20.94	21.45	22.01	23.49
4H	2H	11.29	11.97	12.36	13.03	14.47	17.53	18.21	18.60	19.27	20.72
	3H	12.85	13.42	13.93	14.51	15.96	19.58	20.14	20.65	21.23	22.69
	4H	12.94	13.46	14.02	14.54	16.02	20.34	20.87	21.43	21.94	23.42
	6H	12.95	13.40	14.04	14.50	15.97	20.88	21.33	21.97	22.44	23.91
	8H	12.92	13.34	14.01	14.44	15.93	21.05	21.47	22.14	22.56	24.05
	12H	12.88	13.26	13.99	14.36	15.86	21.14	21.52	22.25	22.63	24.12
8H	4H	14.38	14.80	15.48	15.90	17.39	20.40	20.82	21.49	21.91	23.40
	6H	14.62	14.97	15.74	16.11	17.59	21.03	21.38	22.14	22.51	24.00
	8H	14.64	14.95	15.76	16.06	17.57	21.25	21.56	22.37	22.67	24.18
	12H	14.61	14.87	15.73	15.99	17.53	21.40	21.66	22.52	22.78	24.32
12H	4H	14.53	14.91	15.64	16.01	17.51	20.35	20.73	21.46	21.84	23.33
	6H	14.88	15.19	16.00	16.31	17.81	21.01	21.32	22.13	22.43	23.94
	8H	14.95	15.22	16.07	16.33	17.87	21.24	21.51	22.37	22.62	24.17