

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: P938025

Luminaire Tested: SQ4-FB-125U-100D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938025
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-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

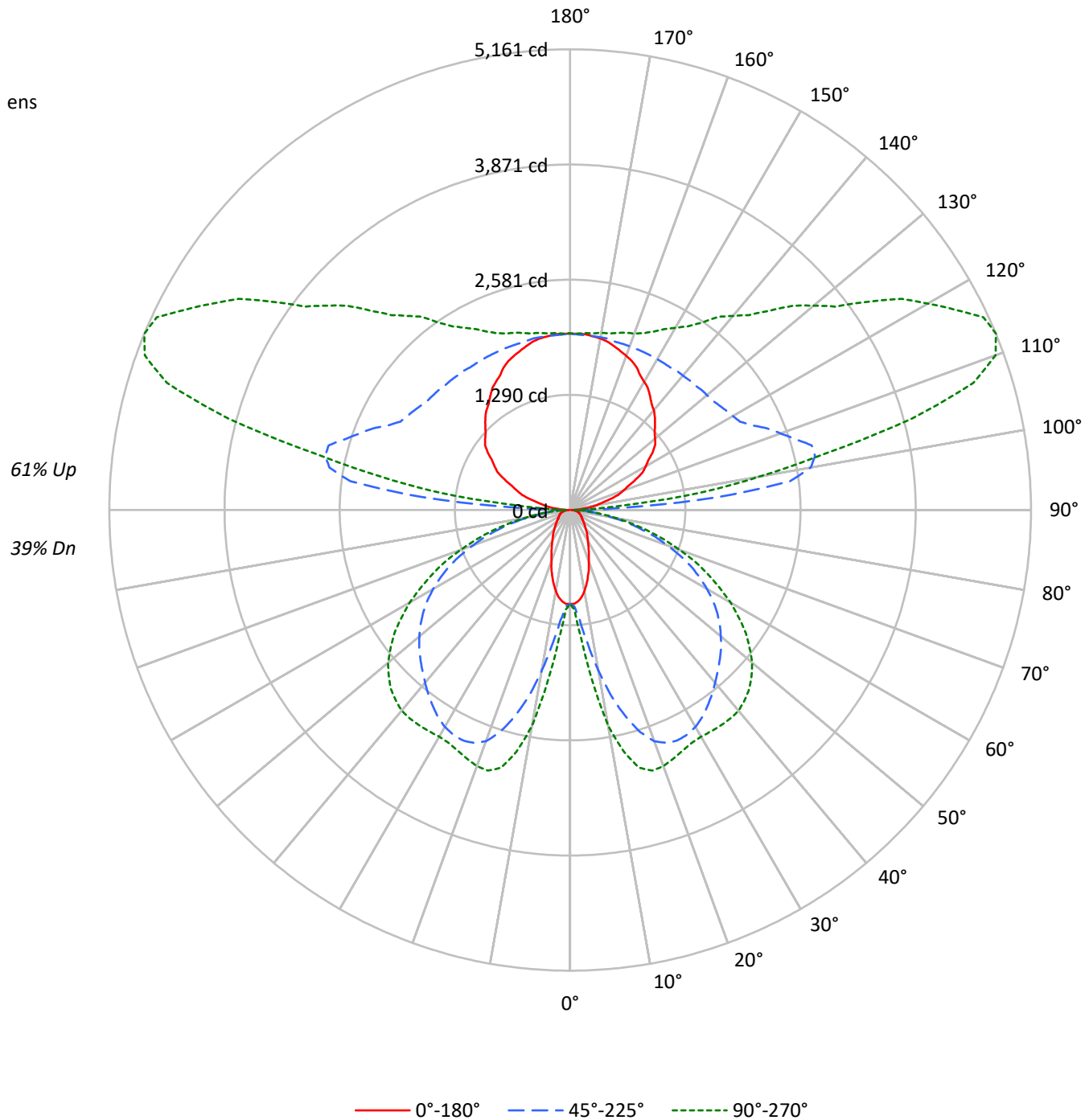
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20967.1 lumens
Efficiency: N/A
Efficacy: 108.5 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

TEST NUMBER: P938025
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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3257	3257	3257
5°	3183	3765	4377
10°	2888	5490	7257
15°	2455	7174	8763
20°	1999	8315	8931
25°	1669	8704	8749
30°	1408	8761	8733
35°	1245	8618	8958
40°	1086	8431	9192
45°	984	8295	9228
50°	903	8173	9075
55°	866	7994	8673
60°	887	7646	8038
65°	925	7116	7165
70°	988	6210	6053
75°	1099	5068	4724
80°	1209	3519	3183
85°	1095	1870	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	0.6
10°-20°	603.6	2.9
20°-30°	1055.8	5.0
30°-40°	1359.1	6.5
40°-50°	1518.1	7.2
50°-60°	1454.0	6.9
60°-70°	1152.3	5.5
70°-80°	677.6	3.2
80°-90°	195.8	0.9
90°-100°	963.6	4.6
100°-110°	2533.3	12.1
110°-120°	2626.8	12.5
120°-130°	2107.0	10.0
130°-140°	1653.2	7.9
140°-150°	1268.9	6.1
150°-160°	913.8	4.4
160°-170°	559.1	2.7
170°-180°	188.9	0.9
0°-30°	1795.6	8.6
0°-40°	3154.7	15.0
0°-60°	6126.9	29.2
0°-90°	8152.5	38.9
90°-120°	6123.6	29.2
90°-150°	11152.7	53.2
90°-180°	12815.0	61.1
0°-180°	20967.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1026	1100	1239	1402	1452	95
15°	768	1418	2390	2898	2989	214
25°	491	1608	2847	2972	2976	226
35°	332	1537	2681	2834	2945	207
45°	227	1226	2370	2715	2837	175
55°	162	779	2011	2336	2400	148
65°	129	413	1493	1679	1703	127
75°	95	254	819	900	904	99
85°	34	78	203	223	227	36
90°	13	37	101	50	50	13
95°	127	499	1660	856	582	141
105°	456	691	2801	4252	3967	484
115°	811	984	2244	4475	5108	801
125°	1128	1264	2040	3448	4068	1001
135°	1344	1479	1977	2783	3156	1040
145°	1559	1658	1952	2375	2560	977
155°	1762	1811	1952	2143	2205	810
165°	1901	1926	1952	2028	2054	537
175°	1977	1977	1965	1990	1990	188
180°	1977	1977	1977	1977	1977	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9
2.5°	1052.9	1052.9	1059.6	1063.0	1069.8	1073.2	1080.0	1086.7	1107.0	1110.5	1117.2
5°	1025.8	1039.3	1083.4	1100.3	1147.7	1212.0	1239.1	1283.1	1374.5	1401.5	1418.5
7.5°	985.2	1015.6	1123.9	1151.0	1269.5	1438.8	1509.9	1604.7	1750.3	1821.3	1878.9
10°	920.8	985.2	1178.1	1242.4	1435.4	1692.7	1824.8	1956.8	2176.8	2275.0	2312.2
12.5°	849.8	954.7	1235.7	1323.7	1601.3	1977.1	2136.2	2281.8	2532.3	2664.4	2684.6
15°	768.5	910.7	1289.8	1418.5	1777.4	2214.1	2390.1	2569.6	2803.2	2897.9	2921.6
17.5°	697.4	876.8	1340.6	1476.0	1912.7	2427.3	2606.8	2755.8	2945.3	3009.6	3026.6
20°	609.3	822.7	1374.5	1550.5	2054.9	2583.1	2755.8	2870.8	2999.4	3040.1	3046.8
22.5°	545.0	765.1	1394.8	1577.6	2149.8	2677.9	2823.4	2914.9	3002.9	3016.4	3019.8
25°	490.9	700.8	1391.4	1608.1	2231.0	2735.4	2847.2	2914.9	2965.6	2972.4	2972.4
27.5°	440.1	629.7	1377.9	1614.8	2292.0	2748.9	2837.0	2884.4	2908.0	2921.6	2921.6
30°	396.1	562.0	1344.0	1601.3	2319.0	2735.4	2806.5	2830.2	2853.9	2874.2	2884.4
32.5°	362.2	497.6	1293.2	1574.2	2322.4	2701.6	2752.3	2765.9	2799.7	2847.2	2864.1
35°	331.7	433.3	1235.7	1537.0	2302.0	2647.4	2681.3	2694.8	2762.5	2833.6	2857.3
37.5°	301.3	386.0	1161.2	1472.7	2271.6	2583.1	2606.8	2630.5	2735.4	2820.1	2847.2
40°	270.8	345.3	1073.2	1401.5	2224.2	2505.2	2525.5	2562.7	2701.6	2799.7	2826.8
42.5°	247.1	311.5	978.4	1327.1	2163.2	2417.2	2447.7	2501.8	2661.0	2765.9	2796.3
45°	226.9	277.6	876.8	1225.5	2085.4	2325.8	2369.8	2444.3	2613.5	2715.1	2742.2
47.5°	206.5	253.9	771.9	1120.6	2000.8	2234.4	2292.0	2376.5	2549.2	2647.4	2671.1
50°	189.6	230.2	666.9	1008.9	1909.4	2136.2	2203.9	2292.0	2468.0	2559.4	2589.9
52.5°	176.0	209.9	568.8	897.2	1804.4	2034.6	2112.5	2203.9	2369.8	2457.8	2478.2
55°	162.5	192.9	484.1	778.6	1696.1	1926.3	2011.0	2098.9	2261.5	2336.0	2349.4
57.5°	155.7	179.5	413.1	666.9	1581.0	1804.4	1899.2	1980.5	2132.8	2190.3	2203.9
60°	145.5	169.3	358.8	572.1	1455.7	1689.3	1770.6	1851.8	1980.5	2027.9	2038.0
62.5°	135.4	162.5	318.2	480.7	1327.1	1553.9	1635.1	1709.6	1818.0	1851.8	1865.3
65°	128.6	155.7	287.8	413.1	1195.1	1411.7	1492.9	1557.3	1645.3	1679.1	1686.0
67.5°	121.9	149.0	264.1	355.5	1063.0	1269.5	1330.5	1391.4	1459.1	1492.9	1496.3
70°	111.7	142.2	243.8	314.8	927.6	1107.0	1157.9	1222.2	1276.3	1293.2	1303.4
72.5°	105.0	132.0	230.2	284.3	788.8	951.3	998.7	1036.0	1083.4	1100.3	1100.3
75°	94.8	118.5	216.7	253.9	646.6	778.6	819.3	856.5	893.8	900.5	890.3
77.5°	84.6	105.0	186.2	213.3	504.4	616.2	650.0	670.3	700.8	707.6	711.0
80°	71.1	91.4	145.5	165.9	365.7	453.6	477.4	494.3	521.4	521.4	528.1
82.5°	54.2	71.1	105.0	118.5	247.1	311.5	331.7	341.9	358.8	358.8	358.8
85°	33.8	44.0	67.7	77.9	149.0	189.6	203.1	206.5	220.0	223.4	223.4
87.5°	16.9	23.7	44.0	47.4	77.9	98.1	98.1	105.0	105.0	101.6	98.1
90°	13.2	23.8	34.5	37.2	58.3	86.6	100.8	89.6	67.2	50.4	50.4
92.5°	53.0	143.2	233.5	256.1	360.0	498.6	567.8	497.6	357.3	252.1	242.1
95°	127.4	292.5	457.6	498.8	885.7	1401.7	1659.7	1481.0	1123.7	855.8	825.3
97.5°	220.2	365.8	511.5	547.9	1193.1	2053.4	2483.5	2370.6	2144.8	1975.4	1917.6
100°	291.9	424.0	556.0	589.1	1305.0	2259.7	2737.0	2745.3	2761.7	2774.1	2705.3
102.5°	352.9	476.2	599.3	630.2	1356.4	2324.5	2808.6	2952.5	3240.2	3456.1	3397.1
105°	456.4	560.7	665.1	691.2	1394.4	2331.9	2800.6	3123.1	3768.2	4252.0	4220.3
107.5°	562.5	659.8	757.1	781.4	1401.5	2228.2	2641.5	3091.3	3991.1	4665.9	4673.6
110°	634.2	722.0	809.9	831.8	1390.8	2136.1	2508.7	3011.7	4017.6	4772.1	4805.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	704.5	788.2	871.9	892.8	1391.2	2055.8	2388.1	2902.8	3932.3	4704.5	4755.2
115°	810.6	887.8	965.1	984.4	1404.1	1963.6	2243.5	2739.4	3731.1	4474.9	4545.2
117.5°	915.5	985.6	1055.8	1073.3	1430.2	1906.0	2143.9	2591.5	3486.6	4157.8	4235.8
120°	976.4	1042.5	1108.6	1125.1	1451.4	1886.6	2104.1	2513.1	3330.9	3944.3	4020.0
122.5°	1036.1	1102.8	1169.4	1186.0	1481.9	1876.4	2073.7	2441.9	3178.3	3730.7	3805.4
125°	1127.7	1188.4	1249.2	1264.4	1523.1	1868.0	2040.4	2353.2	2978.9	3448.0	3516.9
127.5°	1202.0	1263.3	1324.7	1340.0	1564.2	1863.1	2012.6	2281.1	2818.3	3221.2	3279.3
130°	1241.8	1307.8	1373.9	1390.3	1594.2	1866.1	2002.0	2241.1	2719.3	3077.9	3131.6
132.5°	1282.9	1348.9	1415.0	1431.5	1618.6	1868.0	1992.7	2206.7	2634.8	2955.9	3004.0
135°	1344.0	1404.1	1464.2	1479.3	1645.1	1866.3	1976.8	2156.1	2514.6	2783.4	2824.9
137.5°	1406.3	1465.9	1525.4	1540.2	1684.9	1877.7	1974.1	2125.7	2428.7	2656.0	2689.9
140°	1458.0	1512.8	1567.7	1581.4	1709.2	1879.6	1964.8	2095.7	2357.5	2553.8	2585.5
142.5°	1497.8	1548.5	1599.3	1611.9	1729.5	1886.4	1964.8	2079.8	2309.8	2482.3	2509.5
145°	1558.9	1603.1	1647.4	1658.4	1756.1	1886.4	1951.6	2045.6	2233.7	2374.7	2395.4
147.5°	1619.9	1662.9	1705.9	1716.7	1795.0	1899.4	1951.6	2025.6	2173.6	2284.5	2301.6
150°	1659.7	1698.6	1737.6	1747.3	1815.4	1906.2	1951.6	2014.1	2139.1	2232.8	2246.6
152.5°	1700.8	1730.3	1759.8	1767.2	1828.7	1910.6	1951.6	2005.0	2111.7	2191.7	2202.2
155°	1761.8	1783.7	1805.5	1810.9	1857.8	1920.3	1951.6	1994.0	2078.9	2142.6	2149.5
157.5°	1807.0	1828.2	1849.4	1854.7	1887.0	1930.1	1951.6	1984.6	2050.6	2100.1	2105.0
160°	1837.5	1854.0	1870.5	1874.6	1900.3	1934.5	1951.6	1979.9	2036.5	2078.9	2081.8
162.5°	1868.0	1880.4	1892.7	1895.8	1914.4	1939.2	1951.6	1975.5	2023.3	2059.0	2061.7
165°	1901.1	1912.3	1923.5	1926.3	1934.8	1946.0	1951.6	1968.7	2002.8	2028.5	2031.3
167.5°	1931.7	1937.0	1942.3	1943.6	1950.7	1960.1	1964.8	1976.0	1998.4	2015.2	2016.4
170°	1951.6	1956.9	1962.2	1963.5	1963.9	1964.5	1964.8	1976.0	1998.4	2015.2	2015.2
172.5°	1962.2	1963.4	1964.6	1964.8	1964.8	1964.8	1964.8	1973.7	1991.4	2004.6	2003.6
175°	1976.8	1976.8	1976.8	1976.8	1972.8	1967.5	1964.8	1970.5	1981.7	1990.0	1990.0
177.5°	1976.8	1976.8	1976.8	1976.8	1973.7	1969.5	1967.5	1971.9	1980.7	1987.4	1986.2
180°	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8	1976.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1052.9	1052.9
2.5°	1123.9	1117.2
5°	1445.6	1452.4
7.5°	1946.6	1943.2
10°	2420.6	2451.0
12.5°	2765.9	2772.7
15°	2975.8	2989.4
17.5°	3057.0	3060.4
20°	3060.4	3053.7
22.5°	3023.2	3016.4
25°	2979.2	2975.8
27.5°	2938.5	2942.0
30°	2921.6	2931.8
32.5°	2921.6	2938.5
35°	2928.4	2945.3
37.5°	2925.0	2945.3
40°	2911.5	2935.1
42.5°	2874.2	2891.1
45°	2816.7	2837.0
47.5°	2742.2	2755.8
50°	2647.4	2661.0
52.5°	2528.9	2532.3
55°	2386.7	2400.3
57.5°	2234.4	2237.7
60°	2065.1	2075.3
62.5°	1885.7	1885.7
65°	1696.1	1702.9
67.5°	1499.8	1516.7
70°	1300.0	1303.4
72.5°	1103.6	1103.6
75°	900.5	903.9
77.5°	707.6	707.6
80°	524.8	528.1
82.5°	362.2	369.0
85°	226.9	226.9
87.5°	105.0	94.8
90°	50.4	50.4
92.5°	201.9	161.9
95°	703.9	582.4
97.5°	1686.5	1455.3
100°	2429.9	2154.5
102.5°	3161.2	2925.4
105°	4093.6	3966.8
107.5°	4704.3	4734.9
110°	4937.2	5069.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4958.0	5160.8
115°	4826.5	5107.8
117.5°	4547.7	4859.6
120°	4323.1	4626.1
122.5°	4104.3	4403.3
125°	3792.2	4067.6
127.5°	3511.6	3743.9
130°	3346.2	3560.9
132.5°	3196.1	3388.3
135°	2990.5	3156.2
137.5°	2825.5	2961.2
140°	2712.4	2839.1
142.5°	2618.6	2727.7
145°	2477.9	2560.5
147.5°	2370.0	2438.5
150°	2302.1	2357.6
152.5°	2244.1	2285.9
155°	2177.3	2204.9
157.5°	2124.5	2143.9
160°	2093.0	2104.1
162.5°	2072.3	2082.9
165°	2042.5	2053.8
167.5°	2021.1	2025.8
170°	2015.2	2015.2
172.5°	1999.4	1995.3
175°	1990.0	1990.0
177.5°	1981.5	1976.8
180°	1976.8	1976.8



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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	4.00	4.80	5.04	5.85	7.27	17.19	17.99	18.23	19.04	20.46
	3H	4.70	5.42	5.75	6.48	7.92	19.03	19.75	20.08	20.81	22.25
	4H	5.00	5.68	6.06	6.74	8.18	19.68	20.36	20.74	21.42	22.86
	6H	5.24	5.87	6.32	6.94	8.39	20.11	20.74	21.18	21.80	23.26
	8H	5.31	5.91	6.39	6.99	8.44	20.23	20.83	21.31	21.91	23.36
	12H	5.33	5.89	6.41	6.97	8.44	20.30	20.87	21.38	21.94	23.42
4H	2H	11.22	11.90	12.29	12.96	14.40	17.46	18.14	18.53	19.20	20.64
	3H	12.78	13.35	13.85	14.44	15.89	19.50	20.07	20.58	21.16	22.62
	4H	12.87	13.39	13.95	14.47	15.95	20.27	20.79	21.35	21.87	23.35
	6H	12.88	13.33	13.97	14.43	15.90	20.81	21.26	21.90	22.36	23.84
	8H	12.85	13.27	13.94	14.37	15.85	20.97	21.39	22.07	22.49	23.98
	12H	12.80	13.18	13.91	14.29	15.79	21.07	21.45	22.18	22.56	24.05
8H	4H	14.31	14.73	15.40	15.83	17.32	20.33	20.75	21.42	21.84	23.33
	6H	14.55	14.90	15.67	16.04	17.52	20.96	21.30	22.07	22.44	23.93
	8H	14.57	14.87	15.69	15.99	17.50	21.18	21.48	22.30	22.60	24.11
	12H	14.53	14.80	15.66	15.92	17.46	21.32	21.59	22.45	22.71	24.25
12H	4H	14.45	14.83	15.56	15.94	17.44	20.28	20.66	21.38	21.76	23.26
	6H	14.81	15.12	15.93	16.23	17.74	20.94	21.24	22.06	22.36	23.87
	8H	14.88	15.14	16.00	16.26	17.80	21.17	21.44	22.29	22.55	24.09