

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: P938149

Luminaire Tested: SQ4-FB-125U-125D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938149
REPORT IS A COMBINATION OF REPORTS P933592 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

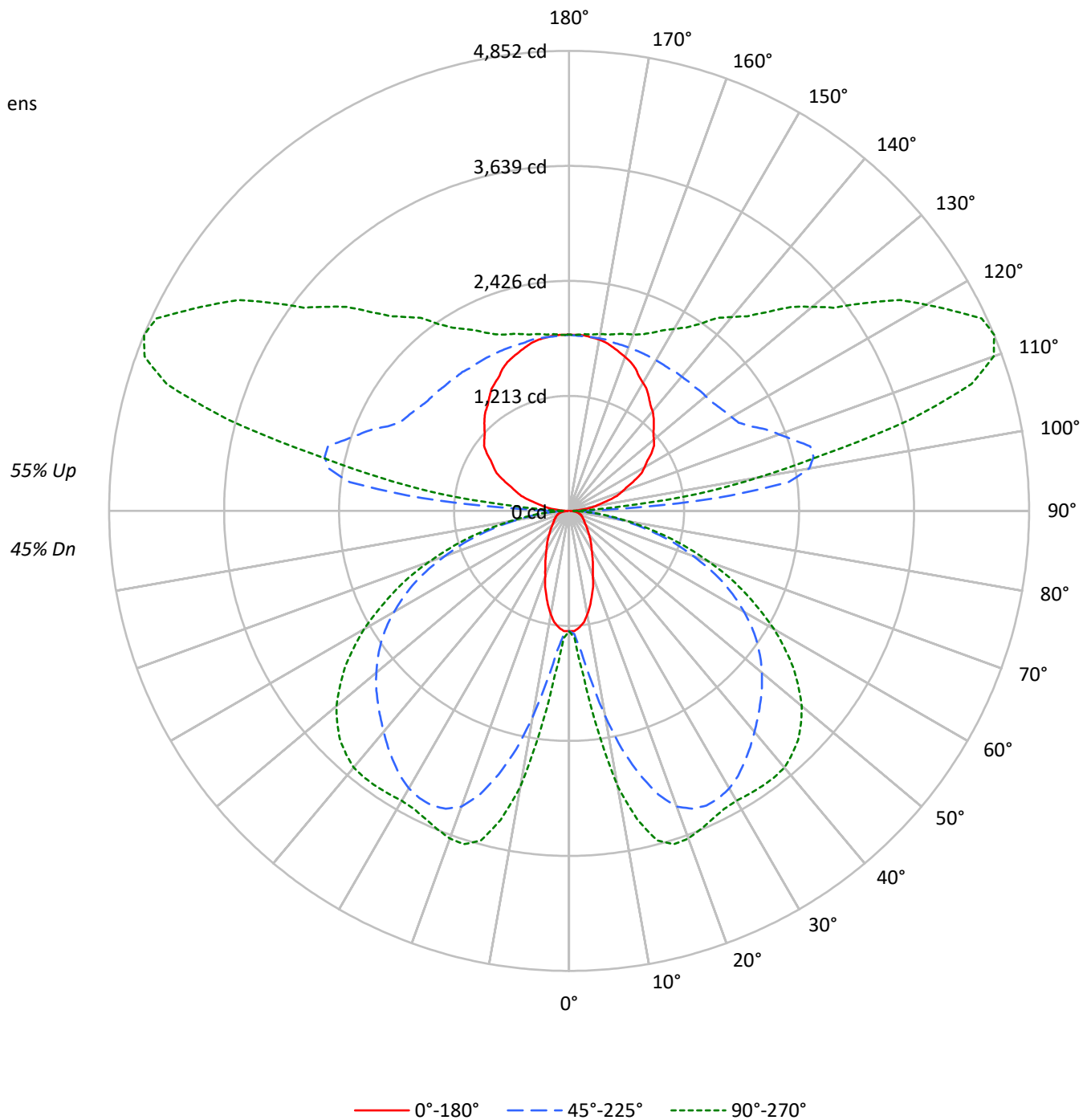
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21862.5 lumens
Efficiency: N/A
Efficacy: 96.9 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: General Diffuse

Input Watts (W): 225.6
Input Voltage (V): NR
Input Current (Ain): 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3922	3922	3922
5°	3832	4534	5271
10°	3478	6610	8738
15°	2957	8638	10552
20°	2408	10012	10754
25°	2010	10480	10535
30°	1695	10549	10515
35°	1500	10377	10787
40°	1308	10152	11068
45°	1185	9988	11112
50°	1088	9841	10928
55°	1043	9625	10443
60°	1069	9207	9678
65°	1114	8569	8627
70°	1189	7478	7289
75°	1322	6103	5688
80°	1456	4237	3833
85°	1322	2252	1961

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	0.8
10°-20°	726.8	3.3
20°-30°	1271.4	5.8
30°-40°	1636.6	7.5
40°-50°	1828.0	8.4
50°-60°	1750.8	8.0
60°-70°	1387.6	6.3
70°-80°	815.9	3.7
80°-90°	233.8	1.1
90°-100°	905.9	4.1
100°-110°	2381.7	10.9
110°-120°	2469.5	11.3
120°-130°	1980.9	9.1
130°-140°	1554.3	7.1
140°-150°	1193.0	5.5
150°-160°	859.1	3.9
160°-170°	525.7	2.4
170°-180°	177.6	0.8
0°-30°	2162.2	9.9
0°-40°	3798.8	17.4
0°-60°	7377.7	33.7
0°-90°	9814.9	44.9
90°-120°	5757.1	26.3
90°-150°	10485.2	48.0
90°-180°	12048.0	55.1
0°-180°	21862.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1235	1325	1492	1688	1749	114
15°	925	1708	2878	3490	3600	258
25°	591	1936	3428	3579	3583	272
35°	400	1851	3229	3412	3547	249
45°	273	1476	2854	3269	3416	211
55°	196	938	2422	2813	2890	178
65°	155	497	1798	2022	2050	154
75°	114	306	987	1084	1088	119
85°	41	94	245	269	273	43
90°	12	35	95	47	47	13
95°	120	469	1560	804	548	133
105°	429	650	2633	3998	3729	455
115°	762	926	2109	4207	4802	753
125°	1060	1189	1918	3242	3824	941
135°	1264	1391	1858	2617	2967	978
145°	1466	1559	1835	2233	2407	918
155°	1656	1702	1835	2014	2073	761
165°	1787	1811	1835	1907	1931	504
175°	1858	1858	1847	1871	1871	176
180°	1858	1858	1858	1858	1858	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9
2.5°	1267.9	1267.9	1276.0	1280.1	1288.2	1292.3	1300.5	1308.6	1333.1	1337.2	1345.3
5°	1235.2	1251.5	1304.5	1324.9	1382.0	1459.5	1492.1	1545.1	1655.1	1687.7	1708.1
7.5°	1186.3	1223.0	1353.5	1386.1	1528.8	1732.6	1818.2	1932.3	2107.6	2193.2	2262.5
10°	1108.9	1186.3	1418.7	1496.1	1728.5	2038.3	2197.2	2356.2	2621.2	2739.4	2784.3
12.5°	1023.3	1149.6	1488.0	1594.0	1928.2	2380.7	2572.3	2747.6	3049.3	3208.3	3232.7
15°	925.4	1096.6	1553.2	1708.1	2140.2	2666.1	2878.0	3094.1	3375.4	3489.6	3518.1
17.5°	839.8	1055.9	1614.4	1777.4	2303.2	2922.9	3139.0	3318.3	3546.6	3624.1	3644.5
20°	733.8	990.6	1655.1	1867.1	2474.5	3110.4	3318.3	3456.9	3611.9	3660.8	3668.9
22.5°	656.3	921.3	1679.6	1899.7	2588.6	3224.6	3399.9	3509.9	3615.9	3632.2	3636.3
25°	591.1	843.9	1675.5	1936.4	2686.4	3293.9	3428.4	3509.9	3571.1	3579.2	3579.2
27.5°	530.0	758.3	1659.2	1944.5	2759.8	3310.2	3416.2	3473.2	3501.8	3518.1	3518.1
30°	477.0	676.7	1618.4	1928.2	2792.4	3293.9	3379.5	3408.0	3436.6	3461.0	3473.2
32.5°	436.2	599.3	1557.3	1895.6	2796.5	3253.1	3314.3	3330.6	3371.3	3428.4	3448.8
35°	399.5	521.8	1488.0	1850.8	2772.1	3187.9	3228.6	3245.0	3326.5	3412.1	3440.6
37.5°	362.8	464.7	1398.3	1773.3	2735.4	3110.4	3139.0	3167.5	3293.9	3395.8	3428.4
40°	326.1	415.8	1292.3	1687.7	2678.3	3016.7	3041.1	3086.0	3253.1	3371.3	3403.9
42.5°	297.6	375.1	1178.2	1598.1	2604.9	2910.7	2947.4	3012.6	3204.2	3330.6	3367.3
45°	273.1	334.3	1055.9	1475.8	2511.1	2800.6	2853.6	2943.3	3147.1	3269.4	3302.0
47.5°	248.7	305.8	929.5	1349.4	2409.2	2690.5	2759.8	2861.7	3069.7	3187.9	3216.4
50°	228.3	277.2	803.1	1214.9	2299.2	2572.3	2653.8	2759.8	2971.8	3081.9	3118.6
52.5°	212.0	252.8	684.9	1080.3	2172.8	2450.0	2543.8	2653.8	2853.6	2959.6	2984.0
55°	195.7	232.4	583.0	937.6	2042.4	2319.5	2421.5	2527.5	2723.1	2812.8	2829.1
57.5°	187.5	216.1	497.4	803.1	1903.8	2172.8	2286.9	2384.8	2568.2	2637.5	2653.8
60°	175.3	203.8	432.1	689.0	1752.9	2034.2	2132.0	2229.9	2384.8	2441.8	2454.1
62.5°	163.1	195.7	383.2	578.9	1598.1	1871.2	1969.0	2058.7	2189.1	2229.9	2246.2
65°	154.9	187.5	346.5	497.4	1439.1	1700.0	1797.8	1875.2	1981.2	2022.0	2030.1
67.5°	146.8	179.4	318.0	428.1	1280.1	1528.8	1602.1	1675.5	1757.0	1797.8	1801.9
70°	134.5	171.2	293.5	379.1	1117.0	1333.1	1394.2	1471.7	1536.9	1557.3	1569.5
72.5°	126.4	159.0	277.2	342.4	949.9	1145.6	1202.6	1247.5	1304.5	1324.9	1324.9
75°	114.1	142.7	260.9	305.8	778.6	937.6	986.6	1031.4	1076.2	1084.4	1072.2
77.5°	101.9	126.4	224.2	256.8	607.4	742.0	782.7	807.2	843.9	852.0	856.1
80°	85.6	110.1	175.3	199.8	440.3	546.3	574.8	595.2	627.8	627.8	636.0
82.5°	65.2	85.6	126.4	142.7	297.6	375.1	399.5	411.7	432.1	432.1	432.1
85°	40.8	53.0	81.5	93.8	179.4	228.3	244.6	248.7	265.0	269.1	269.1
87.5°	20.4	28.5	53.0	57.1	93.8	118.2	118.2	126.4	126.4	122.3	118.2
90°	12.4	22.4	32.4	34.9	54.8	81.4	94.8	84.2	63.2	47.4	47.4
92.5°	49.9	134.7	219.5	240.7	338.5	468.7	533.8	467.8	335.9	237.0	227.6
95°	119.7	274.9	430.2	469.0	832.7	1317.8	1560.3	1392.3	1056.4	804.5	775.9
97.5°	207.0	343.9	480.9	515.1	1121.7	1930.5	2334.9	2228.7	2016.4	1857.2	1802.8
100°	274.4	398.6	522.8	553.8	1226.9	2124.4	2573.1	2580.9	2596.4	2608.1	2543.3
102.5°	331.8	447.7	563.5	592.5	1275.2	2185.4	2640.5	2775.7	3046.3	3249.2	3193.8
105°	429.0	527.2	625.3	649.9	1310.9	2192.3	2633.0	2936.2	3542.7	3997.5	3967.7
107.5°	528.9	620.3	711.8	734.7	1317.6	2094.8	2483.4	2906.3	3752.2	4386.6	4393.9
110°	596.2	678.8	761.4	782.0	1307.5	2008.2	2358.6	2831.5	3777.2	4486.4	4517.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	662.3	741.0	819.7	839.4	1307.9	1932.7	2245.1	2729.1	3696.9	4422.8	4470.5
115°	762.0	834.6	907.3	925.5	1320.1	1846.1	2109.2	2575.4	3507.7	4207.1	4273.2
117.5°	860.7	926.6	992.6	1009.0	1344.5	1791.9	2015.6	2436.4	3277.8	3908.9	3982.2
120°	918.0	980.1	1042.2	1057.7	1364.5	1773.7	1978.2	2362.7	3131.5	3708.2	3779.4
122.5°	974.1	1036.8	1099.4	1115.0	1393.2	1764.1	1949.5	2295.7	2988.0	3507.3	3577.6
125°	1060.2	1117.3	1174.4	1188.7	1431.9	1756.2	1918.3	2212.3	2800.5	3241.6	3306.4
127.5°	1130.1	1187.7	1245.4	1259.7	1470.5	1751.6	1892.1	2144.6	2649.6	3028.4	3083.0
130°	1167.5	1229.6	1291.6	1307.1	1498.8	1754.4	1882.2	2106.9	2556.5	2893.7	2944.1
132.5°	1206.1	1268.2	1330.3	1345.8	1521.7	1756.2	1873.4	2074.6	2477.1	2778.9	2824.2
135°	1263.5	1320.1	1376.6	1390.7	1546.7	1754.6	1858.5	2027.0	2364.0	2616.8	2655.8
137.5°	1322.1	1378.1	1434.1	1448.0	1584.0	1765.3	1856.0	1998.4	2283.3	2497.0	2528.9
140°	1370.7	1422.3	1473.8	1486.8	1606.9	1767.1	1847.2	1970.2	2216.4	2401.0	2430.8
142.5°	1408.1	1455.8	1503.5	1515.4	1626.0	1773.5	1847.2	1955.3	2171.6	2333.7	2359.3
145°	1465.6	1507.2	1548.7	1559.1	1651.0	1773.5	1834.8	1923.2	2100.0	2232.6	2252.0
147.5°	1522.9	1563.4	1603.8	1613.9	1687.6	1785.7	1834.8	1904.3	2043.5	2147.8	2163.8
150°	1560.3	1596.9	1633.5	1642.7	1706.7	1792.1	1834.8	1893.6	2011.0	2099.1	2112.1
152.5°	1599.0	1626.7	1654.5	1661.4	1719.2	1796.2	1834.8	1885.0	1985.3	2060.5	2070.4
155°	1656.3	1676.9	1697.4	1702.5	1746.6	1805.4	1834.8	1874.7	1954.5	2014.3	2020.8
157.5°	1698.8	1718.7	1738.7	1743.7	1774.1	1814.5	1834.8	1865.8	1927.8	1974.4	1979.0
160°	1727.5	1743.0	1758.6	1762.4	1786.5	1818.7	1834.8	1861.4	1914.6	1954.5	1957.2
162.5°	1756.2	1767.8	1779.4	1782.3	1799.8	1823.1	1834.8	1857.3	1902.1	1935.8	1938.3
165°	1787.3	1797.8	1808.4	1811.0	1819.0	1829.5	1834.8	1850.8	1883.0	1907.0	1909.7
167.5°	1816.1	1821.0	1826.0	1827.2	1833.9	1842.8	1847.2	1857.7	1878.8	1894.6	1895.7
170°	1834.8	1839.8	1844.7	1845.9	1846.3	1846.9	1847.2	1857.7	1878.8	1894.6	1894.6
172.5°	1844.7	1845.9	1847.0	1847.2	1847.2	1847.2	1847.2	1855.6	1872.2	1884.6	1883.7
175°	1858.5	1858.5	1858.5	1858.5	1854.7	1849.7	1847.2	1852.5	1863.0	1870.9	1870.9
177.5°	1858.5	1858.5	1858.5	1858.5	1855.6	1851.6	1849.7	1853.9	1862.2	1868.4	1867.3
180°	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5	1858.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1267.9	1267.9
2.5°	1353.5	1345.3
5°	1740.7	1748.9
7.5°	2344.0	2339.9
10°	2914.7	2951.4
12.5°	3330.6	3338.7
15°	3583.3	3599.6
17.5°	3681.2	3685.2
20°	3685.2	3677.1
22.5°	3640.4	3632.2
25°	3587.4	3583.3
27.5°	3538.5	3542.6
30°	3518.1	3530.3
32.5°	3518.1	3538.5
35°	3526.2	3546.6
37.5°	3522.2	3546.6
40°	3505.9	3534.4
42.5°	3461.0	3481.4
45°	3391.7	3416.2
47.5°	3302.0	3318.3
50°	3187.9	3204.2
52.5°	3045.2	3049.3
55°	2874.0	2890.3
57.5°	2690.5	2694.6
60°	2486.7	2498.9
62.5°	2270.6	2270.6
65°	2042.4	2050.5
67.5°	1805.9	1826.3
70°	1565.4	1569.5
72.5°	1329.0	1329.0
75°	1084.4	1088.5
77.5°	852.0	852.0
80°	631.9	636.0
82.5°	436.2	444.4
85°	273.1	273.1
87.5°	126.4	114.1
90°	47.4	47.4
92.5°	189.8	152.2
95°	661.8	547.6
97.5°	1585.5	1368.2
100°	2284.5	2025.6
102.5°	2972.0	2750.3
105°	3848.5	3729.4
107.5°	4422.7	4451.5
110°	4641.7	4765.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4661.2	4851.9
115°	4537.6	4802.0
117.5°	4275.5	4568.7
120°	4064.3	4349.2
122.5°	3858.7	4139.7
125°	3565.2	3824.1
127.5°	3301.4	3519.8
130°	3145.9	3347.7
132.5°	3004.8	3185.5
135°	2811.5	2967.2
137.5°	2656.4	2783.9
140°	2550.0	2669.2
142.5°	2461.8	2564.4
145°	2329.6	2407.2
147.5°	2228.2	2292.5
150°	2164.3	2216.4
152.5°	2109.7	2149.1
155°	2046.9	2072.9
157.5°	1997.3	2015.6
160°	1967.7	1978.2
162.5°	1948.2	1958.2
165°	1920.2	1930.8
167.5°	1900.1	1904.6
170°	1894.6	1894.6
172.5°	1879.7	1875.9
175°	1870.9	1870.9
177.5°	1862.9	1858.5
180°	1858.5	1858.5



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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	5.27	6.12	6.27	7.13	8.47	18.46	19.32	19.46	20.32	21.66
	3H	5.98	6.74	6.98	7.76	9.12	20.31	21.07	21.31	22.09	23.45
	4H	6.28	7.00	7.29	8.02	9.39	20.96	21.68	21.97	22.70	24.07
	6H	6.53	7.19	7.55	8.22	9.60	21.39	22.06	22.42	23.09	24.47
	8H	6.59	7.23	7.62	8.27	9.65	21.51	22.15	22.55	23.19	24.57
	12H	6.61	7.22	7.65	8.25	9.65	21.58	22.19	22.62	23.23	24.63
4H	2H	12.50	13.22	13.52	14.24	15.61	18.74	19.46	19.76	20.48	21.85
	3H	14.06	14.67	15.09	15.72	17.10	20.79	21.39	21.82	22.44	23.82
	4H	14.16	14.71	15.19	15.75	17.16	21.56	22.11	22.60	23.15	24.56
	6H	14.17	14.64	15.21	15.71	17.11	22.10	22.58	23.15	23.64	25.04
	8H	14.14	14.59	15.19	15.65	17.06	22.26	22.71	23.31	23.77	25.19
	12H	14.10	14.50	15.17	15.57	17.00	22.36	22.77	23.43	23.84	25.26
8H	4H	15.60	16.05	16.65	17.11	18.52	21.62	22.06	22.67	23.12	24.54
	6H	15.84	16.22	16.92	17.31	18.73	22.25	22.62	23.32	23.72	25.13
	8H	15.86	16.19	16.94	17.27	18.70	22.47	22.80	23.55	23.88	25.31
	12H	15.83	16.12	16.92	17.20	18.67	22.62	22.91	23.70	23.98	25.46
12H	4H	15.75	16.15	16.82	17.22	18.64	21.57	21.97	22.64	23.05	24.47
	6H	16.10	16.43	17.18	17.51	18.95	22.23	22.56	23.31	23.64	25.07
	8H	16.17	16.46	17.26	17.54	19.01	22.46	22.75	23.55	23.83	25.30