

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: P938193

Luminaire Tested: SQ4-FB-125U-125D-B2750-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938193
REPORT IS A COMBINATION OF REPORTS P933616 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-B2750-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

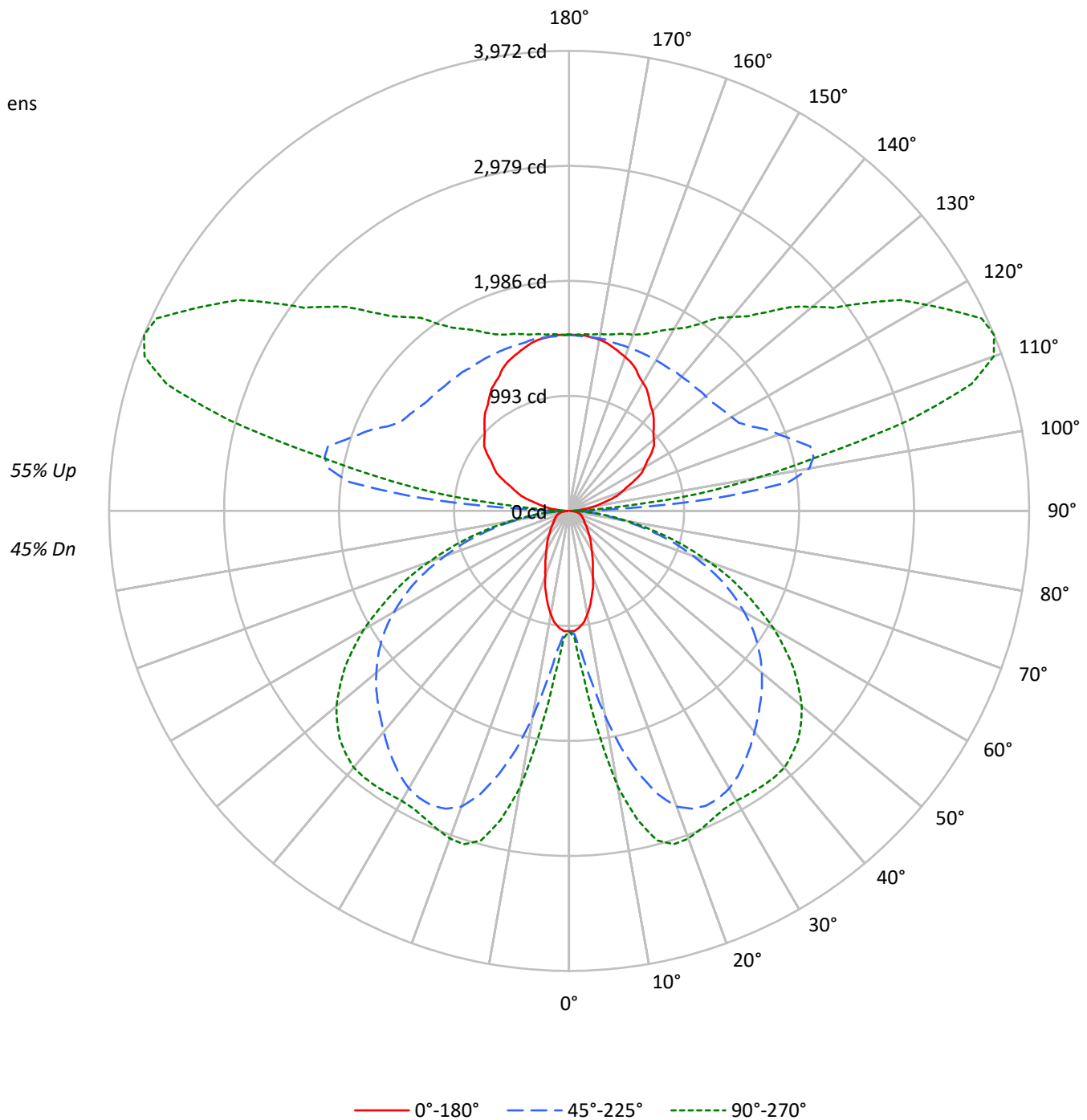
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17896.9 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 150.4
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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4815	4815	4815
5°	4704	5566	6473
10°	4267	8113	10731
15°	3626	10599	12957
20°	2952	12283	13205
25°	2463	12853	12937
30°	2077	12934	12913
35°	1837	12720	13246
40°	1600	12441	13592
45°	1449	12236	13645
50°	1329	12053	13419
55°	1273	11783	12824
60°	1303	11265	11885
65°	1356	10479	10595
70°	1444	9138	8950
75°	1601	7451	6984
80°	1749	5167	4706
85°	1551	2742	2409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13645 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	0.8
10°-20°	595.0	3.3
20°-30°	1040.8	5.8
30°-40°	1339.8	7.5
40°-50°	1496.5	8.4
50°-60°	1433.3	8.0
60°-70°	1135.9	6.3
70°-80°	667.9	3.7
80°-90°	191.4	1.1
90°-100°	741.6	4.1
100°-110°	1949.6	10.9
110°-120°	2021.5	11.3
120°-130°	1621.5	9.1
130°-140°	1272.3	7.1
140°-150°	976.6	5.5
150°-160°	703.3	3.9
160°-170°	430.3	2.4
170°-180°	145.4	0.8
0°-30°	1770.0	9.9
0°-40°	3109.8	17.4
0°-60°	6039.6	33.7
0°-90°	8034.8	44.9
90°-120°	4712.7	26.3
90°-150°	8583.1	48.0
90°-180°	9862.0	55.1
0°-180°	17896.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1011	1085	1222	1382	1432	93
15°	758	1398	2356	2857	2947	211
25°	484	1585	2807	2930	2933	223
35°	327	1515	2643	2793	2903	204
45°	224	1208	2336	2676	2797	173
55°	160	768	1982	2303	2366	146
65°	127	407	1472	1655	1679	126
75°	94	250	808	888	891	98
85°	33	77	200	220	224	35
90°	10	29	78	39	39	11
95°	98	384	1277	658	448	109
105°	351	532	2155	3272	3053	372
115°	624	758	1727	3444	3931	616
125°	868	973	1570	2654	3130	771
135°	1034	1138	1521	2142	2429	800
145°	1200	1276	1502	1828	1970	752
155°	1356	1394	1502	1649	1697	623
165°	1463	1482	1502	1561	1581	413
175°	1521	1521	1512	1532	1532	144
180°	1521	1521	1521	1521	1521	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1037.9	1037.9	1044.6	1047.9	1054.5	1057.9	1064.6	1071.3	1091.3	1094.7	1101.3
5°	1011.1	1024.6	1067.9	1084.6	1131.3	1194.7	1221.5	1264.8	1354.9	1381.6	1398.2
7.5°	971.1	1001.2	1108.0	1134.7	1251.4	1418.4	1488.4	1581.8	1725.3	1795.4	1852.2
10°	907.7	971.1	1161.3	1224.7	1415.0	1668.6	1798.8	1928.9	2145.8	2242.7	2279.3
12.5°	837.6	941.1	1218.1	1304.9	1578.5	1948.9	2105.8	2249.3	2496.3	2626.4	2646.4
15°	757.5	897.8	1271.4	1398.2	1752.0	2182.5	2356.0	2532.9	2763.3	2856.6	2880.0
17.5°	687.4	864.3	1321.5	1455.0	1885.5	2392.8	2569.6	2716.5	2903.4	2966.8	2983.4
20°	600.7	811.0	1354.9	1528.4	2025.7	2546.3	2716.5	2829.9	2956.8	2996.8	3003.5
22.5°	537.3	754.2	1375.0	1555.1	2119.1	2639.7	2783.3	2873.3	2960.1	2973.5	2976.8
25°	483.9	690.8	1371.6	1585.2	2199.3	2696.5	2806.6	2873.3	2923.4	2930.1	2930.1
27.5°	433.8	620.7	1358.2	1591.9	2259.3	2709.8	2796.6	2843.3	2866.7	2880.0	2880.0
30°	390.5	553.9	1324.9	1578.5	2286.0	2696.5	2766.5	2789.9	2813.3	2833.3	2843.3
32.5°	357.1	490.5	1274.8	1551.8	2289.3	2663.1	2713.2	2726.5	2759.9	2806.6	2823.3
35°	327.1	427.1	1218.1	1515.1	2269.3	2609.7	2643.1	2656.4	2723.1	2793.2	2816.6
37.5°	297.0	380.4	1144.6	1451.7	2239.3	2546.3	2569.6	2593.0	2696.5	2779.9	2806.6
40°	267.0	340.4	1057.9	1381.6	2192.6	2469.5	2489.6	2526.2	2663.1	2759.9	2786.5
42.5°	243.6	307.0	964.5	1308.2	2132.5	2382.8	2412.8	2466.2	2623.1	2726.5	2756.6
45°	223.6	273.6	864.3	1208.0	2055.7	2292.6	2336.0	2409.5	2576.3	2676.5	2703.1
47.5°	203.6	250.2	760.9	1104.6	1972.3	2202.5	2259.3	2342.7	2512.9	2609.7	2633.1
50°	186.8	227.0	657.5	994.5	1882.2	2105.8	2172.6	2259.3	2432.9	2523.0	2553.0
52.5°	173.5	206.9	560.6	884.3	1778.7	2005.6	2082.4	2172.6	2336.0	2422.8	2442.8
55°	160.2	190.2	477.2	767.6	1672.0	1898.8	1982.4	2069.1	2229.2	2302.7	2316.0
57.5°	153.5	176.9	407.1	657.5	1558.5	1778.7	1872.2	1952.3	2102.4	2159.1	2172.6
60°	143.5	166.8	353.8	564.0	1435.0	1665.3	1745.3	1825.5	1952.3	1999.0	2009.0
62.5°	133.5	160.2	313.7	473.9	1308.2	1531.8	1611.9	1685.3	1792.1	1825.5	1838.8
65°	126.8	153.5	283.7	407.1	1178.1	1391.6	1471.7	1535.1	1621.9	1655.3	1661.9
67.5°	120.1	146.8	260.3	350.4	1047.9	1251.4	1311.5	1371.6	1438.4	1471.7	1475.1
70°	110.1	140.2	240.3	310.4	914.4	1091.3	1141.3	1204.7	1258.1	1274.8	1284.9
72.5°	103.4	130.2	227.0	280.3	777.6	937.8	984.5	1021.2	1067.9	1084.6	1084.6
75°	93.5	116.8	213.6	250.2	637.4	767.6	807.6	844.3	881.0	887.7	877.7
77.5°	83.4	103.4	183.6	210.2	497.2	607.4	640.7	660.8	690.8	697.5	700.8
80°	70.1	90.1	143.5	163.5	360.4	447.2	470.5	487.3	513.9	513.9	520.6
82.5°	53.4	70.1	103.4	116.8	243.6	307.0	327.1	337.0	353.8	353.8	353.8
85°	33.3	43.4	66.8	76.7	146.8	186.8	200.3	203.6	216.9	220.3	220.3
87.5°	16.7	23.4	43.4	46.7	76.7	96.8	96.8	103.4	103.4	100.1	96.8
90°	10.3	18.4	26.5	28.6	45.0	66.8	77.6	68.9	51.7	38.7	38.7
92.5°	40.8	110.2	179.7	197.1	277.1	383.7	437.0	383.0	275.0	193.9	186.3
95°	98.0	225.1	352.2	383.9	681.7	1078.8	1277.3	1139.8	864.8	658.5	635.2
97.5°	169.5	281.6	393.7	421.7	918.3	1580.4	1911.4	1824.5	1650.7	1520.3	1475.8
100°	224.6	326.3	427.9	453.4	1004.3	1739.0	2106.4	2112.7	2125.4	2135.0	2082.0
102.5°	271.5	366.4	461.3	485.0	1043.9	1789.0	2161.5	2272.2	2493.7	2659.7	2614.4
105°	351.2	431.6	511.8	531.9	1073.1	1794.6	2155.4	2403.6	2900.0	3272.3	3248.0
107.5°	433.0	507.8	582.6	601.4	1078.5	1714.8	2032.8	2379.1	3071.6	3590.9	3596.8
110°	488.1	555.7	623.3	640.2	1070.4	1644.0	1930.8	2317.9	3092.0	3672.6	3698.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	542.2	606.6	671.1	687.1	1070.7	1582.1	1837.8	2234.0	3026.2	3620.5	3659.5
115°	623.8	683.3	742.7	757.5	1080.6	1511.2	1726.6	2108.2	2871.4	3443.9	3498.0
117.5°	704.5	758.5	812.5	826.0	1100.7	1466.9	1650.0	1994.4	2683.2	3199.9	3259.9
120°	751.4	802.3	853.1	865.8	1116.9	1451.9	1619.3	1934.0	2563.4	3035.5	3093.8
122.5°	797.4	848.7	899.9	912.7	1140.4	1444.0	1595.8	1879.2	2446.1	2871.1	2928.6
125°	867.9	914.6	961.4	973.0	1172.1	1437.6	1570.3	1811.1	2292.5	2653.6	2706.6
127.5°	925.1	972.3	1019.4	1031.3	1203.8	1433.8	1548.9	1755.6	2169.0	2479.0	2523.7
130°	955.6	1006.5	1057.3	1070.0	1226.9	1436.1	1540.7	1724.7	2092.8	2368.8	2410.1
132.5°	987.3	1038.2	1088.9	1101.7	1245.6	1437.6	1533.5	1698.3	2027.7	2274.8	2311.8
135°	1034.3	1080.6	1126.9	1138.4	1266.0	1436.2	1521.3	1659.2	1935.1	2142.1	2173.9
137.5°	1082.2	1128.1	1173.9	1185.4	1296.7	1445.1	1519.2	1635.9	1869.2	2044.1	2070.2
140°	1122.1	1164.3	1206.5	1217.0	1315.4	1446.6	1512.1	1612.9	1814.3	1965.5	1989.8
142.5°	1152.7	1191.8	1230.7	1240.5	1331.0	1451.8	1512.1	1600.6	1777.6	1910.3	1931.3
145°	1199.7	1233.7	1267.8	1276.3	1351.5	1451.8	1501.9	1574.2	1719.1	1827.6	1843.5
147.5°	1246.7	1279.8	1313.0	1321.2	1381.5	1461.7	1501.9	1558.9	1672.7	1758.2	1771.3
150°	1277.3	1307.2	1337.2	1344.7	1397.1	1467.0	1501.9	1550.0	1646.2	1718.4	1729.0
152.5°	1308.9	1331.6	1354.3	1360.0	1407.3	1470.3	1501.9	1543.0	1625.1	1686.8	1694.8
155°	1355.9	1372.7	1389.5	1393.7	1429.8	1477.8	1501.9	1534.6	1600.0	1649.0	1654.3
157.5°	1390.7	1406.9	1423.3	1427.3	1452.2	1485.3	1501.9	1527.3	1578.1	1616.3	1620.0
160°	1414.1	1426.8	1439.6	1442.7	1462.4	1488.8	1501.9	1523.7	1567.2	1599.9	1602.1
162.5°	1437.6	1447.1	1456.6	1459.0	1473.3	1492.3	1501.9	1520.2	1557.0	1584.6	1586.7
165°	1463.1	1471.8	1480.4	1482.5	1489.0	1497.5	1501.9	1515.1	1541.4	1561.1	1563.3
167.5°	1486.6	1490.6	1494.8	1495.8	1501.2	1508.5	1512.1	1520.7	1538.0	1550.9	1551.8
170°	1501.9	1506.0	1510.2	1511.1	1511.4	1511.9	1512.1	1520.7	1538.0	1550.9	1550.9
172.5°	1510.1	1510.9	1511.9	1512.1	1512.1	1512.1	1512.1	1518.9	1532.5	1542.8	1542.0
175°	1521.3	1521.3	1521.3	1521.3	1518.2	1514.2	1512.1	1516.5	1525.0	1531.6	1531.6
177.5°	1521.3	1521.3	1521.3	1521.3	1518.9	1515.8	1514.2	1517.6	1524.4	1529.5	1528.6
180°	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1037.9	1037.9
2.5°	1108.0	1101.3
5°	1425.0	1431.7
7.5°	1918.9	1915.6
10°	2386.1	2416.2
12.5°	2726.5	2733.2
15°	2933.4	2946.8
17.5°	3013.5	3016.9
20°	3016.9	3010.2
22.5°	2980.2	2973.5
25°	2936.8	2933.4
27.5°	2896.7	2900.0
30°	2880.0	2890.1
32.5°	2880.0	2896.7
35°	2886.7	2903.4
37.5°	2883.4	2903.4
40°	2870.0	2893.4
42.5°	2833.3	2850.0
45°	2776.6	2796.6
47.5°	2703.1	2716.5
50°	2609.7	2623.1
52.5°	2492.9	2496.3
55°	2352.7	2366.1
57.5°	2202.5	2205.9
60°	2035.7	2045.8
62.5°	1858.8	1858.8
65°	1672.0	1678.7
67.5°	1478.4	1495.1
70°	1281.5	1284.9
72.5°	1088.0	1088.0
75°	887.7	891.0
77.5°	697.5	697.5
80°	517.3	520.6
82.5°	357.1	363.7
85°	223.6	223.6
87.5°	103.4	93.5
90°	38.7	38.7
92.5°	155.4	124.5
95°	541.7	448.2
97.5°	1298.0	1120.1
100°	1870.0	1658.2
102.5°	2432.9	2251.3
105°	3150.4	3052.9
107.5°	3620.4	3644.0
110°	3799.6	3901.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3815.6	3971.7
115°	3714.5	3930.9
117.5°	3499.9	3740.0
120°	3327.1	3560.2
122.5°	3158.7	3388.8
125°	2918.6	3130.5
127.5°	2702.5	2881.3
130°	2575.2	2740.4
132.5°	2459.8	2607.7
135°	2301.5	2429.0
137.5°	2174.5	2278.9
140°	2087.5	2185.0
142.5°	2015.2	2099.2
145°	1907.0	1970.5
147.5°	1824.0	1876.7
150°	1771.7	1814.3
152.5°	1727.0	1759.2
155°	1675.6	1696.9
157.5°	1635.0	1650.0
160°	1610.6	1619.3
162.5°	1594.9	1603.0
165°	1571.9	1580.6
167.5°	1555.4	1559.1
170°	1550.9	1550.9
172.5°	1538.8	1535.6
175°	1531.6	1531.6
177.5°	1524.9	1521.3
180°	1521.3	1521.3



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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	5.98	6.83	6.97	7.84	9.18	19.16	20.01	20.15	21.02	22.36
	3H	6.69	7.45	7.69	8.47	9.83	21.00	21.76	22.00	22.78	24.14
	4H	6.98	7.71	8.00	8.73	10.10	21.64	22.37	22.66	23.39	24.76
	6H	7.23	7.90	8.26	8.93	10.31	22.07	22.74	23.10	23.77	25.15
	8H	7.30	7.94	8.33	8.98	10.36	22.19	22.83	23.23	23.87	25.25
	12H	7.32	7.92	8.36	8.96	10.36	22.26	22.87	23.30	23.90	25.31
4H	2H	13.20	13.92	14.22	14.94	16.31	19.43	20.16	20.45	21.18	22.55
	3H	14.76	15.37	15.79	16.42	17.80	21.48	22.08	22.51	23.13	24.52
	4H	14.86	15.41	15.89	16.45	17.86	22.24	22.80	23.28	23.84	25.25
	6H	14.87	15.35	15.91	16.41	17.81	22.78	23.26	23.83	24.33	25.73
	8H	14.84	15.29	15.89	16.35	17.76	22.94	23.39	23.99	24.45	25.87
	12H	14.80	15.20	15.87	16.28	17.70	23.04	23.44	24.11	24.51	25.94
8H	4H	16.30	16.75	17.35	17.81	19.22	22.30	22.75	23.35	23.81	25.22
	6H	16.54	16.91	17.62	18.01	19.42	22.93	23.30	24.01	24.40	25.81
	8H	16.56	16.89	17.64	17.97	19.40	23.15	23.48	24.23	24.56	25.99
	12H	16.53	16.81	17.61	17.89	19.36	23.30	23.58	24.38	24.66	26.13
12H	4H	16.44	16.85	17.51	17.92	19.34	22.26	22.66	23.32	23.73	25.15
	6H	16.80	17.13	17.88	18.21	19.64	22.92	23.24	24.00	24.32	25.76
	8H	16.87	17.16	17.95	18.23	19.71	23.15	23.43	24.23	24.51	25.98