

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: P938544

Luminaire Tested: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938544
REPORT IS A COMBINATION OF REPORTS P933648 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

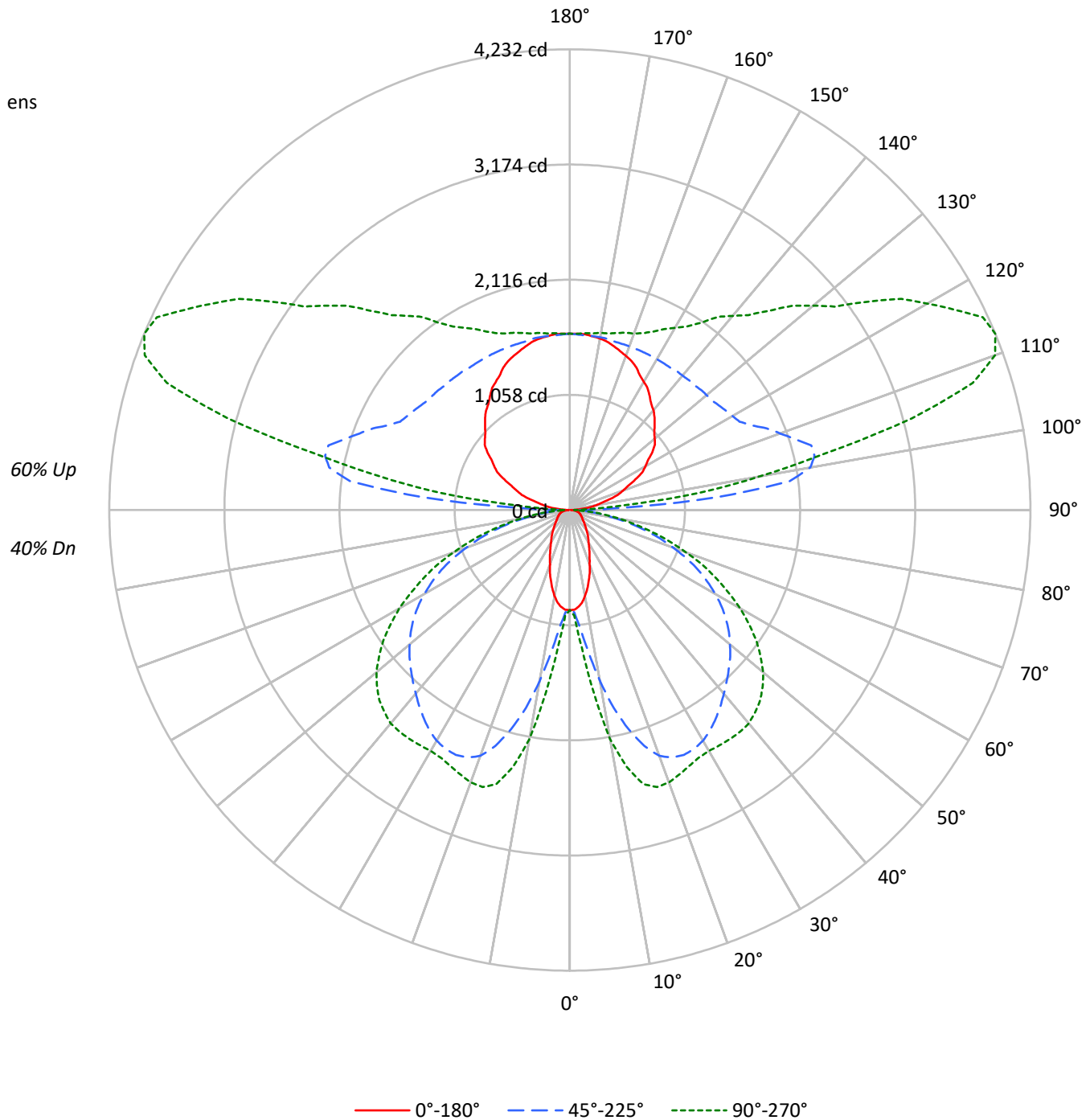
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17614.2 lumens
Efficiency: N/A
Efficacy: 105.9 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): 166.4
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4161	4923	5724
10°	3774	7175	9490
15°	3207	9374	11460
20°	2611	10863	11679
25°	2178	11368	11442
30°	1837	11440	11420
35°	1624	11250	11715
40°	1415	11003	12021
45°	1282	10822	12068
50°	1176	10659	11868
55°	1126	10421	11342
60°	1153	9963	10511
65°	1199	9268	9370
70°	1277	8082	7915
75°	1416	6590	6178
80°	1547	4570	4162
85°	1374	2425	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12068 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	0.7
10°-20°	526.2	3.0
20°-30°	920.5	5.2
30°-40°	1184.9	6.7
40°-50°	1323.5	7.5
50°-60°	1267.6	7.2
60°-70°	1004.6	5.7
70°-80°	590.7	3.4
80°-90°	170.3	1.0
90°-100°	790.1	4.5
100°-110°	2077.1	11.8
110°-120°	2153.8	12.2
120°-130°	1727.6	9.8
130°-140°	1355.5	7.7
140°-150°	1040.4	5.9
150°-160°	749.3	4.3
160°-170°	458.4	2.6
170°-180°	154.9	0.9
0°-30°	1565.5	8.9
0°-40°	2750.4	15.6
0°-60°	5341.5	30.3
0°-90°	7107.2	40.3
90°-120°	5020.9	28.5
90°-150°	9144.4	51.9
90°-180°	10507.0	59.7
0°-180°	17614.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	894	959	1080	1222	1266	83
15°	670	1237	2084	2526	2606	186
25°	428	1402	2482	2591	2594	197
35°	289	1340	2338	2470	2568	181
45°	198	1068	2066	2367	2473	153
55°	142	679	1753	2036	2093	129
65°	112	360	1302	1464	1485	111
75°	83	221	714	785	788	87
85°	30	68	177	195	198	31
90°	11	30	83	41	41	11
95°	104	409	1361	702	478	116
105°	374	567	2296	3486	3252	397
115°	665	807	1840	3669	4188	656
125°	925	1037	1673	2827	3335	821
135°	1102	1213	1621	2282	2588	853
145°	1278	1360	1600	1947	2099	801
155°	1445	1485	1600	1757	1808	664
165°	1559	1579	1600	1663	1684	440
175°	1621	1621	1611	1632	1632	154
180°	1621	1621	1621	1621	1621	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9
2.5°	917.9	917.9	923.8	926.8	932.6	935.6	941.5	947.5	965.2	968.1	974.0
5°	894.3	906.1	944.5	959.2	1000.6	1056.6	1080.3	1118.6	1198.3	1221.9	1236.6
7.5°	858.9	885.5	979.9	1003.5	1106.8	1254.4	1316.3	1399.0	1525.9	1587.9	1638.1
10°	802.8	858.9	1027.1	1083.2	1251.5	1475.7	1590.9	1706.0	1897.8	1983.4	2015.9
12.5°	740.8	832.4	1077.3	1154.0	1396.0	1723.7	1862.4	1989.3	2207.7	2322.8	2340.5
15°	670.0	794.0	1124.5	1236.6	1549.5	1930.2	2083.7	2240.2	2443.9	2526.5	2547.1
17.5°	608.0	764.4	1168.8	1286.9	1667.6	2116.3	2272.6	2402.5	2567.8	2623.9	2638.6
20°	531.2	717.2	1198.3	1351.7	1791.6	2252.0	2402.5	2502.8	2615.1	2650.5	2656.3
22.5°	475.2	667.0	1216.1	1375.4	1874.2	2334.6	2461.6	2541.2	2617.9	2629.8	2632.8
25°	428.0	610.9	1213.1	1402.0	1945.1	2384.8	2482.2	2541.2	2585.5	2591.4	2591.4
27.5°	383.7	548.9	1201.2	1407.9	1998.2	2396.6	2473.4	2514.7	2535.4	2547.1	2547.1
30°	345.3	489.9	1171.8	1396.0	2021.8	2384.8	2446.8	2467.4	2488.1	2505.8	2514.7
32.5°	315.9	433.8	1127.5	1372.4	2024.7	2355.3	2399.6	2411.3	2440.9	2482.2	2497.0
35°	289.3	377.8	1077.3	1340.0	2007.0	2308.1	2337.6	2349.3	2408.4	2470.4	2491.1
37.5°	262.7	336.4	1012.3	1283.9	1980.5	2252.0	2272.6	2293.3	2384.8	2458.6	2482.2
40°	236.1	301.0	935.6	1221.9	1939.1	2184.1	2201.8	2234.2	2355.3	2440.9	2464.5
42.5°	215.5	271.6	853.0	1157.0	1886.0	2107.4	2134.0	2181.1	2319.9	2411.3	2437.9
45°	197.8	242.0	764.4	1068.4	1818.1	2027.7	2066.0	2131.0	2278.5	2367.1	2390.7
47.5°	180.1	221.3	672.9	976.9	1744.3	1947.9	1998.2	2072.0	2222.5	2308.1	2328.8
50°	165.3	200.7	581.5	879.5	1664.6	1862.4	1921.4	1998.2	2151.7	2231.4	2257.9
52.5°	153.5	183.0	495.8	782.1	1573.1	1773.8	1841.7	1921.4	2066.0	2142.8	2160.5
55°	141.7	168.2	422.1	678.9	1478.7	1679.4	1753.2	1830.0	1971.6	2036.5	2048.3
57.5°	135.8	156.4	360.1	581.5	1378.3	1573.1	1655.8	1726.6	1859.4	1909.6	1921.4
60°	126.9	147.5	312.9	498.8	1269.2	1472.8	1543.6	1614.5	1726.6	1768.0	1776.8
62.5°	118.1	141.7	277.5	419.1	1157.0	1354.7	1425.6	1490.5	1584.9	1614.5	1626.3
65°	112.1	135.8	250.9	360.1	1041.9	1230.8	1301.6	1357.7	1434.4	1464.0	1469.8
67.5°	106.2	129.8	230.2	309.9	926.8	1106.8	1159.9	1213.1	1272.1	1301.6	1304.6
70°	97.4	124.0	212.5	274.5	808.7	965.2	1009.4	1065.5	1112.7	1127.5	1136.3
72.5°	91.5	115.1	200.7	247.9	687.7	829.4	870.7	903.2	944.5	959.2	959.2
75°	82.7	103.3	188.9	221.3	563.8	678.9	714.3	746.7	779.2	785.1	776.3
77.5°	73.8	91.5	162.4	185.9	439.8	537.2	566.6	584.4	610.9	616.9	619.8
80°	62.0	79.7	126.9	144.6	318.7	395.5	416.1	431.0	454.5	454.5	460.4
82.5°	47.3	62.0	91.5	103.3	215.5	271.6	289.3	298.1	312.9	312.9	312.9
85°	29.5	38.4	59.0	67.8	129.8	165.3	177.1	180.1	191.8	194.8	194.8
87.5°	14.7	20.7	38.4	41.3	67.8	85.6	85.6	91.5	91.5	88.5	85.6
90°	10.9	19.6	28.3	30.4	47.9	71.1	82.7	73.5	55.1	41.3	41.3
92.5°	43.5	117.5	191.5	210.0	295.2	408.8	465.6	408.0	293.0	206.7	198.5
95°	104.5	239.8	375.1	409.0	726.2	1149.3	1360.8	1214.3	921.4	701.6	676.7
97.5°	180.6	300.0	419.4	449.3	978.3	1683.7	2036.4	1943.8	1758.6	1619.7	1572.4
100°	239.3	347.6	455.9	483.0	1070.1	1852.7	2244.1	2250.9	2264.4	2274.5	2218.1
102.5°	289.3	390.4	491.4	516.7	1112.1	1905.9	2302.9	2420.9	2656.7	2833.7	2785.4
105°	374.2	459.7	545.4	566.7	1143.2	1911.9	2296.3	2560.8	3089.7	3486.4	3460.4
107.5°	461.2	541.0	620.7	640.7	1149.1	1826.9	2165.8	2534.7	3272.5	3825.8	3832.1
110°	520.0	592.0	664.1	682.0	1140.4	1751.5	2057.0	2469.4	3294.2	3912.8	3939.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	577.6	646.3	714.9	732.1	1140.7	1685.6	1958.0	2380.0	3224.2	3857.3	3898.9
115°	664.7	728.0	791.3	807.2	1151.3	1610.0	1839.5	2246.0	3059.2	3669.1	3726.7
117.5°	750.6	808.1	865.7	880.1	1172.6	1562.8	1757.8	2124.8	2858.7	3409.1	3473.0
120°	800.6	854.8	908.9	922.4	1190.1	1546.8	1725.2	2060.5	2731.1	3234.0	3296.1
122.5°	849.5	904.2	958.8	972.5	1215.1	1538.5	1700.2	2002.1	2606.0	3058.8	3120.1
125°	924.6	974.4	1024.2	1036.7	1248.8	1531.6	1673.0	1929.5	2442.4	2827.1	2883.6
127.5°	985.6	1035.8	1086.1	1098.7	1282.5	1527.6	1650.1	1870.3	2310.8	2641.1	2688.7
130°	1018.2	1072.3	1126.5	1140.0	1307.2	1530.0	1641.4	1837.5	2229.6	2523.7	2567.7
132.5°	1051.9	1106.1	1160.2	1173.8	1327.1	1531.6	1633.8	1809.3	2160.3	2423.6	2463.0
135°	1101.9	1151.3	1200.6	1212.9	1348.9	1530.2	1620.8	1767.8	2061.7	2282.2	2316.1
137.5°	1153.1	1201.9	1250.7	1262.9	1381.5	1539.6	1618.7	1742.9	1991.4	2177.7	2205.5
140°	1195.5	1240.5	1285.4	1296.6	1401.4	1541.1	1611.0	1718.3	1933.0	2094.0	2120.0
142.5°	1228.1	1269.7	1311.3	1321.7	1418.1	1546.7	1611.0	1705.3	1893.8	2035.2	2057.6
145°	1278.1	1314.4	1350.7	1359.8	1439.9	1546.7	1600.1	1677.2	1831.4	1947.2	1964.1
147.5°	1328.2	1363.5	1398.8	1407.6	1471.8	1557.4	1600.1	1660.8	1782.1	1873.1	1887.2
150°	1360.8	1392.7	1424.6	1432.6	1488.4	1562.9	1600.1	1651.4	1753.8	1830.7	1842.1
152.5°	1394.6	1418.7	1443.0	1449.0	1499.4	1566.5	1600.1	1643.9	1731.3	1797.0	1805.5
155°	1444.6	1462.5	1480.4	1484.8	1523.3	1574.5	1600.1	1634.9	1704.6	1756.8	1762.5
157.5°	1481.6	1499.0	1516.4	1520.7	1547.2	1582.5	1600.1	1627.2	1681.4	1722.0	1726.0
160°	1506.6	1520.1	1533.6	1537.0	1558.1	1586.1	1600.1	1623.3	1669.8	1704.6	1706.8
162.5°	1531.6	1541.8	1552.0	1554.5	1569.7	1590.0	1600.1	1619.7	1658.9	1688.3	1690.4
165°	1558.8	1567.9	1577.2	1579.4	1586.3	1595.5	1600.1	1614.1	1642.2	1663.2	1665.5
167.5°	1583.8	1588.1	1592.5	1593.6	1599.4	1607.2	1611.0	1620.2	1638.6	1652.3	1653.3
170°	1600.1	1604.5	1608.8	1609.9	1610.3	1610.7	1611.0	1620.2	1638.6	1652.3	1652.3
172.5°	1608.8	1609.8	1610.7	1611.0	1611.0	1611.0	1611.0	1618.2	1632.7	1643.6	1642.7
175°	1620.8	1620.8	1620.8	1620.8	1617.5	1613.2	1611.0	1615.6	1624.8	1631.7	1631.7
177.5°	1620.8	1620.8	1620.8	1620.8	1618.2	1614.8	1613.2	1616.8	1624.1	1629.5	1628.5
180°	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8	1620.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	917.9	917.9
2.5°	979.9	974.0
5°	1260.3	1266.2
7.5°	1697.1	1694.2
10°	2110.3	2136.9
12.5°	2411.3	2417.3
15°	2594.4	2606.2
17.5°	2665.2	2668.2
20°	2668.2	2662.2
22.5°	2635.7	2629.8
25°	2597.4	2594.4
27.5°	2561.9	2564.8
30°	2547.1	2556.0
32.5°	2547.1	2561.9
35°	2553.1	2567.8
37.5°	2550.1	2567.8
40°	2538.3	2559.0
42.5°	2505.8	2520.6
45°	2455.6	2473.4
47.5°	2390.7	2402.5
50°	2308.1	2319.9
52.5°	2204.8	2207.7
55°	2080.8	2092.6
57.5°	1947.9	1950.9
60°	1800.4	1809.3
62.5°	1644.0	1644.0
65°	1478.7	1484.6
67.5°	1307.5	1322.3
70°	1133.4	1136.3
72.5°	962.2	962.2
75°	785.1	788.1
77.5°	616.9	616.9
80°	457.5	460.4
82.5°	315.9	321.7
85°	197.8	197.8
87.5°	91.5	82.7
90°	41.3	41.3
92.5°	165.6	132.7
95°	577.1	477.5
97.5°	1382.8	1193.3
100°	1992.3	1766.6
102.5°	2591.9	2398.6
105°	3356.5	3252.5
107.5°	3857.2	3882.3
110°	4048.2	4156.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4065.2	4231.5
115°	3957.4	4187.9
117.5°	3728.8	3984.6
120°	3544.6	3793.1
122.5°	3365.3	3610.4
125°	3109.4	3335.2
127.5°	2879.3	3069.7
130°	2743.7	2919.7
132.5°	2620.5	2778.2
135°	2452.0	2587.8
137.5°	2316.7	2427.9
140°	2223.9	2327.9
142.5°	2147.0	2236.5
145°	2031.8	2099.4
147.5°	1943.2	1999.3
150°	1887.6	1933.0
152.5°	1839.9	1874.3
155°	1785.2	1807.9
157.5°	1741.9	1757.8
160°	1716.1	1725.2
162.5°	1699.1	1707.8
165°	1674.7	1683.9
167.5°	1657.2	1661.1
170°	1652.3	1652.3
172.5°	1639.4	1636.0
175°	1631.7	1631.7
177.5°	1624.6	1620.8
180°	1620.8	1620.8



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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	5.09	5.90	6.12	6.94	8.34	18.27	19.08	19.29	20.12	21.52
	3H	5.79	6.52	6.83	7.57	8.99	20.10	20.83	21.14	21.88	23.30
	4H	6.09	6.78	7.14	7.83	9.25	20.74	21.43	21.80	22.49	23.91
	6H	6.33	6.97	7.39	8.02	9.46	21.17	21.81	22.23	22.86	24.30
	8H	6.40	7.01	7.47	8.08	9.51	21.29	21.90	22.36	22.97	24.40
	12H	6.42	6.99	7.49	8.06	9.52	21.36	21.93	22.43	23.00	24.46
4H	2H	12.30	12.99	13.35	14.04	15.46	18.53	19.22	19.59	20.28	21.70
	3H	13.86	14.44	14.93	15.52	16.96	20.58	21.15	21.64	22.23	23.67
	4H	13.95	14.48	15.02	15.55	17.01	21.34	21.87	22.41	22.94	24.40
	6H	13.96	14.42	15.04	15.51	16.96	21.88	22.33	22.96	23.43	24.88
	8H	13.94	14.36	15.02	15.45	16.92	22.04	22.46	23.12	23.55	25.02
	12H	13.89	14.28	14.99	15.37	16.85	22.13	22.51	23.23	23.61	25.09
8H	4H	15.39	15.82	16.47	16.90	18.38	21.40	21.82	22.48	22.91	24.38
	6H	15.63	15.99	16.74	17.11	18.58	22.02	22.38	23.13	23.50	24.97
	8H	15.65	15.96	16.76	17.07	18.56	22.24	22.55	23.35	23.66	25.15
	12H	15.62	15.89	16.73	16.99	18.52	22.38	22.66	23.50	23.76	25.29
12H	4H	15.53	15.92	16.63	17.02	18.50	21.35	21.73	22.45	22.83	24.31
	6H	15.89	16.20	17.00	17.31	18.80	22.01	22.32	23.12	23.42	24.91
	8H	15.96	16.23	17.07	17.34	18.86	22.23	22.51	23.35	23.61	25.14