

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: P938321

Luminaire Tested: SQ4-FB-150U-075D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938321
REPORT IS A COMBINATION OF REPORTS P933622 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

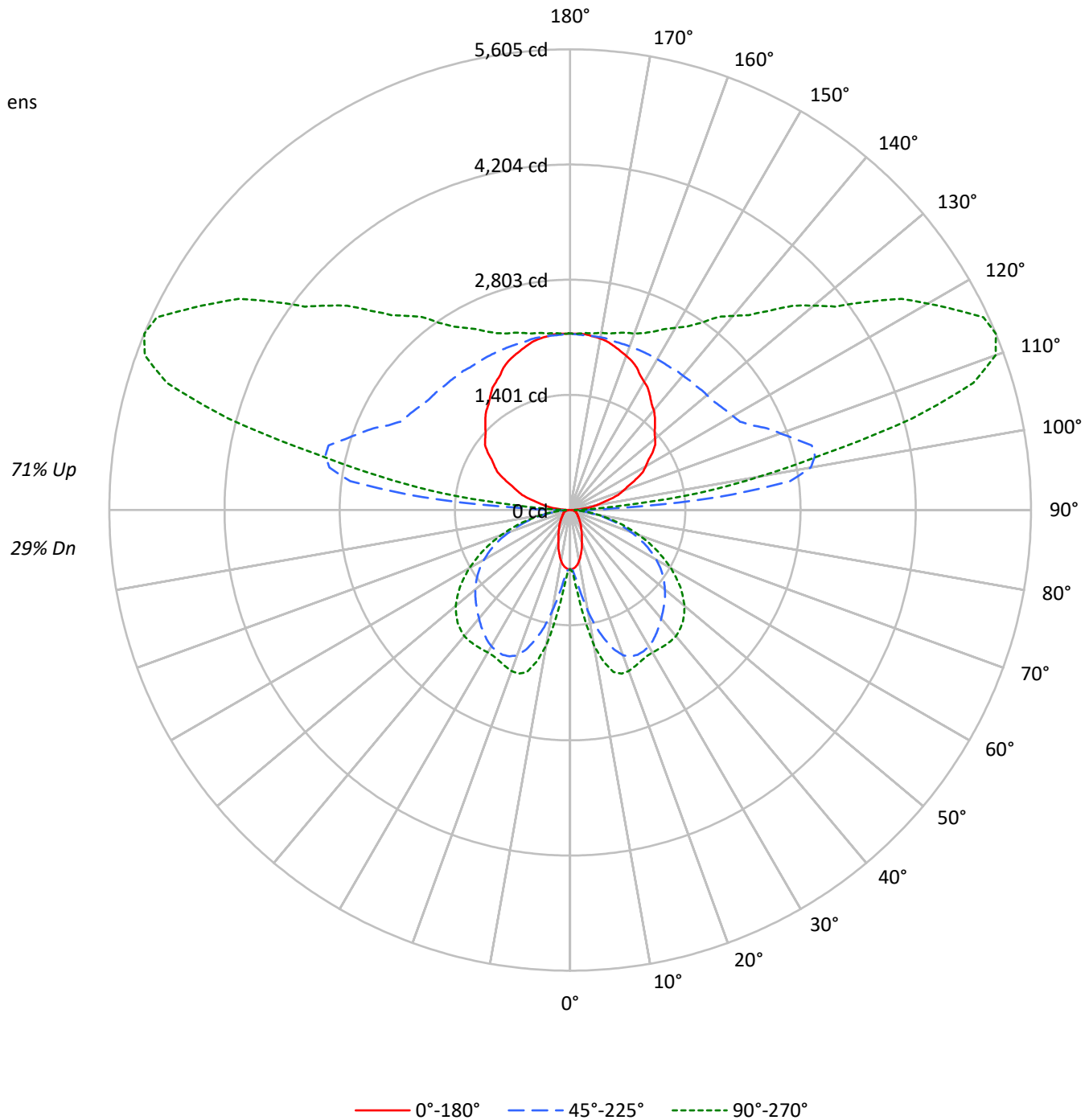
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19482.5 lumens
Efficiency: N/A
Efficacy: 102.1 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): 190.8
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2172	2569	2987
10°	1970	3746	4952
15°	1675	4895	5979
20°	1365	5674	6094
25°	1139	5939	5970
30°	961	5978	5959
35°	850	5880	6113
40°	741	5753	6272
45°	672	5660	6297
50°	617	5577	6192
55°	591	5454	5918
60°	606	5217	5485
65°	631	4856	4889
70°	674	4237	4130
75°	750	3458	3223
80°	825	2401	2172
85°	749	1276	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	0.5
10°-20°	411.9	2.1
20°-30°	720.5	3.7
30°-40°	927.4	4.8
40°-50°	1035.9	5.3
50°-60°	992.2	5.1
60°-70°	786.3	4.0
70°-80°	462.3	2.4
80°-90°	136.6	0.7
90°-100°	1046.4	5.4
100°-110°	2751.1	14.1
110°-120°	2852.6	14.6
120°-130°	2288.1	11.7
130°-140°	1795.4	9.2
140°-150°	1378.0	7.1
150°-160°	992.4	5.1
160°-170°	607.2	3.1
170°-180°	205.1	1.1
0°-30°	1225.3	6.3
0°-40°	2152.7	11.0
0°-60°	4180.8	21.5
0°-90°	5566.0	28.6
90°-120°	6650.2	34.1
90°-150°	12111.7	62.2
90°-180°	13916.0	71.4
0°-180°	19482.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	751	846	956	991	65
15°	524	968	1631	1977	2040	146
25°	335	1097	1943	2028	2031	154
35°	226	1049	1830	1934	2010	141
45°	155	836	1617	1853	1936	120
55°	111	531	1372	1594	1638	101
65°	88	282	1019	1146	1162	87
75°	65	173	559	614	617	68
85°	23	53	139	152	155	25
90°	14	40	110	55	55	13
95°	138	542	1802	929	632	154
105°	496	751	3041	4618	4308	525
115°	880	1069	2436	4860	5547	869
125°	1225	1373	2216	3744	4417	1087
135°	1460	1606	2147	3023	3428	1129
145°	1693	1801	2119	2579	2781	1061
155°	1913	1967	2119	2327	2394	879
165°	2065	2092	2119	2203	2230	583
175°	2147	2147	2134	2161	2161	204
180°	2147	2147	2147	2147	2147	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4
2.5°	718.4	718.4	723.0	725.3	730.0	732.3	736.9	741.5	755.4	757.7	762.3
5°	699.9	709.2	739.2	750.8	783.1	827.0	845.5	875.6	937.9	956.4	968.0
7.5°	672.2	693.0	766.9	785.4	866.2	981.8	1030.3	1095.0	1194.3	1242.9	1282.1
10°	628.3	672.2	803.9	847.8	979.5	1155.1	1245.2	1335.3	1485.4	1552.4	1577.8
12.5°	579.8	651.4	843.2	903.3	1092.7	1349.1	1457.7	1557.0	1728.0	1818.0	1831.9
15°	524.4	621.4	880.2	968.0	1212.8	1510.8	1630.9	1753.4	1912.8	1977.4	1993.6
17.5°	475.9	598.3	914.8	1007.2	1305.2	1656.3	1778.8	1880.4	2009.8	2053.7	2065.2
20°	415.8	561.3	937.9	1058.1	1402.2	1762.6	1880.4	1959.0	2046.7	2074.5	2079.1
22.5°	371.9	522.1	951.8	1076.5	1466.9	1827.3	1926.6	1989.0	2049.0	2058.3	2060.6
25°	335.0	478.2	949.5	1097.3	1522.4	1866.6	1942.8	1989.0	2023.6	2028.3	2028.3
27.5°	300.3	429.7	940.2	1101.9	1563.9	1875.8	1935.9	1968.2	1984.4	1993.6	1993.6
30°	270.3	383.5	917.1	1092.7	1582.4	1866.6	1915.1	1931.2	1947.4	1961.3	1968.2
32.5°	247.2	339.6	882.5	1074.2	1584.7	1843.5	1878.1	1887.3	1910.4	1942.8	1954.3
35°	226.4	295.7	843.2	1048.8	1570.9	1806.5	1829.6	1838.8	1885.0	1933.5	1949.7
37.5°	205.6	263.3	792.3	1004.9	1550.1	1762.6	1778.8	1794.9	1866.6	1924.3	1942.8
40°	184.8	235.6	732.3	956.4	1517.7	1709.5	1723.3	1748.7	1843.5	1910.4	1928.9
42.5°	168.6	212.5	667.6	905.6	1476.2	1649.4	1670.2	1707.2	1815.7	1887.3	1908.1
45°	154.8	189.4	598.3	836.2	1423.0	1587.0	1617.1	1667.9	1783.4	1852.7	1871.2
47.5°	140.9	173.2	526.7	764.6	1365.3	1524.7	1563.9	1621.7	1739.5	1806.5	1822.7
50°	129.4	157.1	455.1	688.4	1302.9	1457.7	1503.9	1563.9	1684.1	1746.4	1767.2
52.5°	120.1	143.2	388.1	612.2	1231.3	1388.4	1441.5	1503.9	1617.1	1677.1	1691.0
55°	110.9	131.7	330.3	531.3	1157.4	1314.5	1372.2	1432.3	1543.2	1594.0	1603.2
57.5°	106.3	122.4	281.8	455.1	1078.8	1231.3	1296.0	1351.4	1455.4	1494.6	1503.9
60°	99.3	115.5	244.9	390.4	993.4	1152.8	1208.2	1263.6	1351.4	1383.8	1390.7
62.5°	92.4	110.9	217.1	328.0	905.6	1060.4	1115.8	1166.6	1240.5	1263.6	1272.9
65°	87.8	106.3	196.4	281.8	815.4	963.3	1018.8	1062.7	1122.7	1145.8	1150.5
67.5°	83.2	101.6	180.2	242.6	725.3	866.2	907.9	949.5	995.7	1018.8	1021.1
70°	76.2	97.0	166.3	214.8	632.9	755.4	790.0	833.9	870.9	882.5	889.4
72.5°	71.6	90.1	157.1	194.0	538.2	649.1	681.4	706.9	739.2	750.8	750.8
75°	64.7	80.9	147.8	173.2	441.2	531.3	559.0	584.4	609.8	614.5	607.5
77.5°	57.8	71.6	127.0	145.5	344.2	420.4	443.5	457.4	478.2	482.8	485.1
80°	48.5	62.4	99.3	113.2	249.5	309.5	325.7	337.3	355.7	355.7	360.4
82.5°	37.0	48.5	71.6	80.9	168.6	212.5	226.4	233.3	244.9	244.9	244.9
85°	23.1	30.0	46.2	53.1	101.6	129.4	138.6	140.9	150.2	152.5	152.5
87.5°	11.6	16.2	30.0	32.3	53.1	67.0	67.0	71.6	71.6	69.3	67.0
90°	14.4	25.9	37.5	40.3	63.4	94.1	109.5	97.3	73.0	54.7	54.7
92.5°	57.6	155.5	253.6	278.0	390.9	541.4	616.6	540.4	388.0	273.7	262.9
95°	138.3	317.5	496.9	541.7	962.0	1522.3	1802.4	1608.4	1220.4	929.3	896.4
97.5°	239.2	397.3	555.5	595.1	1295.8	2230.0	2697.1	2574.5	2329.2	2145.3	2082.5
100°	316.9	460.4	603.8	639.7	1417.3	2453.9	2972.3	2981.2	2999.2	3012.6	2937.9
102.5°	383.2	517.1	650.9	684.4	1472.9	2524.4	3050.1	3206.4	3518.8	3753.2	3689.1
105°	495.6	609.0	722.3	750.7	1514.3	2532.4	3041.4	3391.7	4092.2	4617.6	4583.2
107.5°	610.9	716.6	822.2	848.6	1521.9	2419.6	2868.6	3357.1	4334.3	5067.1	5075.5
110°	688.7	784.1	879.5	903.4	1510.4	2319.8	2724.5	3270.7	4363.1	5182.4	5218.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	765.1	856.0	946.9	969.7	1510.9	2232.5	2593.4	3152.4	4270.4	5109.0	5164.0
115°	880.3	964.2	1048.1	1069.1	1524.8	2132.5	2436.4	2974.9	4051.9	4859.7	4936.1
117.5°	994.1	1070.3	1146.5	1165.5	1553.1	2069.8	2328.2	2814.3	3786.3	4515.4	4600.1
120°	1060.4	1132.1	1203.8	1221.8	1576.2	2048.7	2285.1	2729.1	3617.2	4283.4	4365.7
122.5°	1125.2	1197.6	1270.0	1288.1	1609.4	2037.7	2251.9	2651.8	3451.6	4051.4	4132.6
125°	1224.7	1290.6	1356.6	1373.1	1654.0	2028.6	2215.9	2555.6	3235.0	3744.5	3819.3
127.5°	1305.3	1371.9	1438.5	1455.1	1698.6	2023.3	2185.6	2477.3	3060.7	3498.2	3561.2
130°	1348.6	1420.3	1492.0	1509.9	1731.3	2026.5	2174.1	2433.7	2953.1	3342.6	3400.9
132.5°	1393.2	1464.9	1536.6	1554.6	1757.7	2028.6	2164.0	2396.5	2861.4	3210.1	3262.3
135°	1459.5	1524.8	1590.1	1606.5	1786.6	2026.7	2146.8	2341.4	2730.7	3022.7	3067.7
137.5°	1527.2	1591.9	1656.6	1672.7	1829.8	2039.1	2143.8	2308.4	2637.6	2884.4	2921.2
140°	1583.4	1642.9	1702.5	1717.4	1856.2	2041.2	2133.7	2275.9	2560.2	2773.5	2807.9
142.5°	1626.6	1681.7	1736.7	1750.5	1878.3	2048.6	2133.7	2258.6	2508.4	2695.7	2725.3
145°	1692.9	1741.0	1788.9	1801.0	1907.1	2048.6	2119.3	2221.5	2425.7	2579.0	2601.4
147.5°	1759.1	1805.9	1852.6	1864.3	1949.3	2062.7	2119.3	2199.7	2360.4	2481.0	2499.6
150°	1802.4	1844.7	1887.0	1897.5	1971.4	2070.1	2119.3	2187.3	2323.0	2424.8	2439.8
152.5°	1847.1	1879.1	1911.1	1919.1	1985.8	2074.8	2119.3	2177.3	2293.2	2380.1	2391.5
155°	1913.4	1937.1	1960.7	1966.7	2017.6	2085.4	2119.3	2165.5	2257.7	2326.9	2334.4
157.5°	1962.3	1985.4	2008.4	2014.2	2049.2	2095.9	2119.3	2155.2	2226.9	2280.7	2286.1
160°	1995.5	2013.4	2031.3	2035.8	2063.7	2100.8	2119.3	2150.1	2211.5	2257.6	2260.7
162.5°	2028.6	2042.0	2055.4	2058.8	2079.0	2105.9	2119.3	2145.3	2197.2	2236.1	2238.9
165°	2064.6	2076.8	2088.9	2092.0	2101.1	2113.3	2119.3	2137.9	2175.0	2202.9	2206.0
167.5°	2097.8	2103.6	2109.3	2110.7	2118.4	2128.7	2133.7	2145.9	2170.2	2188.5	2189.8
170°	2119.3	2125.1	2130.9	2132.4	2132.8	2133.4	2133.7	2145.9	2170.2	2188.5	2188.5
172.5°	2130.9	2132.1	2133.4	2133.7	2133.7	2133.7	2133.7	2143.4	2162.6	2177.0	2175.9
175°	2146.8	2146.8	2146.8	2146.8	2142.4	2136.7	2133.7	2139.8	2152.0	2161.2	2161.2
177.5°	2146.8	2146.8	2146.8	2146.8	2143.4	2138.9	2136.7	2141.4	2151.1	2158.2	2156.9
180°	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8	2146.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	718.4	718.4
2.5°	766.9	762.3
5°	986.4	991.1
7.5°	1328.3	1326.0
10°	1651.7	1672.5
12.5°	1887.3	1892.0
15°	2030.6	2039.8
17.5°	2086.0	2088.3
20°	2088.3	2083.7
22.5°	2062.9	2058.3
25°	2032.9	2030.6
27.5°	2005.2	2007.5
30°	1993.6	2000.5
32.5°	1993.6	2005.2
35°	1998.2	2009.8
37.5°	1995.9	2009.8
40°	1986.7	2002.8
42.5°	1961.3	1972.8
45°	1922.0	1935.9
47.5°	1871.2	1880.4
50°	1806.5	1815.7
52.5°	1725.6	1728.0
55°	1628.6	1637.9
57.5°	1524.7	1527.0
60°	1409.2	1416.1
62.5°	1286.7	1286.7
65°	1157.4	1162.0
67.5°	1023.4	1035.0
70°	887.1	889.4
72.5°	753.1	753.1
75°	614.5	616.8
77.5°	482.8	482.8
80°	358.0	360.4
82.5°	247.2	251.8
85°	154.8	154.8
87.5°	71.6	64.7
90°	54.7	54.7
92.5°	219.3	175.8
95°	764.4	632.5
97.5°	1831.5	1580.5
100°	2638.9	2339.8
102.5°	3433.0	3176.9
105°	4445.6	4307.9
107.5°	5108.8	5142.1
110°	5361.7	5505.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5384.3	5604.6
115°	5241.5	5546.9
117.5°	4938.8	5277.5
120°	4694.8	5023.9
122.5°	4457.3	4781.9
125°	4118.3	4417.4
127.5°	3813.6	4065.8
130°	3633.9	3867.0
132.5°	3470.9	3679.7
135°	3247.6	3427.6
137.5°	3068.5	3215.8
140°	2945.6	3083.2
142.5°	2843.8	2962.2
145°	2691.1	2780.7
147.5°	2573.9	2648.1
150°	2500.0	2560.2
152.5°	2437.0	2482.4
155°	2364.4	2394.5
157.5°	2307.2	2328.2
160°	2272.9	2285.1
162.5°	2250.5	2262.0
165°	2218.1	2230.3
167.5°	2194.9	2200.0
170°	2188.5	2188.5
172.5°	2171.4	2166.9
175°	2161.2	2161.2
177.5°	2151.8	2146.8
180°	2146.8	2146.8



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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	1.39	2.11	2.51	3.22	4.77	14.59	15.30	15.70	16.42	17.96
	3H	2.09	2.73	3.21	3.85	5.41	16.42	17.06	17.55	18.19	19.75
	4H	2.38	2.99	3.51	4.11	5.68	17.06	17.67	18.20	18.80	20.36
	6H	2.62	3.18	3.77	4.31	5.89	17.49	18.05	18.63	19.18	20.76
	8H	2.69	3.22	3.83	4.36	5.93	17.61	18.14	18.75	19.28	20.86
	12H	2.70	3.21	3.85	4.34	5.94	17.67	18.18	18.82	19.32	20.91
4H	2H	8.60	9.21	9.74	10.33	11.90	14.84	15.45	15.98	16.58	18.14
	3H	10.15	10.66	11.30	11.81	13.39	16.88	17.39	18.03	18.54	20.12
	4H	10.24	10.71	11.39	11.85	13.45	17.64	18.11	18.79	19.25	20.85
	6H	10.24	10.65	11.40	11.81	13.40	18.18	18.58	19.34	19.74	21.33
	8H	10.22	10.59	11.37	11.74	13.35	18.34	18.72	19.50	19.87	21.47
	12H	10.17	10.51	11.34	11.67	13.28	18.43	18.77	19.60	19.93	21.54
8H	4H	11.68	12.05	12.83	13.21	14.81	17.69	18.07	18.85	19.22	20.83
	6H	11.91	12.22	13.09	13.42	15.02	18.32	18.63	19.49	19.82	21.43
	8H	11.93	12.20	13.11	13.37	15.00	18.54	18.81	19.72	19.98	21.61
	12H	11.89	12.13	13.08	13.30	14.95	18.68	18.92	19.87	20.09	21.74
12H	4H	11.81	12.16	12.99	13.32	14.93	17.64	17.98	18.81	19.14	20.75
	6H	12.17	12.44	13.35	13.61	15.24	18.30	18.57	19.48	19.74	21.37
	8H	12.23	12.47	13.42	13.64	15.30	18.52	18.76	19.71	19.93	21.59