

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: P937969

Luminaire Tested: SQ4-FB-125U-075D-935-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937969
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

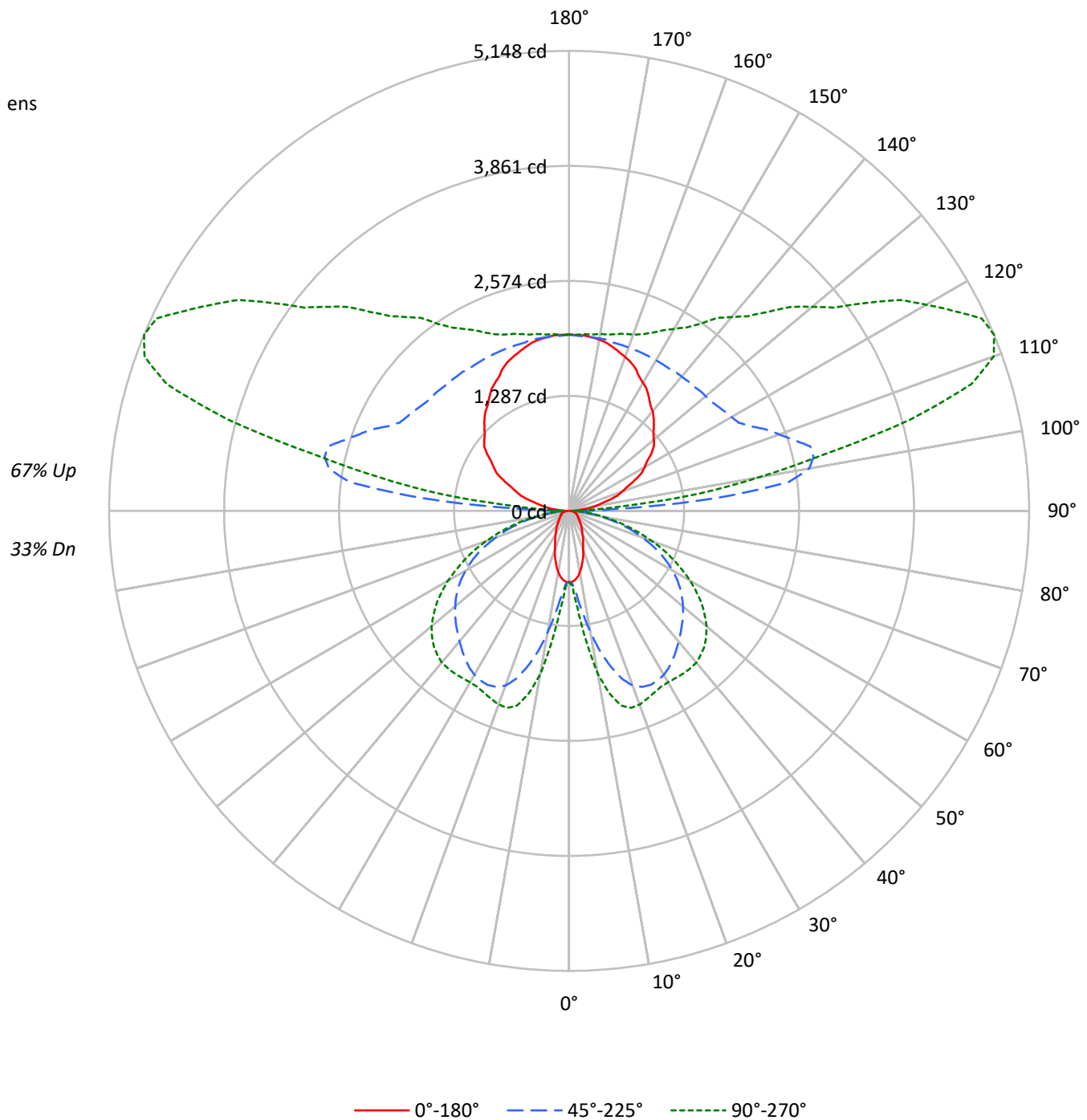
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18939.9 lumens
Efficiency: N/A
Efficacy: 113.5 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): 166.8
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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2459	2459	2459
5°	2403	2843	3305
10°	2180	4145	5479
15°	1854	5416	6616
20°	1510	6278	6743
25°	1260	6571	6606
30°	1063	6615	6593
35°	940	6506	6764
40°	820	6366	6940
45°	743	6263	6967
50°	682	6171	6852
55°	654	6035	6548
60°	670	5773	6069
65°	698	5373	5410
70°	745	4689	4570
75°	830	3827	3567
80°	913	2657	2403
85°	830	1412	1230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6967 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	0.5
10°-20°	455.7	2.4
20°-30°	797.2	4.2
30°-40°	1026.2	5.4
40°-50°	1146.2	6.1
50°-60°	1097.8	5.8
60°-70°	870.0	4.6
70°-80°	511.6	2.7
80°-90°	149.6	0.8
90°-100°	961.2	5.1
100°-110°	2527.0	13.3
110°-120°	2620.2	13.8
120°-130°	2101.7	11.1
130°-140°	1649.1	8.7
140°-150°	1265.8	6.7
150°-160°	911.6	4.8
160°-170°	557.7	2.9
170°-180°	188.4	1.0
0°-30°	1355.7	7.2
0°-40°	2381.9	12.6
0°-60°	4626.0	24.4
0°-90°	6157.2	32.5
90°-120°	6108.4	32.3
90°-150°	11125.0	58.7
90°-180°	12783.0	67.5
0°-180°	18939.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	774	831	936	1058	1097	71
15°	580	1071	1805	2188	2257	161
25°	371	1214	2150	2244	2247	171
35°	250	1160	2024	2140	2224	156
45°	171	925	1789	2050	2142	132
55°	123	588	1518	1764	1812	112
65°	97	312	1127	1268	1286	96
75°	72	192	619	680	682	75
85°	26	59	153	169	171	27
90°	13	37	100	50	50	13
95°	127	498	1656	854	581	141
105°	455	690	2794	4241	3957	483
115°	808	982	2238	4464	5095	799
125°	1125	1261	2035	3439	4058	999
135°	1341	1476	1972	2776	3148	1037
145°	1555	1654	1947	2369	2554	974
155°	1757	1806	1947	2137	2199	808
165°	1896	1922	1947	2023	2049	535
175°	1972	1972	1960	1985	1985	187
180°	1972	1972	1972	1972	1972	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9
2.5°	794.9	794.9	800.0	802.6	807.7	810.3	815.4	820.5	835.8	838.4	843.5
5°	774.5	784.7	817.9	830.7	866.5	915.0	935.5	968.8	1037.8	1058.3	1071.0
7.5°	743.8	766.8	848.6	869.0	958.5	1086.4	1140.1	1211.6	1321.5	1375.2	1418.7
10°	695.2	743.8	889.5	938.1	1083.8	1278.1	1377.8	1477.5	1643.6	1717.7	1745.8
12.5°	641.6	720.8	932.9	999.5	1209.1	1492.8	1612.9	1722.8	1912.0	2011.7	2027.0
15°	580.2	687.6	973.9	1071.0	1342.0	1671.7	1804.6	1940.1	2116.5	2188.0	2205.9
17.5°	526.5	662.0	1012.3	1114.5	1444.2	1832.7	1968.2	2080.7	2223.8	2272.4	2285.1
20°	460.1	621.1	1037.8	1170.7	1551.6	1950.3	2080.7	2167.6	2264.7	2295.4	2300.5
22.5°	411.5	577.7	1053.2	1191.2	1623.1	2021.9	2131.8	2200.8	2267.3	2277.5	2280.0
25°	370.6	529.1	1050.6	1214.2	1684.5	2065.3	2149.7	2200.8	2239.1	2244.3	2244.3
27.5°	332.3	475.4	1040.4	1219.3	1730.5	2075.6	2142.0	2177.8	2195.7	2205.9	2205.9
30°	299.1	424.3	1014.8	1209.1	1750.9	2065.3	2119.0	2136.9	2154.8	2170.1	2177.8
32.5°	273.5	375.7	976.5	1188.6	1753.5	2039.8	2078.1	2088.3	2113.9	2149.7	2162.5
35°	250.5	327.2	932.9	1160.5	1738.2	1998.9	2024.4	2034.7	2085.8	2139.5	2157.3
37.5°	227.5	291.4	876.7	1111.9	1715.2	1950.3	1968.2	1986.1	2065.3	2129.2	2149.7
40°	204.5	260.7	810.3	1058.3	1679.4	1891.5	1906.9	1935.0	2039.8	2113.9	2134.3
42.5°	186.6	235.2	738.7	1002.0	1633.4	1825.1	1848.1	1889.0	2009.1	2088.3	2111.3
45°	171.3	209.6	662.0	925.3	1574.6	1756.1	1789.3	1845.5	1973.3	2050.0	2070.4
47.5°	155.9	191.7	582.8	846.0	1510.7	1687.0	1730.5	1794.4	1924.8	1998.9	2016.8
50°	143.1	173.8	503.5	761.7	1441.7	1612.9	1664.0	1730.5	1863.4	1932.4	1955.4
52.5°	132.9	158.5	429.4	677.3	1362.4	1536.2	1595.0	1664.0	1789.3	1855.7	1871.1
55°	122.7	145.7	365.5	587.9	1280.6	1454.4	1518.3	1584.8	1707.5	1763.7	1773.9
57.5°	117.6	135.5	311.8	503.5	1193.7	1362.4	1434.0	1495.3	1610.4	1653.8	1664.0
60°	109.9	127.8	270.9	432.0	1099.2	1275.5	1336.9	1398.2	1495.3	1531.1	1538.8
62.5°	102.2	122.7	240.3	363.0	1002.0	1173.3	1234.6	1290.9	1372.7	1398.2	1408.4
65°	97.1	117.6	217.3	311.8	902.3	1065.9	1127.3	1175.8	1242.3	1267.9	1273.0
67.5°	92.0	112.5	199.4	268.4	802.6	958.5	1004.6	1050.6	1101.7	1127.3	1129.8
70°	84.3	107.4	184.0	237.7	700.3	835.8	874.2	922.7	963.6	976.5	984.1
72.5°	79.2	99.7	173.8	214.7	595.5	718.2	754.0	782.1	817.9	830.7	830.7
75°	71.6	89.5	163.6	191.7	488.2	587.9	618.6	646.7	674.8	679.9	672.2
77.5°	63.9	79.2	140.6	161.0	380.8	465.2	490.8	506.1	529.1	534.2	536.8
80°	53.7	69.0	109.9	125.2	276.0	342.5	360.4	373.2	393.6	393.6	398.7
82.5°	40.9	53.7	79.2	89.5	186.6	235.2	250.5	258.2	270.9	270.9	270.9
85°	25.6	33.2	51.1	58.8	112.5	143.1	153.4	155.9	166.1	168.7	168.7
87.5°	12.8	17.9	33.2	35.8	58.8	74.1	74.1	79.2	79.2	76.7	74.1
90°	13.2	23.8	34.4	37.1	58.2	86.4	100.5	89.4	67.1	50.3	50.3
92.5°	52.9	142.9	232.9	255.4	359.1	497.3	566.4	496.4	356.4	251.4	241.5
95°	127.0	291.7	456.4	497.6	883.5	1398.2	1655.5	1477.3	1120.9	853.6	823.3
97.5°	219.6	364.9	510.3	546.6	1190.2	2048.3	2477.4	2364.7	2139.5	1970.5	1912.8
100°	291.1	422.9	554.7	587.6	1301.8	2254.1	2730.1	2738.4	2754.9	2767.2	2698.5
102.5°	352.0	475.0	597.8	628.6	1353.0	2318.7	2801.6	2945.1	3232.1	3447.4	3388.7
105°	455.2	559.3	663.5	689.5	1390.9	2326.0	2793.6	3115.3	3758.9	4241.4	4209.8
107.5°	561.1	658.2	755.2	779.5	1398.0	2222.6	2634.9	3083.6	3981.1	4654.3	4662.0
110°	632.6	720.2	807.9	829.8	1387.3	2130.8	2502.5	3004.2	4007.6	4760.2	4793.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	702.7	786.2	869.7	890.6	1387.7	2050.7	2382.1	2895.6	3922.5	4692.7	4743.3
115°	808.5	885.6	962.7	981.9	1400.6	1958.7	2237.9	2732.5	3721.8	4463.8	4533.9
117.5°	913.2	983.1	1053.2	1070.6	1426.6	1901.2	2138.6	2585.1	3477.9	4147.5	4225.2
120°	974.0	1039.9	1105.8	1122.3	1447.8	1881.9	2098.9	2506.8	3322.6	3934.5	4010.0
122.5°	1033.6	1100.0	1166.5	1183.1	1478.2	1871.8	2068.5	2435.8	3170.4	3721.4	3795.9
125°	1124.9	1185.5	1246.0	1261.2	1519.3	1863.3	2035.3	2347.3	2971.4	3439.4	3508.1
127.5°	1199.0	1260.2	1321.4	1336.6	1560.3	1858.5	2007.6	2275.4	2811.3	3213.1	3271.1
130°	1238.7	1304.6	1370.4	1386.9	1590.3	1861.4	1997.0	2235.5	2712.5	3070.3	3123.8
132.5°	1279.7	1345.6	1411.5	1428.0	1614.5	1863.3	1987.7	2201.2	2628.2	2948.5	2996.5
135°	1340.6	1400.6	1460.6	1475.6	1641.0	1861.6	1971.9	2150.7	2508.3	2776.5	2817.8
137.5°	1402.8	1462.2	1521.6	1536.4	1680.7	1873.0	1969.2	2120.4	2422.7	2649.4	2683.2
140°	1454.4	1509.1	1563.8	1577.5	1704.9	1874.9	1959.9	2090.5	2351.6	2547.5	2579.1
142.5°	1494.1	1544.7	1595.3	1607.9	1725.2	1881.7	1959.9	2074.6	2304.1	2476.1	2503.3
145°	1555.0	1599.1	1643.3	1654.2	1751.7	1881.7	1946.7	2040.5	2228.2	2368.8	2389.4
147.5°	1615.8	1658.8	1701.7	1712.4	1790.6	1894.7	1946.7	2020.5	2168.2	2278.8	2295.9
150°	1655.5	1694.4	1733.2	1742.9	1810.8	1901.4	1946.7	2009.1	2133.7	2227.2	2241.0
152.5°	1696.6	1726.0	1755.5	1762.8	1824.1	1905.8	1946.7	2000.0	2106.4	2186.2	2196.7
155°	1757.4	1779.2	1801.0	1806.4	1853.2	1915.6	1946.7	1989.1	2073.8	2137.2	2144.1
157.5°	1802.5	1823.6	1844.8	1850.1	1882.3	1925.3	1946.7	1979.6	2045.5	2094.9	2099.8
160°	1832.9	1849.4	1865.9	1870.0	1895.5	1929.7	1946.7	1974.9	2031.4	2073.8	2076.6
162.5°	1863.3	1875.7	1888.0	1891.1	1909.7	1934.4	1946.7	1970.6	2018.2	2053.9	2056.6
165°	1896.4	1907.5	1918.7	1921.5	1930.0	1941.1	1946.7	1963.8	1997.9	2023.4	2026.2
167.5°	1926.9	1932.2	1937.4	1938.7	1945.8	1955.3	1959.9	1971.1	1993.4	2010.2	2011.4
170°	1946.7	1952.0	1957.3	1958.6	1959.0	1959.6	1959.9	1971.1	1993.4	2010.2	2010.2
172.5°	1957.3	1958.5	1959.7	1959.9	1959.9	1959.9	1959.9	1968.8	1986.4	1999.6	1998.6
175°	1971.9	1971.9	1971.9	1971.9	1967.9	1962.6	1959.9	1965.6	1976.7	1985.1	1985.1
177.5°	1971.9	1971.9	1971.9	1971.9	1968.8	1964.6	1962.6	1967.0	1975.8	1982.4	1981.2
180°	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	794.9	794.9
2.5°	848.6	843.5
5°	1091.5	1096.6
7.5°	1469.8	1467.2
10°	1827.6	1850.6
12.5°	2088.3	2093.4
15°	2246.8	2257.0
17.5°	2308.2	2310.7
20°	2310.7	2305.6
22.5°	2282.6	2277.5
25°	2249.4	2246.8
27.5°	2218.7	2221.2
30°	2205.9	2213.6
32.5°	2205.9	2218.7
35°	2211.0	2223.8
37.5°	2208.5	2223.8
40°	2198.2	2216.1
42.5°	2170.1	2182.9
45°	2126.7	2142.0
47.5°	2070.4	2080.7
50°	1998.9	2009.1
52.5°	1909.4	1912.0
55°	1802.1	1812.3
57.5°	1687.0	1689.6
60°	1559.2	1566.9
62.5°	1423.8	1423.8
65°	1280.6	1285.8
67.5°	1132.4	1145.2
70°	981.6	984.1
72.5°	833.3	833.3
75°	679.9	682.5
77.5°	534.2	534.2
80°	396.2	398.7
82.5°	273.5	278.6
85°	171.3	171.3
87.5°	79.2	71.6
90°	50.3	50.3
92.5°	201.4	161.5
95°	702.1	581.0
97.5°	1682.3	1451.7
100°	2423.9	2149.2
102.5°	3153.3	2918.1
105°	4083.4	3956.9
107.5°	4692.6	4723.1
110°	4924.9	5056.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4945.6	5148.0
115°	4814.5	5095.0
117.5°	4536.4	4847.5
120°	4312.3	4614.6
122.5°	4094.1	4392.3
125°	3782.8	4057.5
127.5°	3502.8	3734.6
130°	3337.9	3552.0
132.5°	3188.2	3379.9
135°	2983.0	3148.3
137.5°	2818.5	2953.8
140°	2705.6	2832.0
142.5°	2612.1	2720.9
145°	2471.7	2554.1
147.5°	2364.1	2432.4
150°	2296.4	2351.7
152.5°	2238.5	2280.2
155°	2171.8	2199.4
157.5°	2119.2	2138.6
160°	2087.7	2098.9
162.5°	2067.1	2077.7
165°	2037.4	2048.6
167.5°	2016.1	2020.8
170°	2010.2	2010.2
172.5°	1994.4	1990.4
175°	1985.1	1985.1
177.5°	1976.6	1971.9
180°	1971.9	1971.9



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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	2.27	3.02	3.36	4.11	5.61	15.47	16.21	16.55	17.30	18.80
	3H	2.97	3.64	4.07	4.74	6.25	17.30	17.97	18.40	19.07	20.59
	4H	3.26	3.90	4.37	5.00	6.52	17.94	18.58	19.05	19.68	21.20
	6H	3.51	4.09	4.62	5.20	6.73	18.37	18.96	19.49	20.06	21.60
	8H	3.57	4.13	4.69	5.25	6.77	18.49	19.05	19.61	20.17	21.70
	12H	3.58	4.11	4.71	5.23	6.78	18.56	19.09	19.68	20.20	21.75
4H	2H	9.48	10.12	10.60	11.22	12.74	15.72	16.36	16.84	17.46	18.98
	3H	11.04	11.57	12.16	12.70	14.23	17.76	18.30	18.89	19.42	20.96
	4H	11.13	11.62	12.25	12.73	14.29	18.53	19.02	19.66	20.14	21.69
	6H	11.13	11.55	12.26	12.69	14.24	19.07	19.49	20.20	20.63	22.17
	8H	11.11	11.50	12.24	12.63	14.19	19.23	19.62	20.36	20.75	22.31
	12H	11.06	11.41	12.21	12.55	14.12	19.32	19.67	20.47	20.82	22.39
8H	4H	12.57	12.96	13.70	14.09	15.65	18.58	18.97	19.71	20.10	21.67
	6H	12.80	13.13	13.96	14.30	15.86	19.21	19.53	20.36	20.71	22.27
	8H	12.82	13.10	13.98	14.26	15.83	19.43	19.71	20.59	20.87	22.45
	12H	12.78	13.03	13.95	14.18	15.79	19.57	19.82	20.74	20.97	22.58
12H	4H	12.70	13.06	13.85	14.20	15.77	18.53	18.88	19.68	20.03	21.59
	6H	13.06	13.35	14.22	14.50	16.08	19.19	19.47	20.35	20.63	22.21
	8H	13.12	13.37	14.29	14.52	16.14	19.42	19.67	20.58	20.82	22.43