

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: P937827

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937827
REPORT IS A COMBINATION OF REPORTS P933589 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

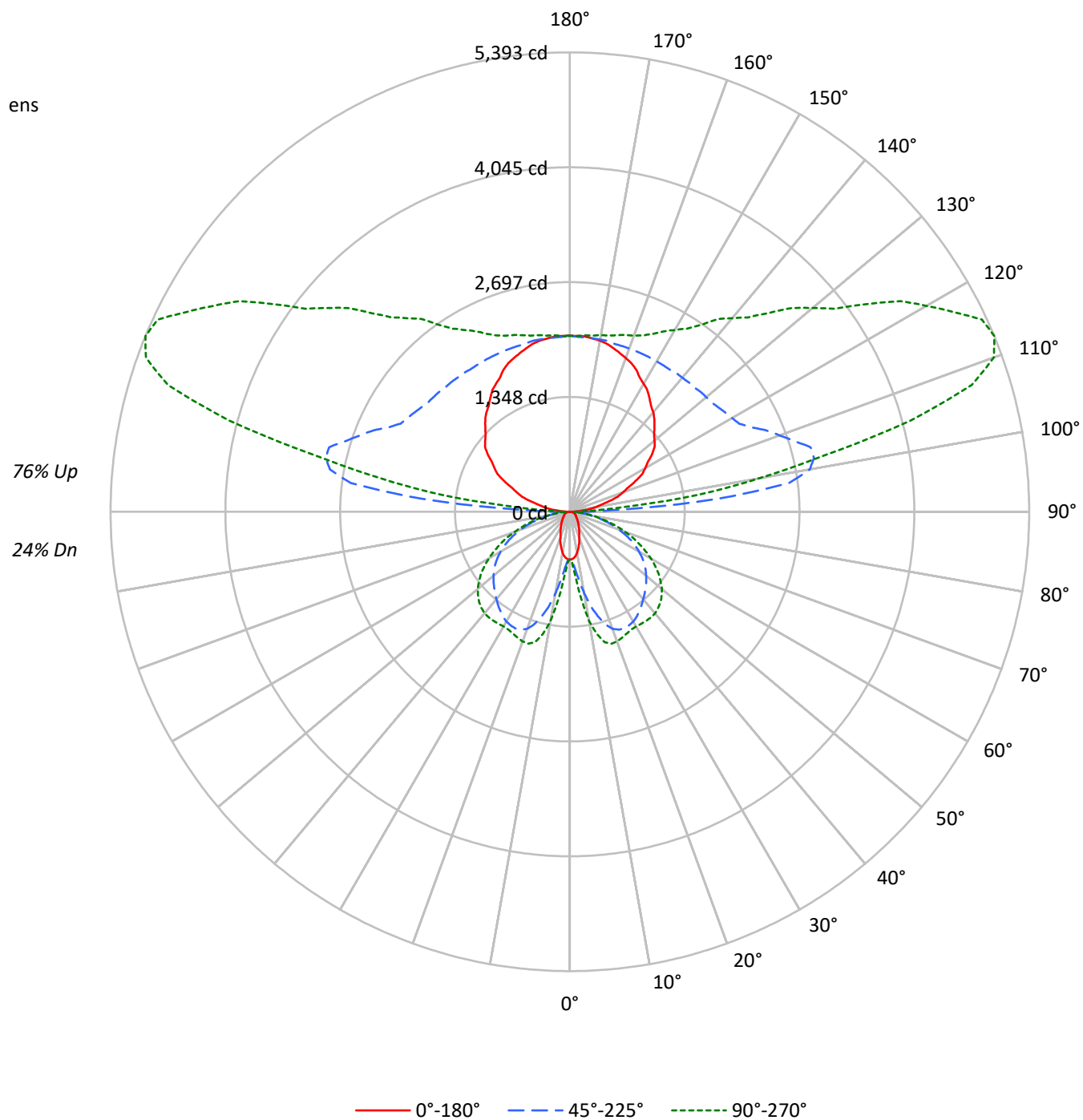
Lumens per Lamp: N/A
Luminaire Lumens: 17721.2 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 142.8
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

TEST NUMBER: P937827

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1728	1728	1728
5°	1688	1997	2322
10°	1532	2912	3850
15°	1303	3806	4649
20°	1061	4411	4738
25°	886	4617	4642
30°	747	4648	4633
35°	661	4572	4753
40°	576	4473	4877
45°	522	4401	4896
50°	479	4336	4815
55°	459	4241	4601
60°	471	4057	4264
65°	491	3775	3801
70°	524	3295	3211
75°	583	2688	2506
80°	643	1867	1689
85°	580	992	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	0.4
10°-20°	320.2	1.8
20°-30°	560.1	3.2
30°-40°	721.1	4.1
40°-50°	805.4	4.5
50°-60°	771.4	4.4
60°-70°	611.3	3.4
70°-80°	359.5	2.0
80°-90°	107.8	0.6
90°-100°	1007.0	5.7
100°-110°	2647.5	14.9
110°-120°	2745.1	15.5
120°-130°	2201.9	12.4
130°-140°	1727.7	9.7
140°-150°	1326.1	7.5
150°-160°	955.0	5.4
160°-170°	584.3	3.3
170°-180°	197.4	1.1
0°-30°	952.6	5.4
0°-40°	1673.7	9.4
0°-60°	3250.5	18.3
0°-90°	4329.1	24.4
90°-120°	6399.6	36.1
90°-150°	11655.4	65.8
90°-180°	13392.0	75.6
0°-180°	17721.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	544	584	657	744	770	50
15°	408	753	1268	1537	1586	113
25°	260	853	1510	1577	1579	120
35°	176	815	1422	1503	1563	110
45°	120	650	1257	1440	1505	93
55°	86	413	1067	1239	1273	79
65°	68	219	792	891	903	68
75°	50	135	435	478	480	53
85°	18	41	108	118	120	19
90°	14	39	105	53	53	13
95°	133	521	1734	894	609	148
105°	477	722	2927	4444	4146	506
115°	847	1029	2345	4677	5338	837
125°	1178	1321	2132	3603	4251	1046
135°	1404	1546	2066	2909	3298	1087
145°	1629	1733	2040	2482	2676	1021
155°	1841	1892	2040	2239	2304	846
165°	1987	2013	2040	2120	2146	561
175°	2066	2066	2053	2080	2080	196
180°	2066	2066	2066	2066	2066	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6
2.5°	558.6	558.6	562.2	564.0	567.5	569.3	573.0	576.5	587.3	589.1	592.7
5°	544.2	551.4	574.8	583.7	608.9	643.0	657.3	680.7	729.2	743.6	752.6
7.5°	522.6	538.8	596.3	610.6	673.6	763.4	801.0	851.4	928.6	966.3	996.8
10°	488.5	522.6	625.0	659.2	761.5	898.1	968.0	1038.1	1154.9	1207.0	1226.7
12.5°	450.8	506.5	655.5	702.2	849.5	1048.9	1133.4	1210.6	1343.5	1413.6	1424.3
15°	407.7	483.2	684.3	752.6	943.0	1174.6	1268.1	1363.2	1487.2	1537.4	1550.0
17.5°	370.0	465.1	711.2	783.1	1014.8	1287.8	1382.9	1462.0	1562.6	1596.7	1605.7
20°	323.3	436.5	729.2	822.6	1090.2	1370.4	1462.0	1523.1	1591.4	1612.9	1616.4
22.5°	289.2	405.9	740.0	837.0	1140.5	1420.7	1497.9	1546.5	1593.1	1600.3	1602.1
25°	260.5	371.8	738.2	853.2	1183.6	1451.2	1510.5	1546.5	1573.3	1577.0	1577.0
27.5°	233.5	334.1	731.0	856.7	1215.9	1458.5	1505.1	1530.2	1542.8	1550.0	1550.0
30°	210.1	298.1	713.0	849.5	1230.3	1451.2	1489.0	1501.6	1514.1	1524.9	1530.2
32.5°	192.2	264.0	686.1	835.1	1232.1	1433.3	1460.2	1467.4	1485.3	1510.5	1519.5
35°	176.0	229.9	655.5	815.4	1221.4	1404.5	1422.5	1429.7	1465.6	1503.4	1515.8
37.5°	159.9	204.8	616.1	781.3	1205.1	1370.4	1382.9	1395.5	1451.2	1496.1	1510.5
40°	143.7	183.2	569.3	743.6	1180.0	1329.1	1339.9	1359.6	1433.3	1485.3	1499.7
42.5°	131.1	165.2	519.1	704.1	1147.7	1282.4	1298.6	1327.3	1411.7	1467.4	1483.5
45°	120.3	147.3	465.1	650.2	1106.4	1233.9	1257.3	1296.8	1386.6	1440.4	1454.8
47.5°	109.5	134.7	409.5	594.5	1061.5	1185.4	1215.9	1260.8	1352.4	1404.5	1417.1
50°	100.6	122.1	353.8	535.2	1012.9	1133.4	1169.2	1215.9	1309.4	1357.9	1374.0
52.5°	93.4	111.4	301.7	475.9	957.3	1079.4	1120.8	1169.2	1257.3	1303.9	1314.7
55°	86.2	102.4	256.8	413.1	899.9	1022.0	1066.9	1113.5	1199.8	1239.3	1246.5
57.5°	82.7	95.2	219.1	353.8	838.8	957.3	1007.6	1050.7	1131.5	1162.1	1169.2
60°	77.2	89.8	190.4	303.6	772.3	896.3	939.4	982.4	1050.7	1075.9	1081.2
62.5°	71.9	86.2	168.8	255.0	704.1	824.4	867.5	907.0	964.5	982.4	989.6
65°	68.3	82.7	152.6	219.1	634.0	749.0	792.1	826.2	872.9	890.8	894.4
67.5°	64.6	79.0	140.1	188.6	564.0	673.6	705.9	738.2	774.1	792.1	793.9
70°	59.3	75.4	129.3	167.0	492.1	587.3	614.3	648.4	677.1	686.1	691.5
72.5°	55.7	70.1	122.1	150.9	418.5	504.7	529.9	549.6	574.8	583.7	583.7
75°	50.3	62.8	115.0	134.7	343.0	413.1	434.6	454.4	474.2	477.7	472.4
77.5°	44.9	55.7	98.8	113.2	267.6	326.9	344.8	355.6	371.8	375.3	377.1
80°	37.8	48.5	77.2	88.0	194.0	240.7	253.2	262.3	276.6	276.6	280.2
82.5°	28.7	37.8	55.7	62.8	131.1	165.2	176.0	181.4	190.4	190.4	190.4
85°	17.9	23.4	35.9	41.3	79.0	100.6	107.7	109.5	116.8	118.5	118.5
87.5°	9.0	12.6	23.4	25.2	41.3	52.1	52.1	55.7	55.7	53.9	52.1
90°	13.8	24.9	36.1	38.8	61.0	90.5	105.3	93.6	70.2	52.7	52.7
92.5°	55.4	149.7	244.0	267.6	376.2	521.0	593.4	520.0	373.4	263.4	253.0
95°	133.1	305.6	478.2	521.3	925.6	1464.9	1734.4	1547.7	1174.3	894.3	862.5
97.5°	230.1	382.3	534.6	572.6	1246.9	2145.9	2595.5	2477.5	2241.5	2064.5	2004.0
100°	305.0	443.1	581.1	615.6	1363.8	2361.5	2860.3	2869.0	2886.2	2899.1	2827.2
102.5°	368.8	497.6	626.4	658.6	1417.5	2429.3	2935.2	3085.5	3386.2	3611.8	3550.2
105°	476.9	586.0	695.1	722.4	1457.2	2436.9	2926.8	3263.9	3938.1	4443.6	4410.5
107.5°	587.9	689.5	791.2	816.7	1464.6	2328.6	2760.5	3230.7	4170.9	4876.2	4884.2
110°	662.8	754.5	846.4	869.3	1453.5	2232.4	2621.8	3147.5	4198.7	4987.2	5021.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	736.2	823.7	911.2	933.1	1453.9	2148.4	2495.7	3033.7	4109.5	4916.5	4969.5
115°	847.1	927.8	1008.6	1028.7	1467.4	2052.1	2344.6	2862.8	3899.2	4676.6	4750.1
117.5°	956.7	1030.0	1103.4	1121.7	1494.6	1991.9	2240.6	2708.3	3643.7	4345.2	4426.7
120°	1020.4	1089.4	1158.5	1175.8	1516.8	1971.6	2199.0	2626.4	3481.0	4122.0	4201.2
122.5°	1082.8	1152.5	1222.1	1239.5	1548.7	1961.0	2167.1	2551.9	3321.5	3898.8	3976.9
125°	1178.5	1242.0	1305.5	1321.3	1591.7	1952.2	2132.4	2459.3	3113.1	3603.4	3675.4
127.5°	1256.2	1320.3	1384.4	1400.3	1634.7	1947.1	2103.3	2383.9	2945.3	3366.3	3427.0
130°	1297.8	1366.8	1435.8	1453.0	1666.1	1950.2	2092.2	2342.1	2841.8	3216.6	3272.7
132.5°	1340.7	1409.7	1478.8	1496.0	1691.5	1952.2	2082.5	2306.2	2753.6	3089.1	3139.3
135°	1404.5	1467.4	1530.2	1545.9	1719.3	1950.4	2065.9	2253.2	2627.9	2908.9	2952.2
137.5°	1469.7	1531.9	1594.1	1609.7	1760.8	1962.3	2063.1	2221.5	2538.2	2775.7	2811.1
140°	1523.7	1581.0	1638.3	1652.7	1786.2	1964.3	2053.4	2190.1	2463.7	2668.9	2702.1
142.5°	1565.3	1618.3	1671.3	1684.6	1807.5	1971.4	2053.4	2173.5	2413.9	2594.1	2622.6
145°	1629.1	1675.4	1721.6	1733.1	1835.2	1971.4	2039.5	2137.8	2334.4	2481.8	2503.4
147.5°	1692.9	1737.8	1782.8	1794.1	1875.9	1985.0	2039.5	2116.8	2271.5	2387.5	2405.3
150°	1734.4	1775.2	1815.9	1826.0	1897.2	1992.1	2039.5	2104.9	2235.5	2333.4	2347.9
152.5°	1777.5	1808.3	1839.2	1846.8	1911.1	1996.7	2039.5	2095.3	2206.8	2290.5	2301.4
155°	1841.2	1864.1	1886.8	1892.5	1941.5	2006.9	2039.5	2083.9	2172.6	2239.1	2246.4
157.5°	1888.4	1910.6	1932.8	1938.3	1972.1	2017.1	2039.5	2074.0	2143.0	2194.8	2199.9
160°	1920.3	1937.5	1954.8	1959.1	1985.9	2021.7	2039.5	2069.1	2128.3	2172.6	2175.6
162.5°	1952.2	1965.1	1978.0	1981.3	2000.7	2026.6	2039.5	2064.5	2114.4	2151.8	2154.6
165°	1986.8	1998.5	2010.2	2013.1	2022.0	2033.7	2039.5	2057.4	2093.1	2119.9	2122.8
167.5°	2018.7	2024.3	2029.8	2031.2	2038.6	2048.5	2053.4	2065.1	2088.5	2106.0	2107.3
170°	2039.5	2045.1	2050.6	2052.0	2052.4	2053.0	2053.4	2065.1	2088.5	2106.0	2106.0
172.5°	2050.6	2051.9	2053.1	2053.4	2053.4	2053.4	2053.4	2062.7	2081.1	2095.0	2093.9
175°	2065.9	2065.9	2065.9	2065.9	2061.7	2056.2	2053.4	2059.3	2071.0	2079.7	2079.7
177.5°	2065.9	2065.9	2065.9	2065.9	2062.7	2058.3	2056.2	2060.8	2070.0	2076.9	2075.7
180°	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	558.6	558.6
2.5°	596.3	592.7
5°	766.9	770.5
7.5°	1032.8	1031.0
10°	1284.2	1300.4
12.5°	1467.4	1470.9
15°	1578.8	1585.9
17.5°	1621.9	1623.7
20°	1623.7	1620.1
22.5°	1603.9	1600.3
25°	1580.6	1578.8
27.5°	1559.0	1560.8
30°	1550.0	1555.4
32.5°	1550.0	1559.0
35°	1553.6	1562.6
37.5°	1551.8	1562.6
40°	1544.6	1557.2
42.5°	1524.9	1533.9
45°	1494.3	1505.1
47.5°	1454.8	1462.0
50°	1404.5	1411.7
52.5°	1341.7	1343.5
55°	1266.3	1273.4
57.5°	1185.4	1187.2
60°	1095.6	1101.0
62.5°	1000.4	1000.4
65°	899.9	903.4
67.5°	795.7	804.6
70°	689.7	691.5
72.5°	585.6	585.6
75°	477.7	479.5
77.5°	375.3	375.3
80°	278.4	280.2
82.5°	192.2	195.8
85°	120.3	120.3
87.5°	55.7	50.3
90°	52.7	52.7
92.5°	211.0	169.2
95°	735.6	608.7
97.5°	1762.5	1520.9
100°	2539.4	2251.6
102.5°	3303.7	3057.2
105°	4278.1	4145.6
107.5°	4916.3	4948.3
110°	5159.7	5297.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5181.4	5393.4
115°	5044.0	5338.0
117.5°	4752.7	5078.7
120°	4517.9	4834.6
122.5°	4289.3	4601.7
125°	3963.1	4250.9
127.5°	3669.8	3912.6
130°	3497.0	3721.3
132.5°	3340.2	3541.0
135°	3125.2	3298.4
137.5°	2952.9	3094.6
140°	2834.6	2967.1
142.5°	2736.6	2850.6
145°	2589.6	2675.9
147.5°	2476.8	2548.3
150°	2405.9	2463.8
152.5°	2345.2	2388.9
155°	2275.4	2304.3
157.5°	2220.2	2240.6
160°	2187.3	2199.0
162.5°	2165.7	2176.7
165°	2134.5	2146.3
167.5°	2112.2	2117.1
170°	2106.0	2106.0
172.5°	2089.5	2085.2
175°	2079.7	2079.7
177.5°	2070.8	2065.9
180°	2065.9	2065.9

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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	0.00	0.58	1.04	1.72	3.31	13.09	13.77	14.23	14.91	16.50
	3H	0.59	1.20	1.74	2.35	3.96	14.92	15.53	16.07	16.68	18.29
	4H	0.88	1.46	2.04	2.61	4.22	15.56	16.15	16.72	17.29	18.90
	6H	1.12	1.66	2.29	2.80	4.43	15.98	16.52	17.15	17.67	19.30
	8H	1.18	1.69	2.35	2.86	4.47	16.10	16.62	17.27	17.78	19.39
	12H	1.19	1.68	2.37	2.83	4.47	16.17	16.65	17.34	17.81	19.45
4H	2H	7.10	7.68	8.27	8.83	10.44	13.34	13.93	14.51	15.07	16.68
	3H	8.65	9.14	9.82	10.31	11.93	15.37	15.86	16.55	17.03	18.66
	4H	8.73	9.19	9.91	10.34	11.99	16.14	16.59	17.31	17.75	19.39
	6H	8.73	9.12	9.92	10.30	11.94	16.67	17.06	17.85	18.24	19.87
	8H	8.71	9.07	9.89	10.24	11.89	16.83	17.19	18.01	18.36	20.01
	12H	8.65	8.98	9.85	10.17	11.82	16.92	17.24	18.11	18.43	20.08
8H	4H	10.17	10.53	11.35	11.70	13.35	16.18	16.54	17.36	17.71	19.37
	6H	10.40	10.70	11.60	11.91	13.56	16.81	17.10	18.01	18.32	19.97
	8H	10.42	10.68	11.62	11.87	13.54	17.03	17.29	18.23	18.48	20.15
	12H	10.38	10.60	11.59	11.79	13.49	17.17	17.39	18.38	18.58	20.28
12H	4H	10.30	10.63	11.50	11.81	13.47	16.12	16.45	17.32	17.64	19.29
	6H	10.66	10.92	11.86	12.11	13.78	16.79	17.05	17.99	18.24	19.91
	8H	10.72	10.95	11.93	12.14	13.84	17.01	17.24	18.22	18.43	20.13