

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
(formerly Eaton)

Brand: CORELITE

Report Number: P519599

Luminaire Tested: **SQ4-WB-150U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519599
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

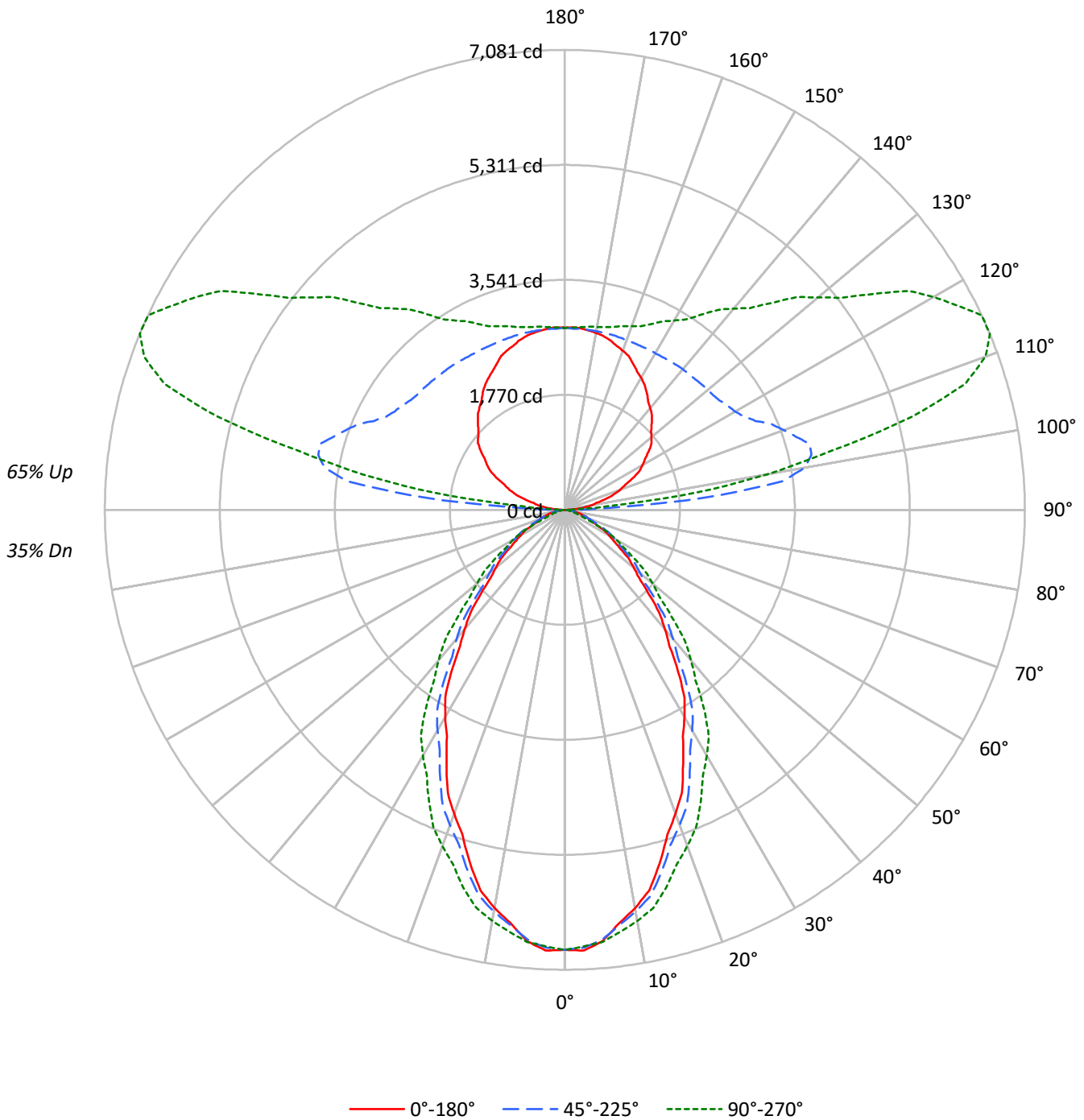
Lumens per Lamp: N/A
Luminaire Lumens: 27948.9 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
Input Voltage (V): 120
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



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20069
15°	17943	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15517
35°	11428	12253	14005
40°	9618	10382	12124
45°	7938	8623	10122
50°	6627	7225	8433
55°	5626	6200	6964
60°	4808	5375	5558
65°	3828	4520	3590
70°	3394	3528	2191
75°	3143	2861	1343
80°	2896	2632	1158
85°	2622	2414	946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	621.4	2.2
10°-20°	1616.2	5.8
20°-30°	2093.4	7.5
30°-40°	2049.9	7.3
40°-50°	1569.1	5.6
50°-60°	1045.6	3.7
60°-70°	570.6	2.0
70°-80°	237.7	0.9
80°-90°	73.2	0.3
90°-100°	1302.7	4.7
100°-110°	3522.1	12.6
110°-120°	3703.0	13.2
120°-130°	3007.8	10.8
130°-140°	2359.4	8.4
140°-150°	1810.8	6.5
150°-160°	1302.3	4.7
160°-170°	795.6	2.8
170°-180°	268.2	1.0
0°-30°	4330.9	15.5
0°-40°	6380.8	22.8
0°-60°	8995.5	32.2
0°-90°	9877.0	35.3
90°-120°	8527.7	30.5
90°-150°	15705.8	56.2
90°-180°	18072.0	64.7
0°-180°	27948.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6774	6774	6774	6774	6774	
5°	6664	6597	6640	6656	6679	620
15°	5636	5615	5766	5923	6025	1574
25°	4307	4319	4542	4740	4949	1981
35°	3044	3058	3264	3483	3730	1892
45°	1825	1860	1983	2133	2327	1423
55°	1049	1093	1156	1200	1299	951
65°	526	570	621	543	493	547
75°	264	264	241	165	113	282
85°	74	74	68	44	27	81
90°	6	18	39	42	39	17
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6774.1	6774.1	6774.1	6774.1	6774.1
2.5°	6790.8	6730.3	6745.6	6745.2	6726.6
5°	6664.2	6597.3	6640.4	6655.8	6679.0
7.5°	6416.9	6366.3	6444.8	6502.9	6550.0
10°	6224.2	6180.7	6280.7	6365.3	6426.4
12.5°	6000.7	5964.1	6088.1	6201.7	6281.3
15°	5635.7	5615.4	5766.5	5923.4	6025.1
17.5°	5245.1	5235.3	5408.6	5591.7	5721.9
20°	4978.8	4975.9	5166.1	5356.8	5507.9
22.5°	4710.1	4716.5	4916.4	5114.7	5286.7
25°	4307.0	4318.7	4541.9	4739.8	4949.1
27.5°	3934.3	3939.5	4170.3	4379.3	4602.5
30°	3679.9	3694.4	3920.6	4136.9	4369.5
32.5°	3425.4	3442.3	3663.8	3887.4	4124.5
35°	3043.8	3058.3	3263.7	3483.3	3730.4
37.5°	2650.2	2670.0	2852.3	3060.0	3303.0
40°	2395.8	2424.8	2586.0	2781.7	3020.0
42.5°	2150.8	2186.9	2336.3	2521.9	2737.0
45°	1825.1	1859.9	1982.6	2132.7	2327.4
47.5°	1544.5	1584.6	1678.8	1808.0	1974.3
50°	1385.1	1422.9	1510.0	1605.7	1762.6
52.5°	1244.8	1282.6	1360.2	1434.0	1567.7
55°	1049.3	1092.9	1156.3	1200.1	1298.9
57.5°	888.8	930.6	980.9	1000.7	1060.6
60°	781.7	828.2	873.9	871.6	903.6
62.5°	684.3	723.8	769.3	737.8	739.5
65°	526.1	569.7	621.2	542.8	493.4
67.5°	425.1	434.4	487.5	378.5	319.8
70°	377.5	377.5	392.4	293.1	243.7
72.5°	332.3	332.3	318.6	238.4	186.7
75°	264.5	264.5	240.8	165.3	113.0
77.5°	203.9	201.6	184.3	123.3	82.0
80°	163.5	163.5	148.6	97.4	65.4
82.5°	127.8	127.8	115.3	76.1	48.7
85°	74.3	74.3	68.4	44.2	26.8
87.5°	27.4	29.7	31.6	22.6	19.7
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)