

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: P519563

Luminaire Tested: **SQ4-WB-150U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519563
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-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

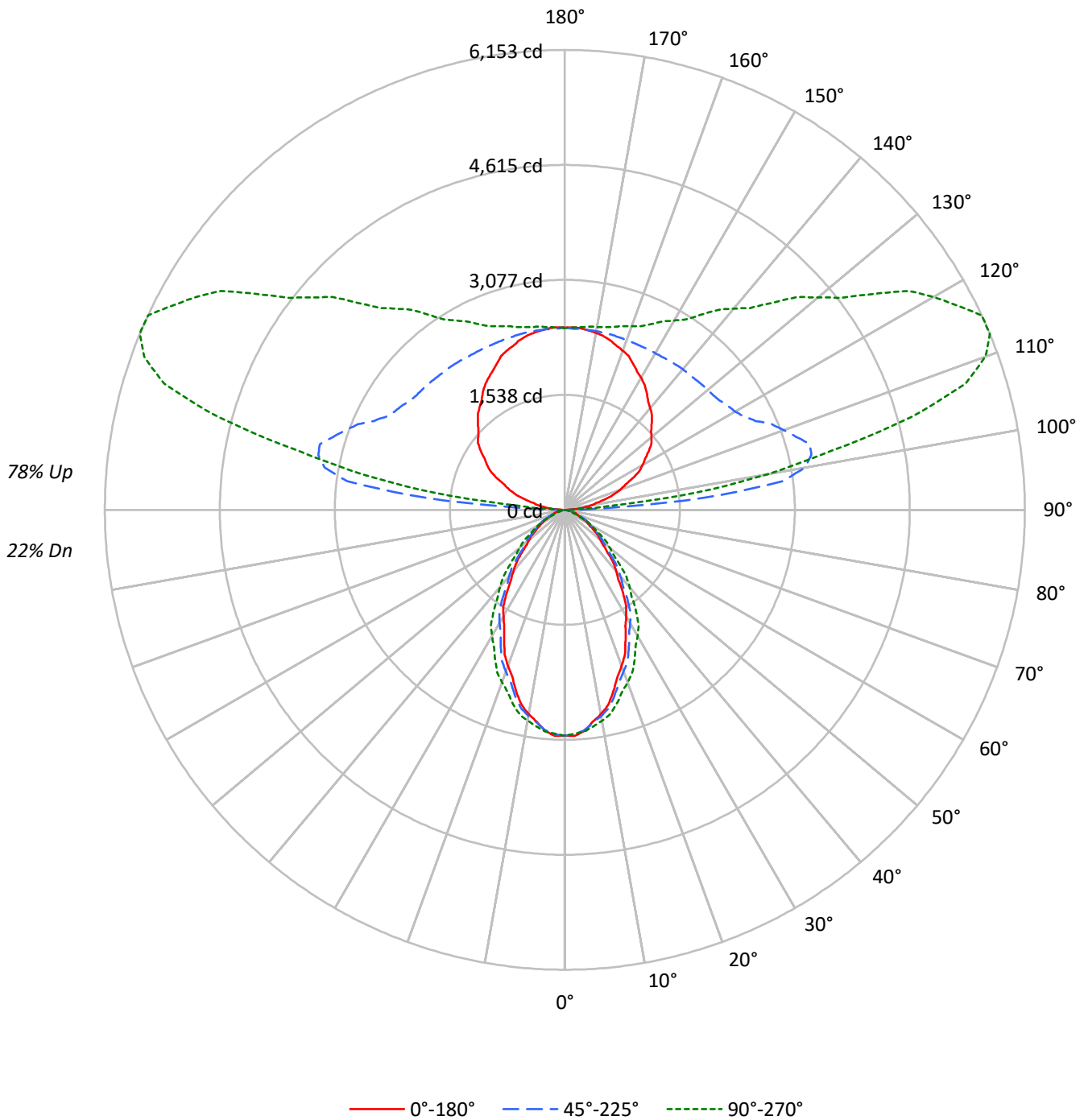
Lumens per Lamp: N/A
Luminaire Lumens: 20108.5 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9140	9193
10°	8666	8744	8947
15°	8000	8185	8553
20°	7265	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4628	5405
45°	3539	3844	4513
50°	2954	3221	3760
55°	2508	2764	3105
60°	2144	2396	2478
65°	1707	2016	1601
70°	1513	1573	977
75°	1401	1275	599
80°	1291	1174	517
85°	1168	1076	420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.0	1.4
10°-20°	720.5	3.6
20°-30°	933.3	4.6
30°-40°	913.9	4.5
40°-50°	699.6	3.5
50°-60°	466.1	2.3
60°-70°	254.4	1.3
70°-80°	106.0	0.5
80°-90°	35.1	0.2
90°-100°	1131.9	5.6
100°-110°	3060.3	15.2
110°-120°	3217.5	16.0
120°-130°	2613.5	13.0
130°-140°	2050.0	10.2
140°-150°	1573.4	7.8
150°-160°	1131.6	5.6
160°-170°	691.3	3.4
170°-180°	233.1	1.2
0°-30°	1930.8	9.6
0°-40°	2844.8	14.1
0°-60°	4010.5	19.9
0°-90°	4406.0	21.9
90°-120°	7409.7	36.8
90°-150°	13646.6	67.9
90°-180°	15703.0	78.1
0°-180°	20108.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3020	3020	3020	3020	3020	
5°	2971	2941	2960	2967	2978	276
15°	2513	2504	2571	2641	2686	702
25°	1920	1925	2025	2113	2206	883
35°	1357	1364	1455	1553	1663	844
45°	814	829	884	951	1038	635
55°	468	487	516	535	579	424
65°	235	254	277	242	220	244
75°	118	118	107	74	50	126
85°	33	33	30	20	12	36
90°	5	16	34	37	34	13
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3020.1	3020.1	3020.1	3020.1	3020.1
2.5°	3027.5	3000.6	3007.4	3007.2	2998.9
5°	2971.1	2941.3	2960.5	2967.3	2977.7
7.5°	2860.8	2838.3	2873.3	2899.2	2920.2
10°	2775.0	2755.5	2800.1	2837.9	2865.1
12.5°	2675.3	2659.0	2714.3	2764.9	2800.4
15°	2512.6	2503.5	2570.9	2640.8	2686.2
17.5°	2338.4	2334.0	2411.3	2492.9	2551.0
20°	2219.7	2218.4	2303.2	2388.2	2455.6
22.5°	2099.9	2102.8	2191.9	2280.3	2357.0
25°	1920.2	1925.4	2024.9	2113.2	2206.4
27.5°	1754.0	1756.4	1859.2	1952.4	2051.9
30°	1640.6	1647.1	1747.9	1844.4	1948.0
32.5°	1527.2	1534.7	1633.4	1733.1	1838.8
35°	1357.0	1363.5	1455.1	1553.0	1663.1
37.5°	1181.5	1190.4	1271.7	1364.2	1472.6
40°	1068.1	1081.1	1152.9	1240.1	1346.4
42.5°	958.9	975.0	1041.6	1124.4	1220.2
45°	813.7	829.2	883.9	950.8	1037.6
47.5°	688.6	706.5	748.5	806.1	880.2
50°	617.5	634.4	673.2	715.9	785.8
52.5°	555.0	571.8	606.4	639.3	698.9
55°	467.8	487.2	515.5	535.1	579.1
57.5°	396.2	414.9	437.3	446.1	472.8
60°	348.5	369.3	389.6	388.6	402.9
62.5°	305.1	322.7	343.0	328.9	329.7
65°	234.6	254.0	277.0	242.0	220.0
67.5°	189.5	193.6	217.3	168.8	142.6
70°	168.3	168.3	174.9	130.7	108.7
72.5°	148.2	148.2	142.1	106.3	83.2
75°	117.9	117.9	107.3	73.7	50.4
77.5°	90.9	89.9	82.2	55.0	36.6
80°	72.9	72.9	66.3	43.4	29.2
82.5°	57.0	57.0	51.4	33.9	21.7
85°	33.1	33.1	30.5	19.7	11.9
87.5°	12.7	14.8	17.4	13.7	12.1
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)