

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: P565161

Luminaire Tested: **SQ4-PW1-150U-100D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565161
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

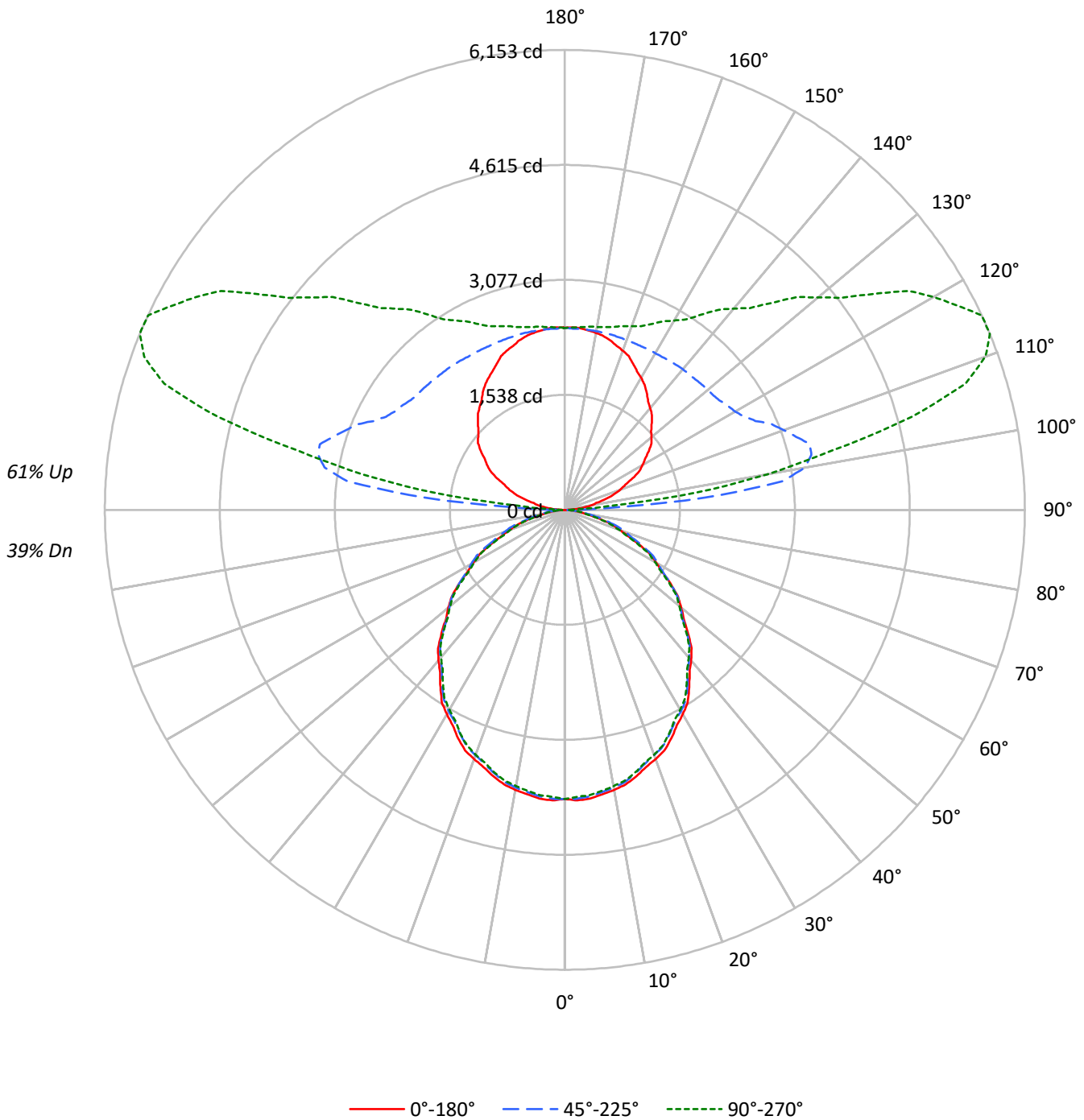
Lumens per Lamp: N/A
Luminaire Lumens: 25549.9 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11897	11897	11897
5°	11974	11879	11827
10°	11878	11782	11718
15°	11752	11622	11579
20°	11612	11433	11411
25°	11450	11242	11207
30°	11208	11038	10966
35°	10890	10736	10672
40°	10550	10385	10345
45°	10139	10006	9962
50°	9719	9637	9572
55°	9265	9265	9119
60°	8700	8868	8553
65°	7962	8358	7763
70°	7018	7693	6835
75°	5994	6885	5832
80°	4647	5795	4707
85°	3006	4450	3970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.3	1.4
10°-20°	1028.4	4.0
20°-30°	1525.5	6.0
30°-40°	1785.0	7.0
40°-50°	1777.0	7.0
50°-60°	1534.5	6.0
60°-70°	1104.6	4.3
70°-80°	579.3	2.3
80°-90°	148.7	0.6
90°-100°	1131.9	4.4
100°-110°	3060.3	12.0
110°-120°	3217.5	12.6
120°-130°	2613.5	10.2
130°-140°	2050.0	8.0
140°-150°	1573.4	6.2
150°-160°	1131.6	4.4
160°-170°	691.3	2.7
170°-180°	233.1	0.9
0°-30°	2918.2	11.4
0°-40°	4703.2	18.4
0°-60°	8014.8	31.4
0°-90°	9847.4	38.5
90°-120°	7409.7	29.0
90°-150°	13646.6	53.4
90°-180°	15703.0	61.5
0°-180°	25549.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3868	3868	3868	3868	3868	
5°	3879	3835	3848	3838	3831	367
15°	3691	3644	3650	3643	3637	1040
25°	3374	3318	3313	3293	3303	1552
35°	2900	2860	2860	2832	2842	1813
45°	2331	2311	2301	2294	2290	1799
55°	1728	1725	1728	1704	1701	1542
65°	1094	1127	1149	1104	1067	1084
75°	504	551	579	541	491	541
85°	85	112	126	119	112	113
90°	5	16	34	37	34	15
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°	3868.4	3868.4	3868.4	3868.4	<i>3868.4</i>
2.5°	3890.2	3858.2	3868.4	3859.8	<i>3841.2</i>
5°	3878.6	3835.3	3848.0	3837.6	<i>3830.9</i>
7.5°	3839.1	3799.1	3808.4	3797.4	<i>3793.4</i>
10°	3803.7	3763.7	3773.0	3759.2	<i>3752.5</i>
12.5°	3762.8	3720.1	3729.4	3715.6	<i>3711.6</i>
15°	3691.2	3644.5	3650.3	3643.3	<i>3636.7</i>
17.5°	3608.0	3560.7	3561.7	3550.7	<i>3549.4</i>
20°	3548.0	3498.1	3493.5	3480.0	<i>3486.7</i>
22.5°	3482.6	3429.9	3425.3	3406.5	<i>3415.8</i>
25°	3374.2	3317.6	3312.9	3292.6	<i>3302.6</i>
27.5°	3248.8	3192.8	3192.9	3164.5	<i>3175.2</i>
30°	3156.1	3102.8	3108.4	3074.6	<i>3087.9</i>
32.5°	3057.9	3009.9	3012.9	2979.2	<i>2992.5</i>
35°	2900.5	2860.5	2859.6	2832.5	<i>2842.5</i>
37.5°	2739.6	2704.3	2698.7	2683.1	<i>2685.7</i>
40°	2627.8	2597.8	2586.9	2576.7	<i>2576.7</i>
42.5°	2510.6	2483.2	2472.4	2464.8	<i>2462.2</i>
45°	2331.3	2311.3	2300.6	2293.7	<i>2290.4</i>
47.5°	2154.0	2135.4	2126.1	2121.3	<i>2117.9</i>
50°	2031.3	2018.0	2014.3	2004.0	<i>2000.7</i>
52.5°	1908.6	1900.7	1897.1	1884.0	<i>1880.7</i>
55°	1728.0	1724.7	1728.0	1704.1	<i>1700.7</i>
57.5°	1539.9	1545.2	1556.2	1524.0	<i>1516.0</i>
60°	1414.4	1427.8	1441.7	1403.9	<i>1390.6</i>
62.5°	1286.3	1307.6	1327.2	1283.8	<i>1265.2</i>
65°	1094.1	1127.4	1148.6	1103.5	<i>1066.8</i>
67.5°	908.7	950.0	975.5	926.8	<i>885.5</i>
70°	780.5	827.2	855.5	806.7	<i>760.1</i>
72.5°	668.7	720.7	743.7	697.6	<i>651.0</i>
75°	504.4	551.1	579.4	540.8	<i>490.8</i>
77.5°	357.9	401.9	425.4	391.7	<i>350.4</i>
80°	262.4	309.1	327.2	299.2	<i>265.8</i>
82.5°	186.1	224.8	237.2	220.3	<i>197.7</i>
85°	85.2	111.9	126.1	119.1	<i>112.5</i>
87.5°	22.9	43.6	58.6	59.2	<i>61.3</i>
90°	5.2	15.5	34.1	36.6	<i>34.1</i>
92.5°	74.5	271.3	535.3	232.4	<i>168.3</i>
95°	175.6	616.5	1882.3	974.1	<i>579.4</i>
97.5°	282.1	707.1	2934.1	2428.2	<i>1783.2</i>
100°	361.8	743.7	3261.3	3401.2	<i>2750.1</i>
102.5°	435.2	794.6	3376.7	4139.0	<i>3651.9</i>
105°	568.9	879.1	3395.0	5007.9	<i>4802.8</i>
107.5°	692.6	975.6	3246.6	5550.0	<i>5618.1</i>
110°	789.1	1045.4	3114.5	5695.5	<i>5985.2</i>

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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)