

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: P564914

Luminaire Tested: **SQ4-PW1-100U-050D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564914
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

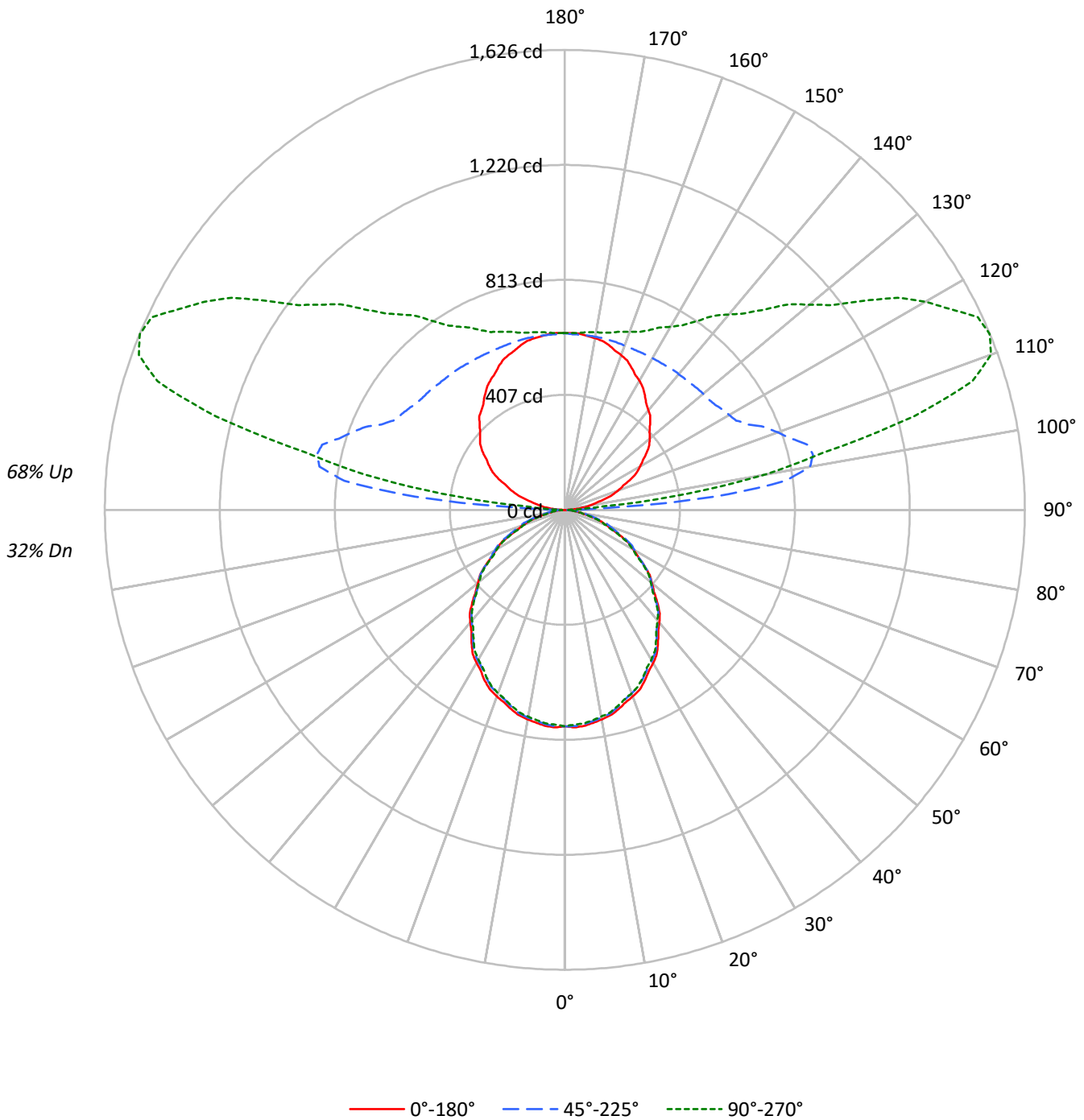
Lumens per Lamp: N/A
Luminaire Lumens: 6005.5 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7052	7020
10°	7051	6994	6956
15°	6977	6899	6873
20°	6892	6786	6774
25°	6796	6673	6653
30°	6653	6552	6509
35°	6464	6373	6334
40°	6263	6165	6140
45°	6019	5939	5913
50°	5769	5721	5683
55°	5500	5500	5413
60°	5165	5264	5076
65°	4726	4962	4609
70°	4165	4567	4057
75°	3558	4085	3461
80°	2758	3438	2795
85°	1789	2646	2361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	1.2
10°-20°	203.5	3.4
20°-30°	301.8	5.0
30°-40°	353.2	5.9
40°-50°	351.6	5.9
50°-60°	303.6	5.1
60°-70°	218.6	3.6
70°-80°	114.6	1.9
80°-90°	29.7	0.5
90°-100°	292.4	4.9
100°-110°	807.2	13.4
110°-120°	832.5	13.9
120°-130°	669.0	11.1
130°-140°	525.7	8.8
140°-150°	403.2	6.7
150°-160°	289.8	4.8
160°-170°	177.2	3.0
170°-180°	59.8	1.0
0°-30°	577.4	9.6
0°-40°	930.6	15.5
0°-60°	1585.9	26.4
0°-90°	1948.7	32.4
90°-120°	1932.1	32.2
90°-150°	3530.0	58.8
90°-180°	4057.0	67.6
0°-180°	6005.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	768	759	761	759	758	73
15°	730	721	722	721	720	206
25°	668	656	656	652	654	307
35°	574	566	566	560	562	359
45°	461	457	455	454	453	356
55°	342	341	342	337	336	305
65°	216	223	227	218	211	215
75°	100	109	115	107	97	107
85°	17	22	25	24	22	22
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.4	765.4	765.4	765.4	765.4
2.5°	769.7	763.4	765.4	763.7	760.0
5°	767.5	758.9	761.4	759.3	758.0
7.5°	759.6	751.7	753.6	751.4	750.6
10°	752.6	744.7	746.5	743.8	742.5
12.5°	744.5	736.1	737.9	735.2	734.4
15°	730.4	721.1	722.3	720.9	719.6
17.5°	713.9	704.5	704.7	702.6	702.3
20°	702.0	692.1	691.2	688.6	689.9
22.5°	689.1	678.7	677.8	674.0	675.9
25°	667.6	656.4	655.5	651.5	653.5
27.5°	642.8	631.7	631.8	626.1	628.3
30°	624.5	613.9	615.0	608.4	611.0
32.5°	605.1	595.6	596.2	589.5	592.1
35°	573.9	566.0	565.8	560.5	562.4
37.5°	542.1	535.1	534.0	530.9	531.4
40°	520.0	514.0	511.9	509.8	509.8
42.5°	496.8	491.3	489.2	487.7	487.2
45°	461.3	457.3	455.2	453.8	453.2
47.5°	426.2	422.5	420.7	419.7	419.1
50°	401.9	399.3	398.6	396.5	395.9
52.5°	377.7	376.1	375.4	372.8	372.1
55°	341.9	341.3	341.9	337.2	336.5
57.5°	304.7	305.7	307.9	301.5	300.0
60°	279.9	282.5	285.3	277.8	275.1
62.5°	254.5	258.7	262.6	254.0	250.3
65°	216.5	223.1	227.3	218.3	211.1
67.5°	179.8	188.0	193.0	183.4	175.2
70°	154.4	163.7	169.3	159.6	150.4
72.5°	132.3	142.6	147.2	138.0	128.8
75°	99.8	109.0	114.6	107.0	97.1
77.5°	70.8	79.5	84.2	77.5	69.3
80°	51.9	61.2	64.7	59.2	52.6
82.5°	36.8	44.5	46.9	43.6	39.1
85°	16.9	22.1	25.0	23.6	22.3
87.5°	4.7	8.8	11.8	12.1	12.8
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)