

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: P518370

Luminaire Tested: **SQ4-BB-025U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518370
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

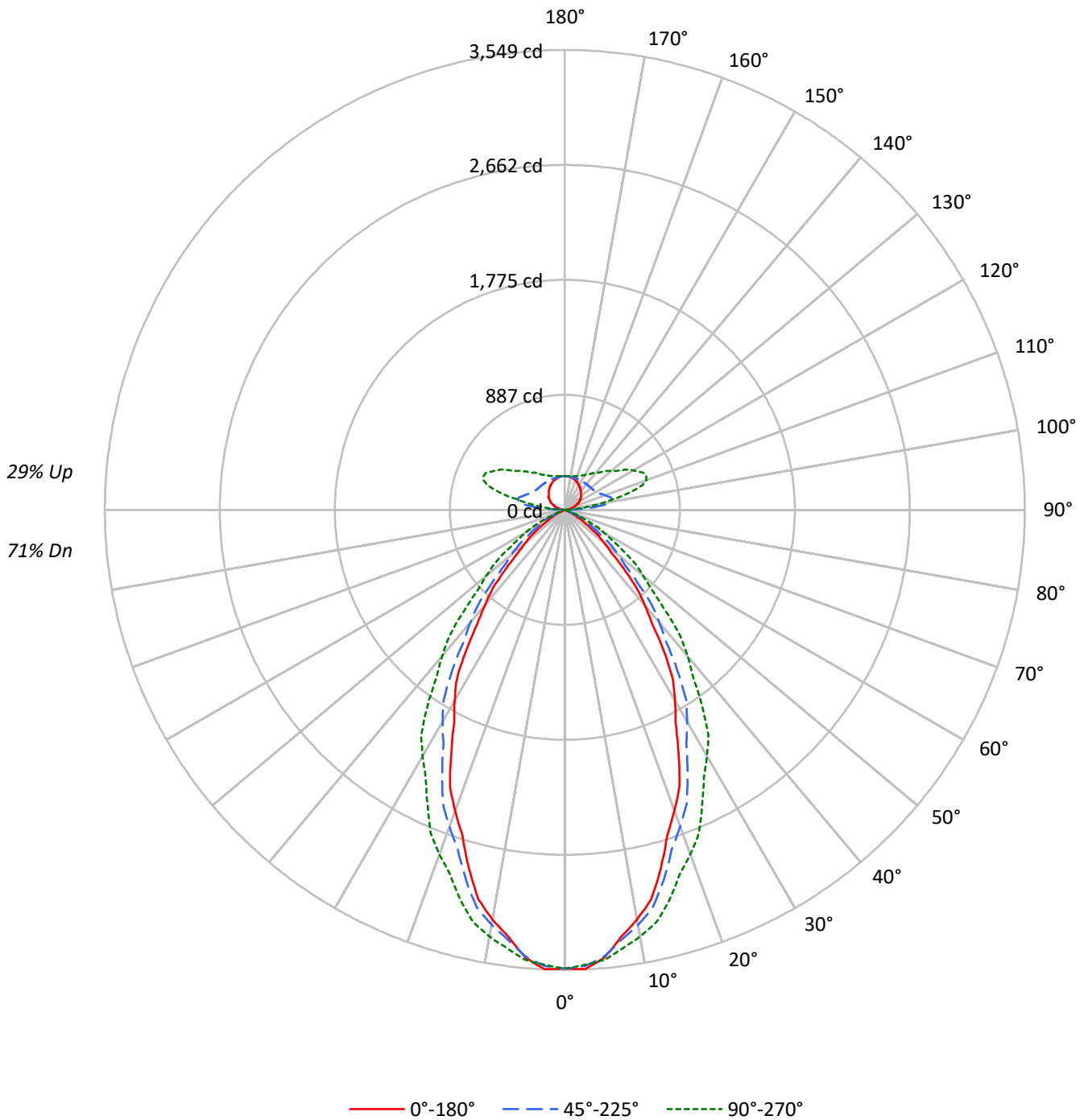
Lumens per Lamp: N/A
Luminaire Lumens: 5911.9 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 82.2
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



TEST NUMBER: P518370
CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518370

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	105	102	99	96	100	97	94	92	87	85	84	79	77	76	71	70	69	65
2	98	92	87	83	93	88	83	80	80	76	74	72	70	68	66	64	62	59
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	53
4	85	76	69	64	81	73	67	62	67	62	58	61	57	54	56	53	51	48
5	79	69	62	57	75	66	60	55	61	56	52	56	52	49	52	49	46	44
6	74	63	56	51	70	61	54	50	56	51	47	52	48	45	48	45	42	40
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	41	39	37
8	65	54	47	42	62	52	46	41	48	43	39	45	41	37	42	38	36	34
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	39	36	33	31
10	58	46	40	35	55	45	39	35	42	37	33	40	35	32	37	33	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16150
10°	15036	15237	15662
15°	13670	14104	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7129
50°	2840	3847	5655
55°	1846	2783	4395
60°	1059	1960	3177
65°	281	1196	1608
70°	139	370	463
75°	61	30	0
80°	45	0	0
85°	0	0	0



TEST NUMBER: P518370

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.1	5.5
10°-20°	826.3	14.0
20°-30°	1034.5	17.5
30°-40°	955.5	16.2
40°-50°	642.1	10.9
50°-60°	331.6	5.6
60°-70°	103.9	1.8
70°-80°	6.6	0.1
80°-90°	1.5	0.0
90°-100°	126.8	2.1
100°-110°	333.5	5.6
110°-120°	345.8	5.8
120°-130°	277.3	4.7
130°-140°	217.6	3.7
140°-150°	167.0	2.8
150°-160°	120.3	2.0
160°-170°	73.6	1.2
170°-180°	24.9	0.4
0°-30°	2183.9	36.9
0°-40°	3139.4	53.1
0°-60°	4113.1	69.6
0°-90°	4225.0	71.5
90°-120°	806.1	13.6
90°-150°	1468.1	24.8
90°-180°	1687.0	28.5
0°-180°	5911.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3541	3541	3541	3541	3541	
5°	3470	3435	3462	3474	3488	322
15°	2862	2852	2953	3052	3118	797
25°	2076	2093	2240	2394	2506	952
35°	1333	1366	1514	1692	1846	826
45°	639	677	791	946	1093	502
55°	230	268	346	444	546	214
65°	26	49	110	132	147	43
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	2	5	13	7	7	1
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	415	137
145°	205	218	257	312	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	



TEST NUMBER: P518370

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3540.6	3540.6	3540.6	3540.6	3540.6
2.5°	3548.8	3515.3	3524.2	3523.9	3514.6
5°	3470.4	3435.2	3461.8	3474.1	3487.5
7.5°	3323.7	3296.3	3347.4	3385.7	3413.5
10°	3210.0	3186.6	3252.8	3305.1	3343.6
12.5°	3078.5	3060.4	3140.5	3212.1	3261.4
15°	2862.3	2852.2	2953.1	3052.2	3117.5
17.5°	2630.7	2630.4	2745.5	2868.5	2947.2
20°	2471.7	2476.8	2600.2	2735.9	2828.0
22.5°	2312.8	2324.5	2456.3	2597.8	2703.3
25°	2076.1	2092.8	2240.5	2393.8	2506.0
27.5°	1848.6	1873.0	2028.4	2187.8	2324.4
30°	1699.2	1727.7	1885.9	2053.6	2194.2
32.5°	1552.6	1586.4	1740.7	1918.0	2061.3
35°	1332.6	1366.1	1514.2	1692.4	1846.5
37.5°	1105.5	1138.3	1283.0	1458.4	1624.9
40°	957.5	994.4	1132.2	1302.2	1471.4
42.5°	823.2	860.1	989.7	1156.8	1316.5
45°	638.9	677.4	791.4	945.5	1092.8
47.5°	486.1	528.0	628.0	767.4	901.7
50°	395.7	437.6	536.1	659.0	787.9
52.5°	323.1	363.6	452.6	568.3	686.5
55°	229.5	268.1	346.0	444.3	546.4
57.5°	158.6	191.8	261.7	343.7	423.8
60°	114.8	146.6	212.4	279.0	344.3
62.5°	76.4	105.5	169.9	220.9	264.8
65°	25.7	49.1	109.6	132.2	147.3
67.5°	13.0	15.7	57.6	60.8	65.8
70°	10.3	10.3	27.4	29.2	34.3
72.5°	7.5	7.5	11.0	14.1	15.1
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	2.7	1.3	1.3
90°	1.7	4.9	13.3	6.7	6.7
92.5°	7.0	33.8	74.7	33.1	21.4
95°	16.7	65.6	218.5	112.6	76.7
97.5°	29.0	72.1	327.0	260.0	191.5
100°	38.4	77.5	360.3	365.2	283.6
102.5°	46.4	82.9	369.7	454.9	385.0
105°	60.1	91.1	368.7	559.7	522.2
107.5°	74.1	102.8	347.7	614.1	623.3
110°	83.4	109.5	330.3	628.2	667.3

TEST NUMBER: P518370

CATALOG NUMBER: SQ4-BB-025U-100D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.8	117.6	314.3	619.3	679.3
115°	106.8	129.6	295.3	589.1	672.3
117.5°	120.4	141.3	282.3	547.3	639.6
120°	128.5	148.0	276.9	519.2	608.9
122.5°	136.5	156.0	272.9	491.1	579.6
125°	148.5	166.4	268.6	454.0	535.5
127.5°	158.2	176.4	264.9	424.0	492.8
130°	163.5	183.1	263.6	405.2	468.8
132.5°	168.8	188.4	262.3	389.0	446.1
135°	176.8	194.8	260.3	366.5	415.4
137.5°	185.2	202.8	259.9	349.6	389.7
140°	191.9	208.2	258.6	336.2	373.7
142.5°	197.2	212.2	258.6	326.7	359.0
145°	205.2	218.2	256.9	312.5	337.0
147.5°	213.2	225.9	256.9	300.7	321.0
150°	218.5	230.0	256.9	294.0	310.3
152.5°	223.9	232.7	256.9	288.6	301.0
155°	231.9	238.4	256.9	282.1	290.3
157.5°	237.9	244.1	256.9	276.4	282.3
160°	241.9	246.8	256.9	273.7	276.9
162.5°	245.9	249.5	256.9	271.0	274.3
165°	250.2	253.5	256.9	267.0	270.3
167.5°	254.2	255.9	258.6	265.3	266.6
170°	256.9	258.5	258.6	265.3	265.3
172.5°	258.2	258.6	258.6	263.9	262.6
175°	260.3	260.3	258.6	261.9	261.9
177.5°	260.3	260.3	258.9	261.6	260.3
180°	260.3	260.3	260.3	260.3	260.3

(END OF REPORT)