

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: P518322

Luminaire Tested: **SQ4-BB-025U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518322
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-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

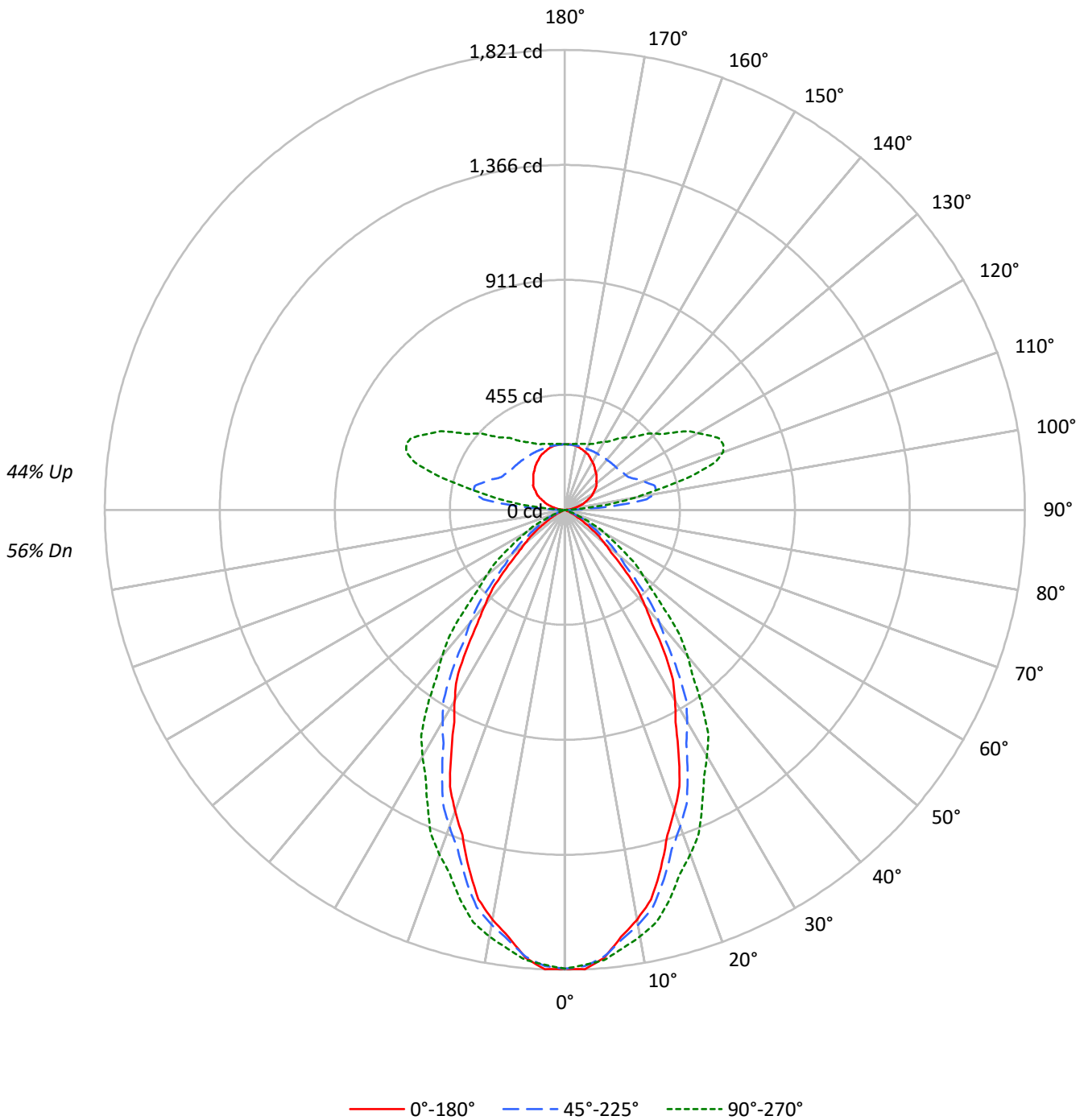
Lumens per Lamp: N/A
Luminaire Lumens: 3855.4 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.7
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
RC	80									50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	101	98	94	92	94	91	88	86	79	77	75	68	67	65	58	57	56	51
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	53	52	50	46
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	45	42
4	81	71	65	59	75	67	61	57	59	55	51	52	49	46	45	43	41	38
5	75	65	58	52	70	61	55	50	54	50	46	48	44	41	42	39	37	34
6	70	59	52	47	65	56	50	45	50	45	41	44	40	38	39	36	34	31
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	29
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27
9	57	46	39	35	54	44	38	33	40	35	31	36	32	29	32	29	26	25
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8381	8381	8381
5°	8245	8226	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3499	4547
45°	2139	2649	3658
50°	1457	1974	2902
55°	947	1428	2255
60°	543	1006	1630
65°	144	613	825
70°	71	190	237
75°	32	16	0
80°	24	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.8	4.3
10°-20°	424.0	11.0
20°-30°	530.8	13.8
30°-40°	490.3	12.7
40°-50°	329.4	8.5
50°-60°	170.2	4.4
60°-70°	53.3	1.4
70°-80°	3.4	0.1
80°-90°	1.5	0.0
90°-100°	126.8	3.3
100°-110°	333.5	8.6
110°-120°	345.8	9.0
120°-130°	277.3	7.2
130°-140°	217.6	5.6
140°-150°	167.0	4.3
150°-160°	120.3	3.1
160°-170°	73.6	1.9
170°-180°	24.9	0.6
0°-30°	1120.6	29.1
0°-40°	1610.8	41.8
0°-60°	2110.4	54.7
0°-90°	2168.6	56.2
90°-120°	806.1	20.9
90°-150°	1468.1	38.1
90°-180°	1687.0	43.8
0°-180°	3855.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1781	1763	1776	1783	1789	165
15°	1469	1464	1515	1566	1600	409
25°	1065	1074	1150	1228	1286	488
35°	684	701	777	868	948	424
45°	328	348	406	485	561	257
55°	118	138	178	228	280	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1820.9	1803.7	1808.2	1808.1	1803.3
5°	1780.6	1762.6	1776.3	1782.6	1789.4
7.5°	1705.4	1691.3	1717.5	1737.2	1751.5
10°	1647.1	1635.0	1669.0	1695.8	1715.6
12.5°	1579.6	1570.3	1611.4	1648.2	1673.4
15°	1468.6	1463.5	1515.2	1566.1	1599.6
17.5°	1349.8	1349.6	1408.7	1471.8	1512.2
20°	1268.3	1270.8	1334.2	1403.8	1451.1
22.5°	1186.7	1192.7	1260.3	1332.9	1387.1
25°	1065.2	1073.8	1149.6	1228.3	1285.8
27.5°	948.5	961.1	1040.8	1122.5	1192.7
30°	871.9	886.5	967.7	1053.7	1125.9
32.5°	796.6	814.0	893.1	984.1	1057.7
35°	683.8	701.0	776.9	868.4	947.5
37.5°	567.2	584.1	658.3	748.3	833.7
40°	491.3	510.2	581.0	668.2	755.0
42.5°	422.4	441.3	507.8	593.5	675.5
45°	327.8	347.6	406.1	485.1	560.7
47.5°	249.4	270.9	322.2	393.7	462.7
50°	203.0	224.5	275.1	338.1	404.3
52.5°	165.8	186.6	232.2	291.6	352.3
55°	117.8	137.5	177.5	227.9	280.4
57.5°	81.4	98.4	134.3	176.4	217.4
60°	58.9	75.2	109.0	143.1	176.7
62.5°	39.2	54.2	87.2	113.4	135.9
65°	13.2	25.2	56.2	67.9	75.6
67.5°	6.7	8.1	29.5	31.2	33.7
70°	5.3	5.3	14.1	15.0	17.6
72.5°	3.9	3.9	5.6	7.2	7.7
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	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



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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)