

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521115

Luminaire Tested: **SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521115
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

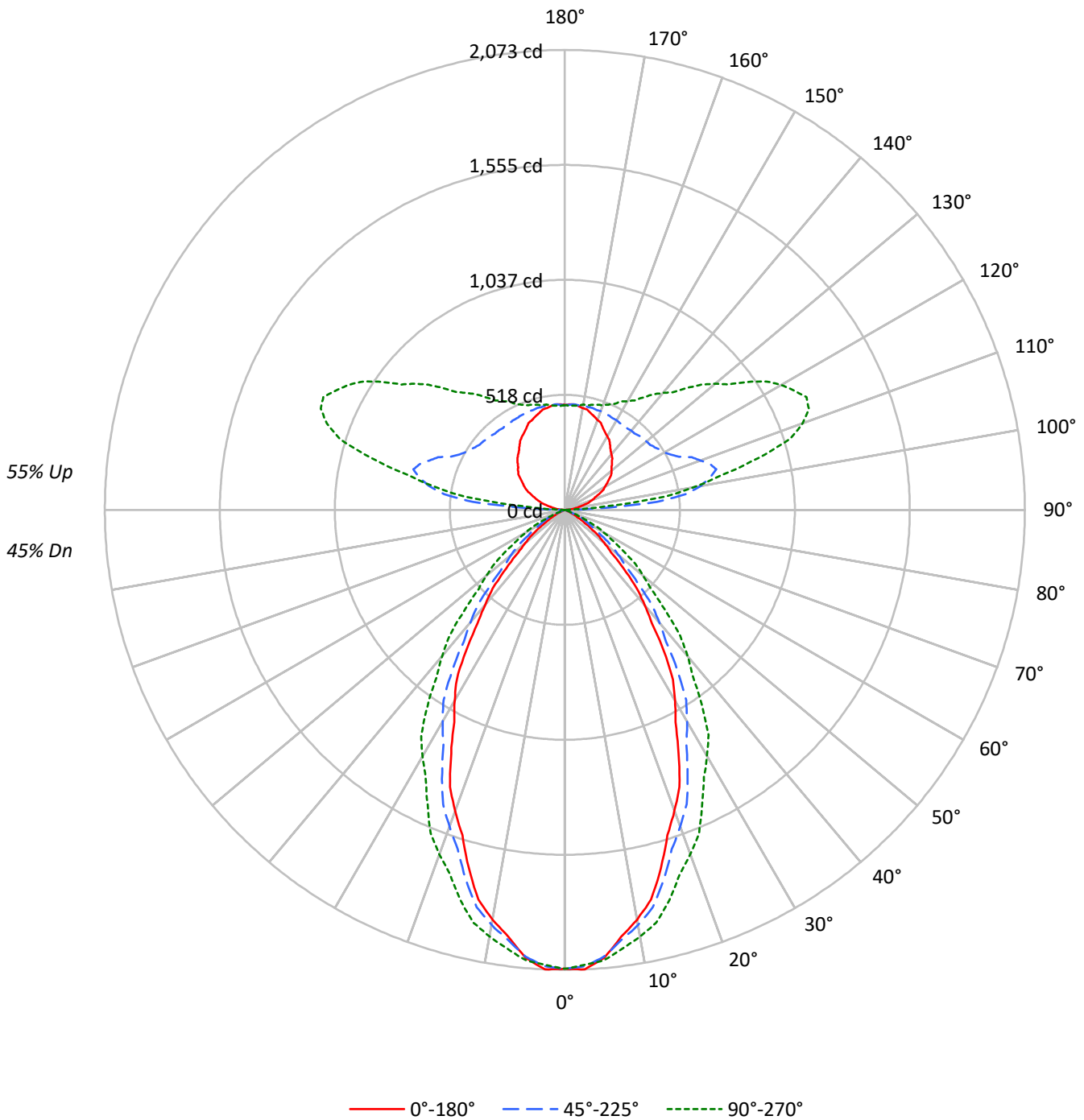
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5524.4 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 66.1
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	57	48	47	46	41
2	91	84	79	75	83	78	73	70	66	63	60	54	52	51	44	43	42	37
3	84	76	69	64	77	70	65	60	59	56	52	50	47	45	41	39	37	33
4	78	68	61	56	71	63	57	53	54	50	46	45	42	40	37	35	34	30
5	72	62	54	49	66	57	51	46	49	45	41	42	38	36	35	32	31	27
6	67	56	49	44	61	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	41	37	41	37	33	35	32	29	30	27	25	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	40	34	30	35	31	27	31	27	24	26	23	22	19
10	51	40	33	29	47	38	32	28	33	28	25	29	25	22	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18776	18729	18869
10°	17568	17803	18300
15°	15971	16478	17395
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11737	13657
35°	8768	9963	12150
40°	6737	7966	10353
45°	4869	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.4
10°-20°	482.7	8.7
20°-30°	604.3	10.9
30°-40°	558.2	10.1
40°-50°	375.1	6.8
50°-60°	193.7	3.5
60°-70°	60.7	1.1
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	243.4	4.4
100°-110°	588.2	10.6
110°-120°	627.4	11.4
120°-130°	508.1	9.2
130°-140°	393.4	7.1
140°-150°	300.1	5.4
150°-160°	217.3	3.9
160°-170°	133.8	2.4
170°-180°	45.3	0.8
0°-30°	1275.8	23.1
0°-40°	1834.0	33.2
0°-60°	2402.8	43.5
0°-90°	2467.4	44.7
90°-120°	1459.0	26.4
90°-150°	2660.7	48.2
90°-180°	3057.0	55.3
0°-180°	5524.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	122	417	271	190	27
105°	94	162	707	915	903	99
115°	172	220	568	1077	1201	170
125°	245	282	493	856	1006	219
135°	301	336	473	675	777	232
145°	356	382	464	574	619	223
155°	408	426	470	508	527	188
165°	451	458	476	483	490	127
175°	477	475	477	473	472	45
180°	472	472	472	472	472	



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CATALOG NUMBER: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.6	2058.8	2058.6	2053.2
5°	2027.3	2006.8	2022.3	2029.5	2037.4
7.5°	1941.7	1925.6	1955.5	1977.9	1994.1
10°	1875.2	1861.5	1900.3	1930.8	1953.3
12.5°	1798.4	1787.8	1834.6	1876.5	1905.3
15°	1672.1	1666.2	1725.1	1783.1	1821.2
17.5°	1536.8	1536.6	1603.9	1675.8	1721.7
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1357.9	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.4	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.7	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.4	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.2
40°	559.4	580.9	661.4	760.8	859.6
42.5°	480.9	502.4	578.2	675.8	769.1
45°	373.2	395.8	462.3	552.3	638.4
47.5°	284.0	308.4	366.8	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	65.9	155.2	75.4	51.2
95°	24.0	121.8	417.0	271.2	190.0
97.5°	42.6	134.9	549.2	529.1	454.2
100°	57.0	143.0	622.0	656.6	595.0
102.5°	70.6	150.4	670.0	762.8	726.2
105°	94.0	162.4	707.0	914.7	903.0
107.5°	117.0	176.6	685.2	1036.6	1064.2
110°	133.0	188.7	650.0	1089.2	1141.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.0	200.8	618.8	1102.0	1190.6
115°	172.0	219.9	568.0	1076.8	1201.0
117.5°	194.8	240.0	538.2	1018.9	1164.4
120°	210.0	252.0	519.0	973.5	1126.0
122.5°	226.0	264.9	507.0	927.0	1077.2
125°	245.0	282.2	493.0	856.4	1006.0
127.5°	263.8	298.8	483.2	796.6	928.0
130°	275.0	309.2	480.0	754.9	884.0
132.5°	285.4	321.2	475.2	724.9	834.4
135°	301.0	336.2	473.0	675.3	777.0
137.5°	315.8	351.2	466.0	641.7	718.4
140°	327.0	359.3	466.0	617.6	688.0
142.5°	338.2	370.5	462.0	596.6	656.0
145°	356.0	382.4	464.0	574.0	619.0
147.5°	372.6	398.2	462.8	548.0	585.2
150°	383.0	405.5	466.0	536.7	566.0
152.5°	394.2	415.9	465.2	524.6	550.8
155°	408.0	425.6	470.0	508.4	527.0
157.5°	424.6	439.7	469.0	502.2	513.2
160°	431.0	443.7	473.0	494.2	502.0
162.5°	441.4	452.5	471.4	491.7	496.4
165°	451.0	457.8	476.0	483.2	490.0
167.5°	462.8	467.3	474.8	482.6	482.8
170°	466.0	468.9	478.0	477.1	482.0
172.5°	471.6	473.8	475.6	477.7	474.8
175°	477.0	475.0	477.0	473.0	472.0
177.5°	476.0	476.0	474.4	472.7	468.8
180°	472.0	472.0	472.0	472.0	472.0

(END OF REPORT)