

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: P518548

Luminaire Tested: **SQ4-BB-075U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518548
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

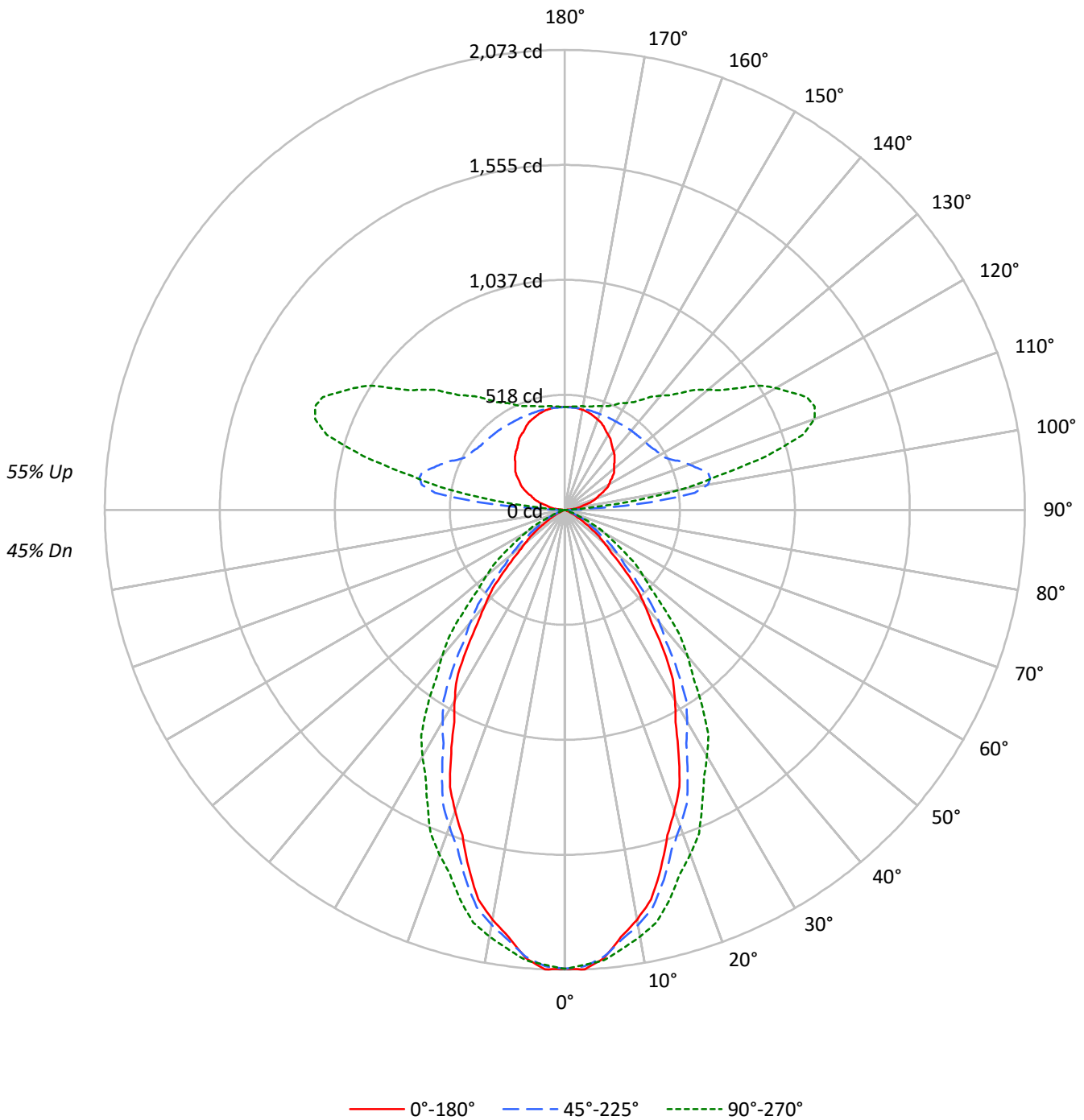
Lumens per Lamp: N/A
Luminaire Lumens: 5492.5 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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



TEST NUMBER: P518548
CATALOG NUMBER: SQ4-BB-075U-100D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518548

CATALOG NUMBER: SQ4-BB-075U-100D-840-1D-UNV-STD-W-4

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	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	53	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	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	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15971	16479	17396
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11738	13657
35°	8768	9963	12150
40°	6737	7967	10353
45°	4871	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



TEST NUMBER: P518548

CATALOG NUMBER: SQ4-BB-075U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.4
10°-20°	482.7	8.8
20°-30°	604.3	11.0
30°-40°	558.2	10.2
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°	1.3	0.0
90°-100°	218.9	4.0
100°-110°	602.3	11.0
110°-120°	621.7	11.3
120°-130°	498.1	9.1
130°-140°	391.2	7.1
140°-150°	299.8	5.5
150°-160°	215.6	3.9
160°-170°	131.8	2.4
170°-180°	44.4	0.8
0°-30°	1275.8	23.2
0°-40°	1834.0	33.4
0°-60°	2402.9	43.7
0°-90°	2468.6	44.9
90°-120°	1442.9	26.3
90°-150°	2632.1	47.9
90°-180°	3024.0	55.1
0°-180°	5492.5	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°	1	4	7	9	9	2
95°	33	120	387	166	106	34
105°	108	166	664	1011	943	113
115°	191	232	532	1060	1203	188
125°	263	299	483	817	957	234
135°	317	352	469	661	748	245
145°	366	392	462	563	606	230
155°	415	428	459	506	520	191
165°	448	454	461	480	483	126
175°	464	465	462	468	467	44
180°	464	464	464	464	464	

TEST NUMBER: P518548

CATALOG NUMBER: SQ4-BB-075U-100D-840-1D-UNV-STD-W-4

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	2053.7	2058.8	2058.7	2053.2
5°	2027.4	2006.8	2022.4	2029.6	2037.4
7.5°	1941.7	1925.7	1955.5	1977.9	1994.2
10°	1875.3	1861.6	1900.3	1930.8	1953.3
12.5°	1798.4	1787.9	1834.7	1876.5	1905.3
15°	1672.1	1666.3	1725.2	1783.1	1821.3
17.5°	1536.9	1536.7	1603.9	1675.8	1721.8
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1358.0	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.5	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.8	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.5	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.3
40°	559.4	580.9	661.5	760.8	859.6
42.5°	480.9	502.5	578.2	675.8	769.1
45°	373.3	395.8	462.3	552.3	638.4
47.5°	284.0	308.5	366.9	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°	0.2	0.8	1.4	1.8	1.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	13.6	58.2	100.9	38.8	31.8
95°	32.6	119.5	387.1	165.5	105.7
97.5°	53.1	132.5	590.8	455.2	321.2
100°	68.1	140.6	654.8	660.9	539.2
102.5°	82.4	150.2	671.4	819.9	708.3
105°	107.6	165.6	663.7	1010.8	943.2
107.5°	131.7	184.7	625.9	1104.2	1124.3
110°	149.1	197.4	597.5	1127.4	1197.0



TEST NUMBER: P518548

CATALOG NUMBER: SQ4-BB-075U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.9	211.7	569.1	1112.5	1218.3
115°	190.6	232.1	532.3	1060.0	1202.9
117.5°	215.1	253.3	509.0	986.3	1148.0
120°	230.1	266.8	498.7	931.2	1098.2
122.5°	243.5	280.2	491.6	882.8	1041.3
125°	262.7	299.4	482.9	817.0	957.0
127.5°	280.9	315.8	477.2	762.1	884.9
130°	290.4	326.1	474.1	729.4	841.4
132.5°	301.4	337.1	471.7	700.7	801.9
135°	317.0	351.8	469.1	660.7	747.6
137.5°	331.6	363.9	466.9	628.4	700.0
140°	342.7	372.6	466.1	606.9	671.6
142.5°	352.2	379.8	464.6	587.7	643.1
145°	366.4	391.5	462.2	562.9	606.4
147.5°	381.6	403.2	461.0	541.0	575.8
150°	391.1	410.4	460.2	529.0	556.0
152.5°	399.8	417.6	459.4	518.6	541.0
155°	414.8	428.3	459.2	506.0	520.5
157.5°	425.7	436.7	459.2	495.6	505.7
160°	433.6	442.2	459.2	490.0	497.8
162.5°	439.9	447.0	460.0	485.3	491.4
165°	448.4	454.2	461.2	480.0	482.9
167.5°	454.3	458.7	462.2	475.6	476.4
170°	458.2	461.1	462.2	474.1	474.1
172.5°	461.4	462.8	462.2	471.7	470.9
175°	464.2	465.1	462.2	468.1	467.1
177.5°	465.0	465.0	461.8	466.5	465.0
180°	464.2	464.2	464.2	464.2	464.2

(END OF REPORT)