

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: P518540

Luminaire Tested: **SQ4-BB-075U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518540
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

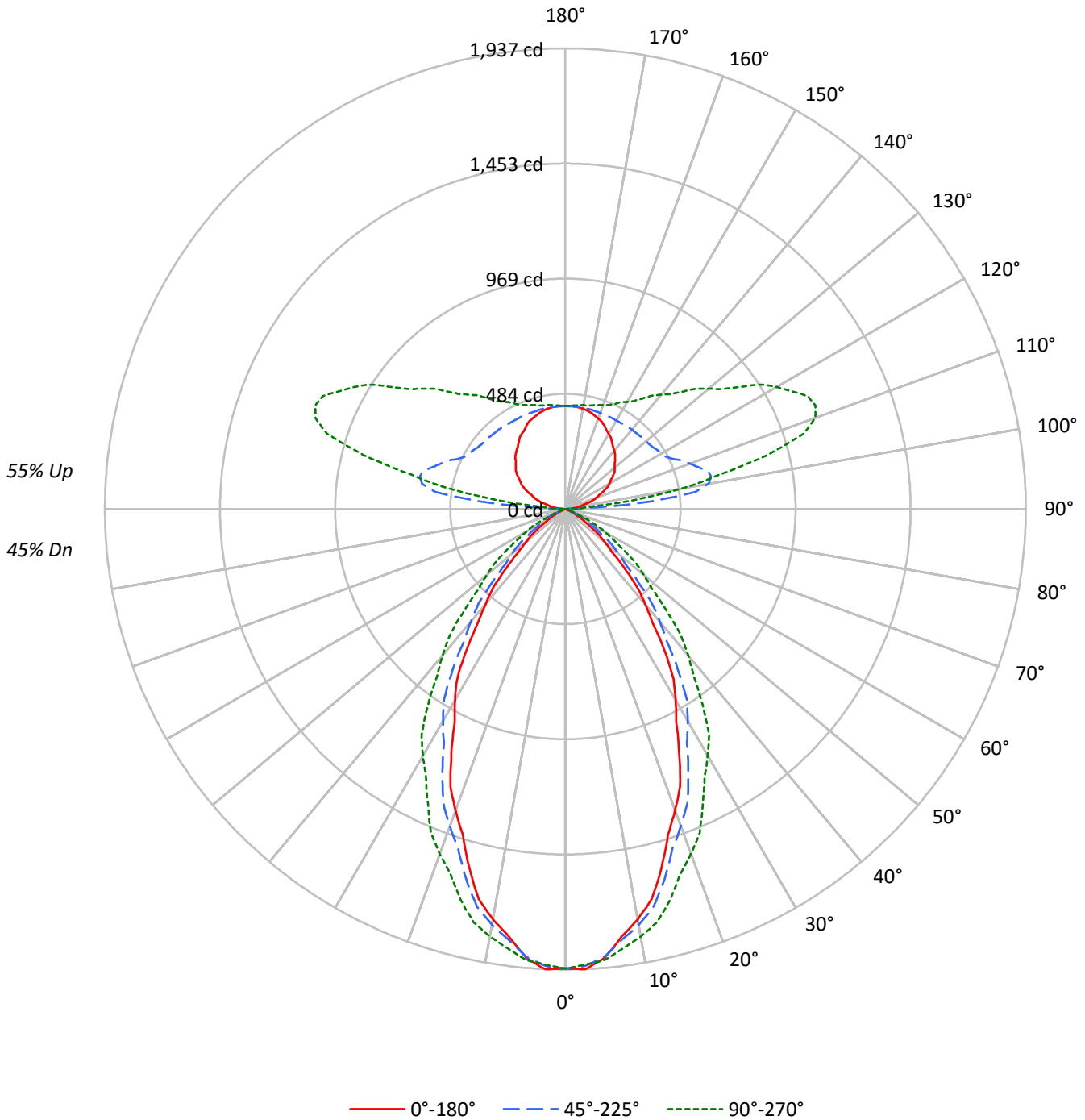
Lumens per Lamp: N/A
Luminaire Lumens: 5132.7 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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: P518540
CATALOG NUMBER: SQ4-BB-075U-100D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518540

CATALOG NUMBER: SQ4-BB-075U-100D-830-1D-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°	17833	17833	17833
5°	17547	17503	17633
10°	16417	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6295	7444	9675
45°	4551	5637	7784
50°	3100	4201	6175
55°	2015	3039	4798
60°	1157	2140	3469
65°	306	1305	1755
70°	151	405	504
75°	68	32	0
80°	48	0	0
85°	0	0	0



TEST NUMBER: P518540

CATALOG NUMBER: SQ4-BB-075U-100D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	3.4
10°-20°	451.1	8.8
20°-30°	564.7	11.0
30°-40°	521.6	10.2
40°-50°	350.5	6.8
50°-60°	181.0	3.5
60°-70°	56.7	1.1
70°-80°	3.6	0.1
80°-90°	1.2	0.0
90°-100°	204.6	4.0
100°-110°	562.9	11.0
110°-120°	581.0	11.3
120°-130°	465.5	9.1
130°-140°	365.6	7.1
140°-150°	280.2	5.5
150°-160°	201.4	3.9
160°-170°	123.2	2.4
170°-180°	41.5	0.8
0°-30°	1192.3	23.2
0°-40°	1713.9	33.4
0°-60°	2245.4	43.7
0°-90°	2306.9	44.9
90°-120°	1348.4	26.3
90°-150°	2459.7	47.9
90°-180°	2826.0	55.1
0°-180°	5132.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1933	1933	1933	1933	1933	
5°	1895	1875	1890	1897	1904	176
15°	1563	1557	1612	1666	1702	435
25°	1133	1142	1223	1307	1368	520
35°	728	746	827	924	1008	451
45°	349	370	432	516	597	274
55°	125	146	189	242	298	117
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	4	6	8	8	2
95°	30	112	362	155	99	32
105°	101	155	620	944	881	106
115°	178	217	497	990	1124	176
125°	246	280	451	763	894	219
135°	296	329	438	617	699	229
145°	342	366	432	526	567	215
155°	388	400	429	473	486	178
165°	419	424	431	449	451	118
175°	434	435	432	437	436	41
180°	434	434	434	434	434	



TEST NUMBER: P518540

CATALOG NUMBER: SQ4-BB-075U-100D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.9	1932.9	1932.9	1932.9	1932.9
2.5°	1937.4	1919.1	1923.9	1923.8	1918.7
5°	1894.6	1875.4	1889.9	1896.6	1903.9
7.5°	1814.5	1799.5	1827.4	1848.4	1863.5
10°	1752.4	1739.6	1775.8	1804.3	1825.4
12.5°	1680.6	1670.7	1714.5	1753.6	1780.5
15°	1562.6	1557.1	1612.2	1666.3	1701.9
17.5°	1436.2	1436.0	1498.8	1566.0	1609.0
20°	1349.4	1352.1	1419.5	1493.6	1543.9
22.5°	1262.6	1269.0	1341.0	1418.2	1475.8
25°	1133.4	1142.5	1223.2	1306.8	1368.1
27.5°	1009.2	1022.5	1107.4	1194.4	1269.0
30°	927.7	943.2	1029.6	1121.1	1197.9
32.5°	847.6	866.1	950.3	1047.1	1125.3
35°	727.5	745.8	826.7	924.0	1008.1
37.5°	603.5	621.5	700.4	796.2	887.1
40°	522.7	542.9	618.1	710.9	803.3
42.5°	449.4	469.5	540.3	631.5	718.7
45°	348.8	369.8	432.0	516.2	596.6
47.5°	265.4	288.2	342.8	418.9	492.3
50°	216.0	238.9	292.7	359.8	430.2
52.5°	176.4	198.5	247.1	310.2	374.8
55°	125.3	146.3	188.9	242.5	298.3
57.5°	86.6	104.7	142.9	187.6	231.4
60°	62.7	80.0	116.0	152.3	188.0
62.5°	41.7	57.6	92.8	120.6	144.6
65°	14.0	26.8	59.8	72.2	80.4
67.5°	7.1	8.6	31.4	33.2	35.9
70°	5.6	5.6	15.0	16.0	18.7
72.5°	4.1	4.1	6.0	7.7	8.2
75°	1.9	1.9	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°	0.2	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	12.7	54.4	94.3	36.2	29.7
95°	30.5	111.7	361.8	154.7	98.8
97.5°	49.7	123.8	552.1	425.4	300.1
100°	63.7	131.4	611.9	617.6	503.9
102.5°	77.0	140.3	627.4	766.2	661.9
105°	100.6	154.7	620.2	944.5	881.4
107.5°	123.1	172.6	584.9	1031.9	1050.6
110°	139.4	184.5	558.4	1053.6	1118.6

TEST NUMBER: P518540

CATALOG NUMBER: SQ4-BB-075U-100D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.1	197.8	531.8	1039.6	1138.5
115°	178.1	216.9	497.4	990.5	1124.1
117.5°	201.0	236.7	475.7	921.7	1072.8
120°	215.0	249.3	466.1	870.2	1026.3
122.5°	227.6	261.9	459.4	824.9	973.1
125°	245.5	279.8	451.3	763.4	894.3
127.5°	262.5	295.1	445.9	712.1	826.9
130°	271.3	304.7	443.0	681.6	786.3
132.5°	281.7	315.1	440.8	654.8	749.4
135°	296.3	328.7	438.4	617.4	698.6
137.5°	309.9	340.1	436.3	587.2	654.2
140°	320.2	348.2	435.6	567.1	627.6
142.5°	329.1	354.9	434.1	549.2	601.0
145°	342.4	365.9	431.9	526.1	566.7
147.5°	356.6	376.8	430.8	505.6	538.1
150°	365.5	383.5	430.1	494.3	519.6
152.5°	373.6	390.2	429.3	484.6	505.6
155°	387.6	400.3	429.2	472.8	486.4
157.5°	397.8	408.1	429.2	463.1	472.5
160°	405.2	413.3	429.2	457.9	465.1
162.5°	411.1	417.7	429.9	453.5	459.2
165°	419.0	424.4	431.0	448.6	451.3
167.5°	424.5	428.7	431.9	444.5	445.2
170°	428.2	430.9	431.9	443.0	443.0
172.5°	431.2	432.4	431.9	440.8	440.0
175°	433.8	434.7	431.9	437.4	436.5
177.5°	434.5	434.5	431.6	435.9	434.5
180°	433.8	433.8	433.8	433.8	433.8

(END OF REPORT)