

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: P518476

Luminaire Tested: **SQ4-BB-050U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518476
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

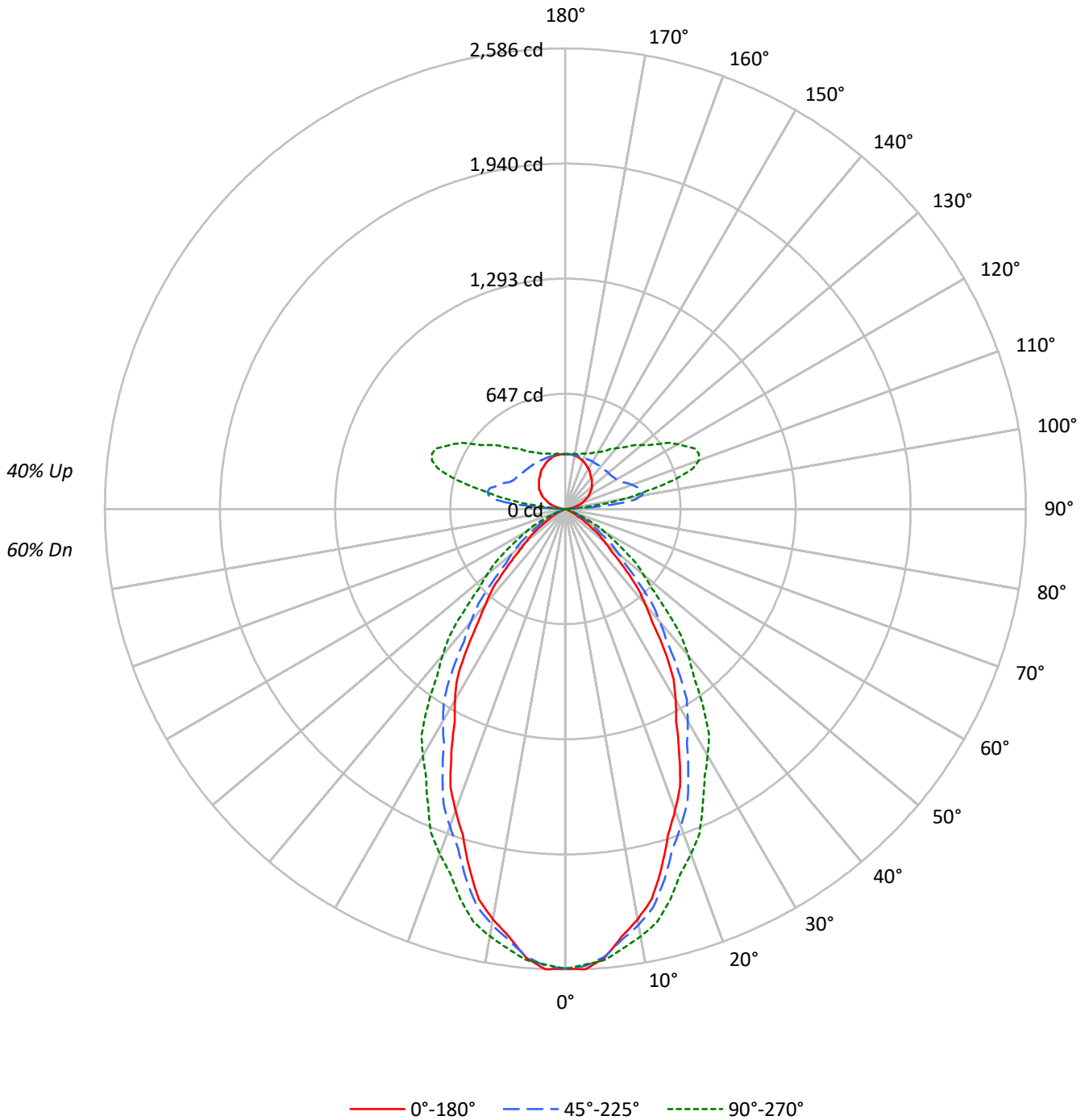
Lumens per Lamp: N/A
Luminaire Lumens: 5091.4 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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: P518476
CATALOG NUMBER: SQ4-BB-050U-125D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518476

CATALOG NUMBER: SQ4-BB-050U-125D-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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17688	18607	20237
25°	15403	16623	18593
30°	13193	14643	17037
35°	10940	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4057	6405
60°	1543	2856	4630
65°	408	1744	2345
70°	202	540	674
75°	89	43	0
80°	64	0	0
85°	0	0	0



TEST NUMBER: P518476

CATALOG NUMBER: SQ4-BB-050U-125D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.5	4.6
10°-20°	602.2	11.8
20°-30°	753.9	14.8
30°-40°	696.4	13.7
40°-50°	467.9	9.2
50°-60°	241.7	4.7
60°-70°	75.7	1.5
70°-80°	4.8	0.1
80°-90°	1.3	0.0
90°-100°	147.9	2.9
100°-110°	401.8	7.9
110°-120°	413.2	8.1
120°-130°	330.3	6.5
130°-140°	259.5	5.1
140°-150°	199.0	3.9
150°-160°	143.1	2.8
160°-170°	87.5	1.7
170°-180°	29.5	0.6
0°-30°	1591.7	31.3
0°-40°	2288.1	44.9
0°-60°	2997.7	58.9
0°-90°	3079.5	60.5
90°-120°	962.9	18.9
90°-150°	1751.8	34.4
90°-180°	2012.0	39.5
0°-180°	5091.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2580	2580	2580	2580	2580	
5°	2529	2504	2523	2532	2542	234
15°	2086	2079	2152	2224	2272	581
25°	1513	1525	1633	1745	1826	694
35°	971	996	1104	1234	1346	602
45°	466	494	577	689	796	366
55°	167	195	252	324	398	156
65°	19	36	80	96	107	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



TEST NUMBER: P518476

CATALOG NUMBER: SQ4-BB-050U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2580.5	2580.5	2580.5	2580.5	2580.5
2.5°	2586.5	2562.1	2568.5	2568.3	2561.5
5°	2529.3	2503.7	2523.0	2532.0	2541.8
7.5°	2422.4	2402.4	2439.7	2467.6	2487.8
10°	2339.5	2322.4	2370.7	2408.8	2436.9
12.5°	2243.7	2230.5	2288.8	2341.1	2377.0
15°	2086.1	2078.8	2152.3	2224.5	2272.1
17.5°	1917.3	1917.1	2001.0	2090.7	2148.0
20°	1801.5	1805.1	1895.1	1994.0	2061.1
22.5°	1685.6	1694.2	1790.2	1893.3	1970.3
25°	1513.1	1525.3	1632.9	1744.6	1826.4
27.5°	1347.3	1365.1	1478.4	1594.5	1694.1
30°	1238.4	1259.2	1374.5	1496.7	1599.2
32.5°	1131.6	1156.2	1268.6	1397.9	1502.3
35°	971.3	995.7	1103.6	1233.5	1345.8
37.5°	805.7	829.7	935.1	1062.9	1184.2
40°	697.9	724.7	825.2	949.1	1072.4
42.5°	600.0	626.8	721.3	843.1	959.5
45°	465.7	493.7	576.8	689.1	796.5
47.5°	354.3	384.8	457.7	559.3	657.2
50°	288.4	318.9	390.8	480.3	574.3
52.5°	235.5	265.0	329.8	414.2	500.4
55°	167.3	195.4	252.2	323.8	398.2
57.5°	115.6	139.8	190.8	250.5	308.9
60°	83.6	106.8	154.8	203.3	250.9
62.5°	55.7	76.9	123.8	161.0	193.0
65°	18.7	35.8	79.9	96.4	107.4
67.5°	9.5	11.4	41.9	44.3	47.9
70°	7.5	7.5	20.0	21.3	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6

TEST NUMBER: P518476

CATALOG NUMBER: SQ4-BB-050U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.4</i>	140.8	378.3	739.6	811.1
115°	<i>126.8</i>	154.0	353.7	703.7	801.6
117.5°	<i>142.3</i>	168.2	338.1	652.9	763.1
120°	<i>152.6</i>	177.8	330.9	618.8	728.3
122.5°	<i>161.3</i>	186.5	326.2	584.6	690.2
125°	<i>174.4</i>	198.6	320.0	539.2	636.1
127.5°	<i>186.1</i>	210.1	316.7	504.8	588.0
130°	<i>193.2</i>	216.5	315.1	483.2	557.8
132.5°	<i>200.3</i>	223.6	313.5	464.8	530.9
135°	<i>210.1</i>	233.3	311.1	439.2	495.4
137.5°	<i>220.6</i>	241.7	309.9	416.6	463.9
140°	<i>226.9</i>	247.2	309.1	402.2	444.9
142.5°	<i>233.2</i>	252.0	308.3	391.0	426.6
145°	<i>242.8</i>	260.2	307.2	373.2	401.3
147.5°	<i>253.5</i>	268.4	306.2	359.2	381.3
150°	<i>260.6</i>	273.2	306.2	351.1	368.6
152.5°	<i>266.1</i>	277.2	305.4	343.9	358.3
155°	<i>274.5</i>	284.1	305.2	335.1	344.8
157.5°	<i>282.6</i>	290.1	305.2	329.1	336.5
160°	<i>287.3</i>	294.1	305.2	325.1	330.9
162.5°	<i>292.1</i>	297.3	306.0	321.9	326.2
165°	<i>297.2</i>	301.1	306.2	319.1	320.0
167.5°	<i>302.6</i>	304.5	307.2	315.7	316.5
170°	<i>304.2</i>	306.1	307.2	314.1	314.1
172.5°	<i>305.8</i>	306.9	307.2	312.5	312.5
175°	<i>308.1</i>	309.1	307.2	311.1	310.1
177.5°	<i>308.9</i>	308.9	306.6	309.7	308.1
180°	<i>308.1</i>	308.1	308.1	308.1	308.1

(END OF REPORT)