

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: P518348

Luminaire Tested: **SQ4-BB-025U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518348  
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-100D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

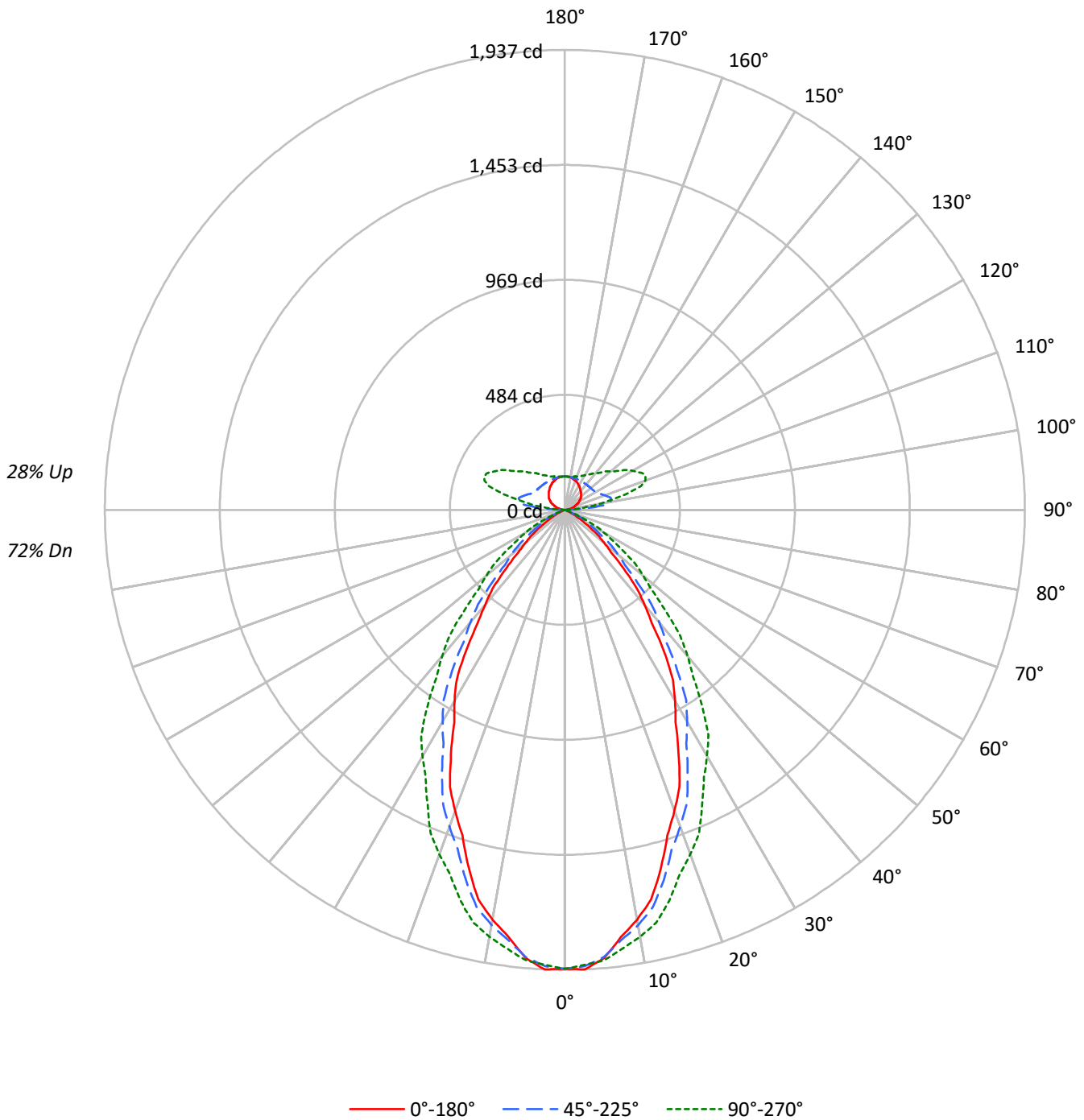
Lumens per Lamp: N/A  
Luminaire Lumens: 3218.3 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.7  
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



TEST NUMBER: P518348  
CATALOG NUMBER: SQ4-BB-025U-100D-830-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P518348

CATALOG NUMBER: SQ4-BB-025U-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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	65
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	59
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	53
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	48
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	44
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	40
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	37
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	34
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	31
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	29

**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: P518348

CATALOG NUMBER: SQ4-BB-025U-100D-830-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.4	5.5
10°-20°	451.1	14.0
20°-30°	564.7	17.5
30°-40°	521.6	16.2
40°-50°	350.5	10.9
50°-60°	181.0	5.6
60°-70°	56.7	1.8
70°-80°	3.6	0.1
80°-90°	0.8	0.0
90°-100°	68.6	2.1
100°-110°	180.2	5.6
110°-120°	186.9	5.8
120°-130°	149.9	4.7
130°-140°	117.6	3.7
140°-150°	90.3	2.8
150°-160°	65.0	2.0
160°-170°	39.8	1.2
170°-180°	13.4	0.4
0°-30°	1192.3	37.0
0°-40°	1713.9	53.3
0°-60°	2245.4	69.8
0°-90°	2306.5	71.7
90°-120°	435.7	13.5
90°-150°	793.5	24.7
90°-180°	912.0	28.3
0°-180°	3218.3	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	3	7	4	4	1
95°	9	36	118	61	42	10
105°	32	49	199	302	282	34
115°	58	70	160	318	363	57
125°	80	90	145	245	289	71
135°	96	105	141	198	224	74
145°	111	118	139	169	182	69
155°	125	129	139	152	157	58
165°	135	137	139	144	146	38
175°	141	141	140	142	142	13
180°	141	141	141	141	141	

TEST NUMBER: P518348

CATALOG NUMBER: SQ4-BB-025U-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	0.5	1.4	0.7	0.7
90°	0.9	2.7	7.2	3.6	3.6
92.5°	3.8	18.2	40.4	17.9	11.5
95°	9.0	35.5	118.1	60.9	41.5
97.5°	15.7	39.0	176.7	140.5	103.5
100°	20.7	41.9	194.8	197.4	153.3
102.5°	25.1	44.8	199.8	245.8	208.1
105°	32.5	49.2	199.3	302.5	282.2
107.5°	40.0	55.6	187.9	331.9	336.9
110°	45.1	59.2	178.5	339.5	360.7

TEST NUMBER: P518348

CATALOG NUMBER: SQ4-BB-025U-100D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	50.1	63.5	169.9	334.7	367.2
115°	57.7	70.1	159.6	318.4	363.4
117.5°	65.1	76.4	152.6	295.8	345.7
120°	69.4	80.0	149.7	280.6	329.1
122.5°	73.8	84.3	147.5	265.5	313.2
125°	80.3	89.9	145.2	245.4	289.4
127.5°	85.5	95.4	143.2	229.2	266.4
130°	88.4	98.9	142.5	219.0	253.4
132.5°	91.3	101.8	141.7	210.3	241.1
135°	95.6	105.3	140.7	198.1	224.5
137.5°	100.1	109.6	140.5	188.9	210.6
140°	103.7	112.5	139.8	181.7	202.0
142.5°	106.6	114.7	139.8	176.6	194.0
145°	110.9	118.0	138.9	168.9	182.1
147.5°	115.2	122.1	138.9	162.6	173.5
150°	118.1	124.3	138.9	158.9	167.7
152.5°	121.0	125.8	138.9	156.0	162.7
155°	125.3	128.9	138.9	152.5	156.9
157.5°	128.6	131.9	138.9	149.4	152.6
160°	130.7	133.4	138.9	147.9	149.7
162.5°	132.9	134.8	138.9	146.5	148.2
165°	135.3	137.0	138.9	144.3	146.1
167.5°	137.4	138.3	139.8	143.4	144.1
170°	138.9	139.7	139.8	143.4	143.4
172.5°	139.6	139.8	139.8	142.6	141.9
175°	140.7	140.7	139.8	141.6	141.6
177.5°	140.7	140.7	139.9	141.4	140.7
180°	140.7	140.7	140.7	140.7	140.7

(END OF REPORT)