

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: P518347

Luminaire Tested: **SQ4-BB-025U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518347
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-12
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

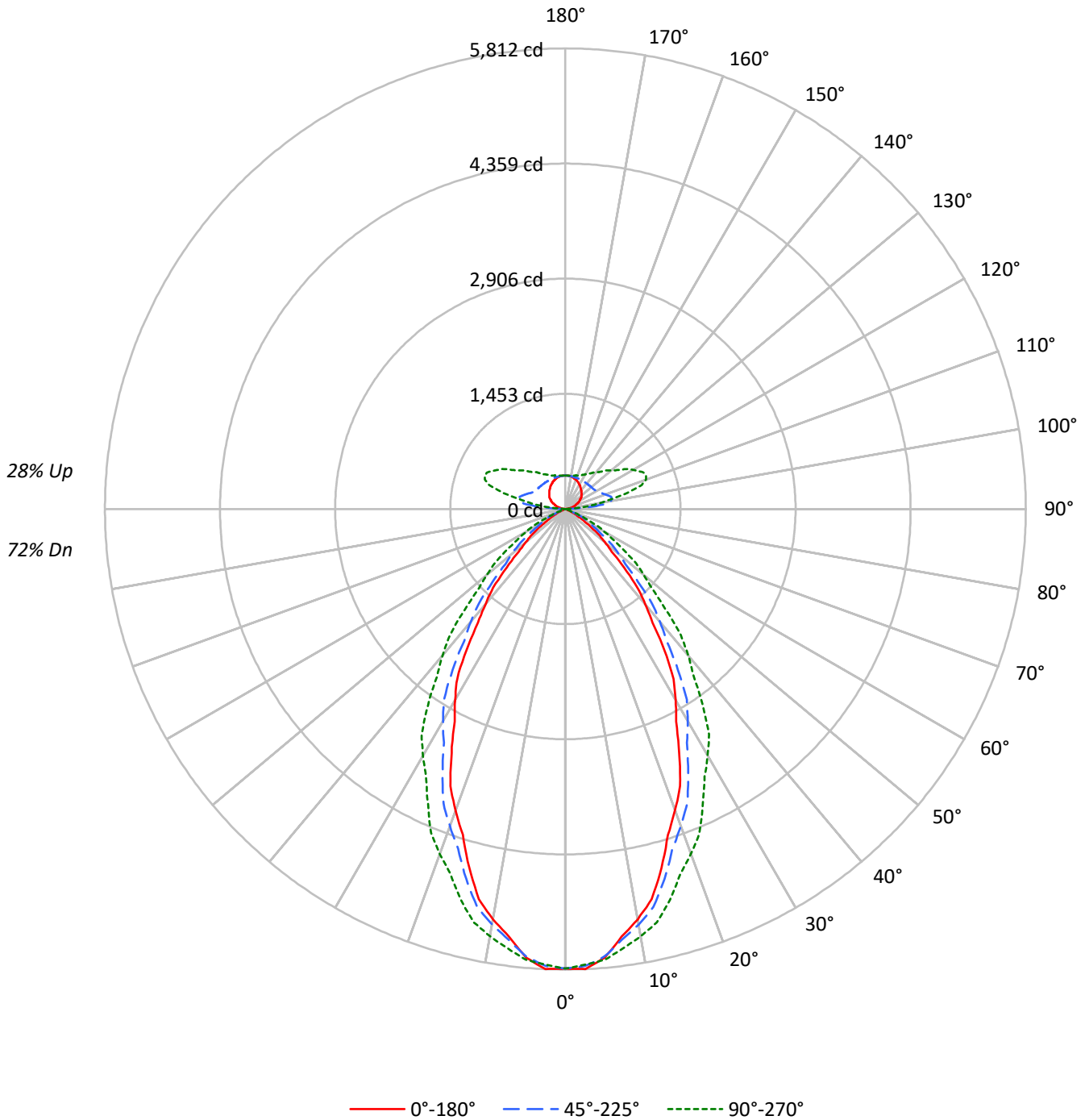
Lumens per Lamp: N/A
Luminaire Lumens: 9654.8 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 123.6
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: P518347
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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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17834	17834	17834
5°	17546	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10968	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	306	1306	1756
70°	151	404	504
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.2	5.5
10°-20°	1353.3	14.0
20°-30°	1694.2	17.5
30°-40°	1564.9	16.2
40°-50°	1051.5	10.9
50°-60°	543.1	5.6
60°-70°	170.1	1.8
70°-80°	10.7	0.1
80°-90°	2.5	0.0
90°-100°	205.7	2.1
100°-110°	540.7	5.6
110°-120°	560.7	5.8
120°-130°	449.7	4.7
130°-140°	352.9	3.7
140°-150°	270.8	2.8
150°-160°	195.1	2.0
160°-170°	119.3	1.2
170°-180°	40.3	0.4
0°-30°	3576.8	37.0
0°-40°	5141.7	53.3
0°-60°	6736.4	69.8
0°-90°	6919.7	71.7
90°-120°	1307.0	13.5
90°-150°	2380.4	24.7
90°-180°	2735.0	28.3
0°-180°	9654.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5799	5799	5799	5799	5799	
5°	5684	5626	5670	5690	5712	527
15°	4688	4671	4836	4999	5106	1306
25°	3400	3428	3670	3920	4104	1559
35°	2183	2238	2480	2772	3024	1352
45°	1046	1110	1296	1548	1790	822
55°	376	439	567	728	895	351
65°	42	80	180	217	241	71
75°	6	6	3	0	0	8
85°	0	0	0	0	0	1
90°	3	8	22	11	11	2
95°	27	106	354	183	124	30
105°	97	148	598	908	847	103
115°	173	210	479	955	1090	171
125°	241	270	436	736	868	214
135°	287	316	422	594	674	222
145°	333	354	417	507	546	208
155°	376	387	417	458	471	173
165°	406	411	417	433	438	115
175°	422	422	419	425	425	40
180°	422	422	422	422	422	

TEST NUMBER: P518347

CATALOG NUMBER: SQ4-BB-025U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5798.8	5798.8	5798.8	5798.8	5798.8
2.5°	5812.2	5757.4	5771.8	5771.5	5756.1
5°	5683.7	5626.1	5669.7	5689.8	5711.8
7.5°	5443.6	5398.6	5482.3	5545.1	5590.6
10°	5257.3	5218.9	5327.4	5413.0	5476.1
12.5°	5041.9	5012.2	5143.4	5260.8	5341.5
15°	4687.8	4671.4	4836.5	4998.8	5105.8
17.5°	4308.5	4308.0	4496.5	4698.0	4827.0
20°	4048.2	4056.4	4258.6	4480.8	4631.7
22.5°	3787.8	3807.0	4022.9	4254.7	4427.5
25°	3400.1	3427.6	3669.5	3920.5	4104.3
27.5°	3027.6	3067.6	3322.1	3583.1	3806.9
30°	2783.0	2829.6	3088.7	3363.3	3593.7
32.5°	2542.8	2598.2	2850.8	3141.2	3376.0
35°	2182.6	2237.5	2480.0	2771.9	3024.2
37.5°	1810.6	1864.4	2101.2	2388.5	2661.2
40°	1568.2	1628.6	1854.4	2132.8	2409.8
42.5°	1348.3	1408.6	1621.0	1894.5	2156.2
45°	1046.4	1109.5	1296.1	1548.5	1789.8
47.5°	796.2	864.7	1028.5	1256.8	1476.8
50°	648.0	716.6	878.1	1079.3	1290.5
52.5°	529.1	595.5	741.2	930.7	1124.4
55°	375.9	439.0	566.7	727.6	894.9
57.5°	259.8	314.1	428.7	562.9	694.1
60°	188.0	240.1	347.9	456.9	563.9
62.5°	125.1	172.8	278.3	361.8	433.7
65°	42.1	80.5	179.5	216.6	241.3
67.5°	21.3	25.7	94.3	99.5	107.7
70°	16.8	16.8	44.9	47.9	56.1
72.5°	12.3	12.3	18.0	23.0	24.7
75°	5.6	5.6	2.8	0.0	0.0
77.5°	2.8	2.8	2.2	0.0	0.0
80°	2.8	2.8	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.6	4.3	2.2	2.2
90°	2.7	8.0	21.6	10.8	10.8
92.5°	11.4	54.7	121.2	53.7	34.6
95°	27.1	106.4	354.4	182.6	124.4
97.5°	47.1	116.9	530.2	421.6	310.5
100°	62.2	125.7	584.3	592.1	459.9
102.5°	75.2	134.4	599.4	737.5	624.3
105°	97.4	147.6	597.8	907.5	846.7
107.5°	120.1	166.7	563.7	995.8	1010.6
110°	135.3	177.6	535.6	1018.5	1082.0



TEST NUMBER: P518347

CATALOG NUMBER: SQ4-BB-025U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.4	190.6	509.6	1004.2	1101.5
115°	173.1	210.2	478.8	955.2	1090.1
117.5°	195.3	229.2	457.7	887.4	1037.1
120°	208.3	240.0	449.0	841.9	987.3
122.5°	221.3	253.0	442.5	796.4	939.7
125°	240.8	269.8	435.5	736.1	868.3
127.5°	256.4	286.1	429.6	687.5	799.1
130°	265.1	296.8	427.4	657.0	760.1
132.5°	273.8	305.5	425.2	630.8	723.3
135°	286.7	315.8	422.0	594.2	673.6
137.5°	300.3	328.8	421.4	566.8	631.9
140°	311.1	337.5	419.3	545.1	605.9
142.5°	319.7	344.1	419.3	529.8	582.1
145°	332.7	353.9	416.6	506.7	546.4
147.5°	345.7	366.3	416.6	487.7	520.5
150°	354.4	372.9	416.6	476.7	503.1
152.5°	363.0	377.3	416.6	467.9	488.0
155°	376.0	386.6	416.6	457.5	470.7
157.5°	385.7	395.8	416.6	448.2	457.7
160°	392.2	400.2	416.6	443.8	449.0
162.5°	398.7	404.5	416.6	439.4	444.7
165°	405.8	411.0	416.6	432.9	438.2
167.5°	412.3	414.9	419.3	430.2	432.3
170°	416.6	419.2	419.3	430.1	430.1
172.5°	418.7	419.3	419.3	427.9	425.8
175°	422.0	422.0	419.3	424.7	424.7
177.5°	422.0	422.0	419.8	424.1	422.0
180°	422.0	422.0	422.0	422.0	422.0

(END OF REPORT)