

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: P518359

Luminaire Tested: **SQ4-BB-025U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518359
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

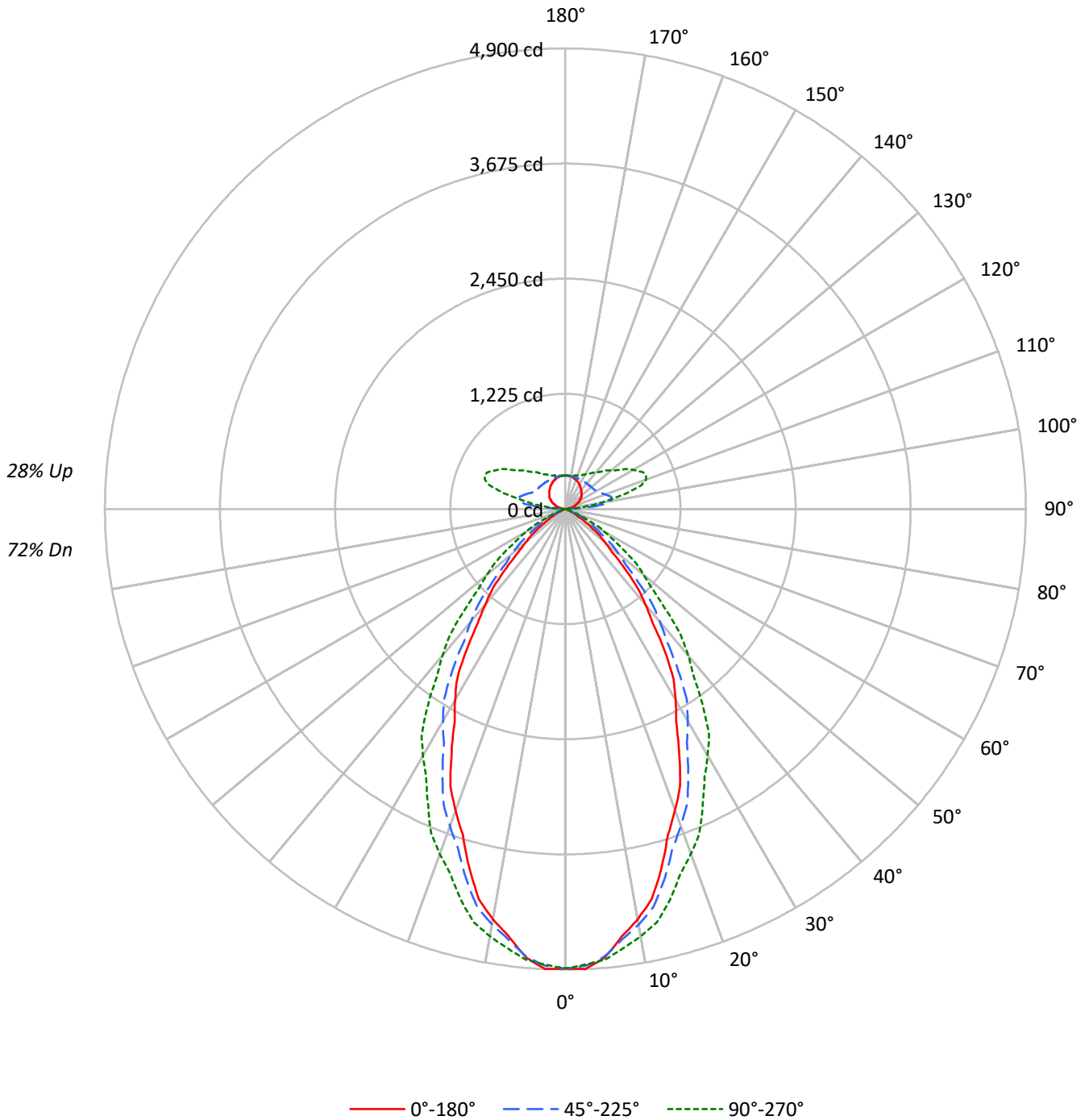
Lumens per Lamp: N/A
Luminaire Lumens: 8139.6 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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



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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	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°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11170	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	975	1804	2924
65°	258	1102	1480
70°	128	340	425
75°	56	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.1	5.5
10°-20°	1140.9	14.0
20°-30°	1428.3	17.5
30°-40°	1319.3	16.2
40°-50°	886.5	10.9
50°-60°	457.9	5.6
60°-70°	143.4	1.8
70°-80°	9.1	0.1
80°-90°	2.1	0.0
90°-100°	173.4	2.1
100°-110°	455.8	5.6
110°-120°	472.7	5.8
120°-130°	379.1	4.7
130°-140°	297.5	3.7
140°-150°	228.3	2.8
150°-160°	164.5	2.0
160°-170°	100.6	1.2
170°-180°	34.0	0.4
0°-30°	3015.4	37.0
0°-40°	4334.7	53.3
0°-60°	5679.1	69.8
0°-90°	5833.7	71.7
90°-120°	1101.9	13.5
90°-150°	2006.9	24.7
90°-180°	2306.0	28.3
0°-180°	8139.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4889	4889	4889	4889	4889	
5°	4792	4743	4780	4797	4815	444
15°	3952	3938	4077	4214	4304	1101
25°	2866	2890	3094	3305	3460	1314
35°	1840	1886	2091	2337	2550	1140
45°	882	935	1093	1305	1509	693
55°	317	370	478	613	754	296
65°	36	68	151	183	203	60
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	7	18	9	9	2
95°	23	90	299	154	105	25
105°	82	124	504	765	714	87
115°	146	177	404	805	919	144
125°	203	228	367	621	732	180
135°	242	266	356	501	568	187
145°	280	298	351	427	461	176
155°	317	326	351	386	397	146
165°	342	346	351	365	369	97
175°	356	356	354	358	358	34
180°	356	356	356	356	356	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4888.7	4888.7	4888.7	4888.7	4888.7
2.5°	4900.0	4853.8	4866.0	4865.7	4852.7
5°	4791.7	4743.1	4779.9	4796.9	4815.4
7.5°	4589.3	4551.3	4621.9	4674.8	4713.2
10°	4432.2	4399.8	4491.3	4563.5	4616.7
12.5°	4250.6	4225.6	4336.2	4435.2	4503.2
15°	3952.1	3938.2	4077.4	4214.3	4304.5
17.5°	3632.3	3631.9	3790.8	3960.7	4069.4
20°	3412.9	3419.8	3590.2	3777.6	3904.8
22.5°	3193.4	3209.6	3391.6	3586.9	3732.6
25°	2866.5	2889.6	3093.6	3305.2	3460.2
27.5°	2552.4	2586.2	2800.8	3020.7	3209.5
30°	2346.2	2385.5	2604.0	2835.4	3029.7
32.5°	2143.7	2190.4	2403.4	2648.2	2846.2
35°	1840.1	1886.3	2090.8	2336.8	2549.6
37.5°	1526.4	1571.8	1771.5	2013.7	2243.5
40°	1322.1	1373.0	1563.3	1798.1	2031.6
42.5°	1136.7	1187.5	1366.6	1597.2	1817.8
45°	882.2	935.4	1092.7	1305.4	1508.9
47.5°	671.2	729.0	867.0	1059.5	1245.0
50°	546.3	604.2	740.3	909.9	1087.9
52.5°	446.1	502.0	624.9	784.7	947.9
55°	316.9	370.1	477.8	613.4	754.5
57.5°	219.0	264.8	361.4	474.6	585.1
60°	158.5	202.4	293.3	385.2	475.4
62.5°	105.5	145.7	234.6	305.1	365.6
65°	35.5	67.9	151.4	182.6	203.4
67.5°	18.0	21.7	79.5	83.9	90.8
70°	14.2	14.2	37.8	40.4	47.3
72.5°	10.4	10.4	15.1	19.4	20.8
75°	4.7	4.7	2.4	0.0	0.0
77.5°	2.4	2.4	1.9	0.0	0.0
80°	2.4	2.4	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.3	3.6	1.8	1.8
90°	2.3	6.7	18.2	9.1	9.1
92.5°	9.6	46.1	102.2	45.2	29.2
95°	22.8	89.7	298.7	154.0	104.9
97.5°	39.7	98.5	447.0	355.5	261.8
100°	52.5	106.0	492.6	499.2	387.7
102.5°	63.4	113.3	505.4	621.8	526.3
105°	82.1	124.5	504.0	765.1	713.8
107.5°	101.3	140.5	475.3	839.5	852.0
110°	114.0	149.7	451.5	858.7	912.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.8	160.7	429.7	846.6	928.6
115°	146.0	177.2	403.7	805.3	919.1
117.5°	164.7	193.2	385.9	748.1	874.4
120°	175.6	202.4	378.6	709.7	832.4
122.5°	186.5	213.3	373.1	671.4	792.3
125°	203.0	227.5	367.2	620.6	732.0
127.5°	216.2	241.2	362.1	579.6	673.7
130°	223.5	250.2	360.3	553.9	640.8
132.5°	230.8	257.5	358.5	531.8	609.8
135°	241.7	266.3	355.8	501.0	567.9
137.5°	253.1	277.2	355.3	477.9	532.7
140°	262.3	284.6	353.5	459.6	510.8
142.5°	269.6	290.1	353.5	446.6	490.8
145°	280.5	298.3	351.2	427.2	460.7
147.5°	291.5	308.8	351.2	411.1	438.8
150°	298.7	314.4	351.2	401.9	424.2
152.5°	306.0	318.1	351.2	394.5	411.4
155°	317.0	325.9	351.2	385.7	396.8
157.5°	325.2	333.7	351.2	377.8	385.9
160°	330.7	337.4	351.2	374.1	378.6
162.5°	336.1	341.1	351.2	370.5	374.9
165°	342.1	346.5	351.2	365.0	369.4
167.5°	347.6	349.8	353.5	362.6	364.4
170°	351.2	353.4	353.5	362.6	362.6
172.5°	353.0	353.5	353.5	360.7	359.0
175°	355.8	355.8	353.5	358.0	358.0
177.5°	355.8	355.8	353.9	357.5	355.8
180°	355.8	355.8	355.8	355.8	355.8

(END OF REPORT)