

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: P518367

Luminaire Tested: **SQ4-BB-025U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518367
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

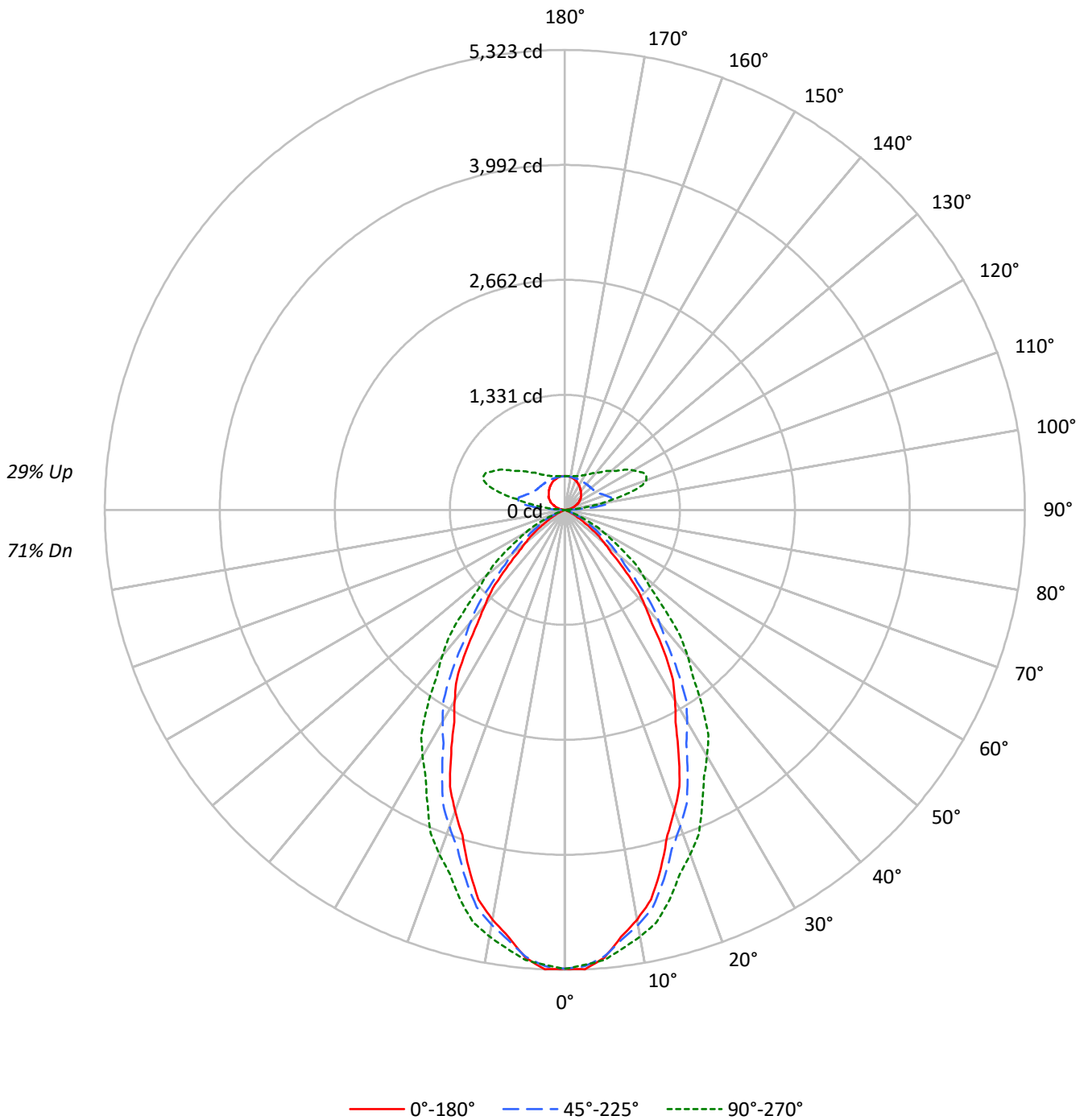
Lumens per Lamp: N/A
Luminaire Lumens: 8867.8 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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	71
1	105	102	99	96	100	97	94	92	87	85	84	79	77	76	71	70	69	65
2	98	92	87	83	93	88	83	80	80	76	74	72	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	57	54	56	53	51	48
5	79	69	62	57	75	66	60	55	61	56	52	56	52	49	52	49	46	44
6	74	63	56	51	70	61	54	50	56	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	41	39	37
8	65	54	47	42	62	52	46	41	48	43	39	45	41	37	42	38	36	34
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	39	36	33	31
10	58	46	40	35	55	45	39	35	42	37	33	40	35	32	37	33	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7130
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	280	1196	1608
70°	138	370	462
75°	61	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.7	5.5
10°-20°	1239.5	14.0
20°-30°	1551.7	17.5
30°-40°	1433.3	16.2
40°-50°	963.1	10.9
50°-60°	497.4	5.6
60°-70°	155.8	1.8
70°-80°	9.8	0.1
80°-90°	2.3	0.0
90°-100°	190.3	2.1
100°-110°	500.2	5.6
110°-120°	518.7	5.8
120°-130°	416.0	4.7
130°-140°	326.4	3.7
140°-150°	250.5	2.8
150°-160°	180.4	2.0
160°-170°	110.4	1.2
170°-180°	37.3	0.4
0°-30°	3275.8	36.9
0°-40°	4709.1	53.1
0°-60°	6169.6	69.6
0°-90°	6337.5	71.5
90°-120°	1209.1	13.6
90°-150°	2202.1	24.8
90°-180°	2530.0	28.5
0°-180°	8867.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5311	5311	5311	5311	5311	
5°	5206	5153	5193	5211	5231	483
15°	4293	4278	4430	4578	4676	1196
25°	3114	3139	3361	3591	3759	1428
35°	1999	2049	2271	2539	2770	1238
45°	958	1016	1187	1418	1639	753
55°	344	402	519	666	820	321
65°	38	74	164	198	221	65
75°	5	5	3	0	0	7
85°	0	0	0	0	0	1
90°	2	7	20	10	10	2
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5310.9	5310.9	5310.9	5310.9	5310.9
2.5°	5323.2	5273.0	5286.2	5285.9	5271.8
5°	5205.5	5152.8	5192.7	5211.1	5231.2
7.5°	4985.6	4944.4	5021.1	5078.5	5120.2
10°	4815.0	4779.8	4879.2	4957.6	5015.4
12.5°	4617.7	4590.5	4710.7	4818.2	4892.1
15°	4293.4	4278.3	4429.6	4578.3	4676.3
17.5°	3946.0	3945.5	4118.2	4302.8	4420.9
20°	3707.6	3715.1	3900.3	4103.9	4242.0
22.5°	3469.2	3486.8	3684.5	3896.7	4055.0
25°	3114.1	3139.2	3360.7	3590.7	3759.0
27.5°	2772.9	2809.5	3042.7	3281.6	3486.6
30°	2548.8	2591.5	2828.9	3080.3	3291.4
32.5°	2328.9	2379.6	2611.0	2876.9	3092.0
35°	1999.0	2049.2	2271.3	2538.7	2769.8
37.5°	1658.3	1707.5	1924.5	2187.6	2437.3
40°	1436.3	1491.5	1698.4	1953.4	2207.1
42.5°	1234.8	1290.1	1484.6	1735.1	1974.8
45°	958.4	1016.2	1187.0	1418.2	1639.3
47.5°	729.2	792.0	941.9	1151.0	1352.5
50°	593.5	656.3	804.2	988.5	1181.9
52.5°	484.6	545.4	678.8	852.4	1029.8
55°	344.3	402.1	519.0	666.4	819.6
57.5°	237.9	287.7	392.6	515.6	635.7
60°	172.1	219.9	318.6	418.5	516.4
62.5°	114.6	158.3	254.9	331.4	397.2
65°	38.5	73.7	164.4	198.4	221.0
67.5°	19.5	23.5	86.3	91.1	98.7
70°	15.4	15.4	41.1	43.9	51.4
72.5°	11.3	11.3	16.4	21.1	22.6
75°	5.1	5.1	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	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	1.5	4.0	2.0	2.0
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.6	112.1	49.6	32.0
95°	25.0	98.4	327.8	168.9	115.1
97.5°	43.5	108.1	490.5	390.0	287.3
100°	57.6	116.3	540.5	547.8	425.4
102.5°	69.6	124.4	554.5	682.3	577.6
105°	90.1	136.6	553.0	839.5	783.3
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.2	1001.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.1	176.3	471.5	928.9	1019.0
115°	160.2	194.4	442.9	883.7	1008.5
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.7	234.1	409.4	736.7	869.3
125°	222.7	249.6	402.9	680.9	803.3
127.5°	237.2	264.6	397.4	636.0	739.2
130°	245.2	274.6	395.4	607.8	703.2
132.5°	253.2	282.6	393.4	583.5	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.2	387.9	504.3	560.5
142.5°	295.8	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.1	481.5
150°	327.8	344.9	385.4	441.0	465.4
152.5°	335.8	349.0	385.4	432.8	451.4
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.3	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.3	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)