

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: P518363

Luminaire Tested: **SQ4-BB-025U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518363
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

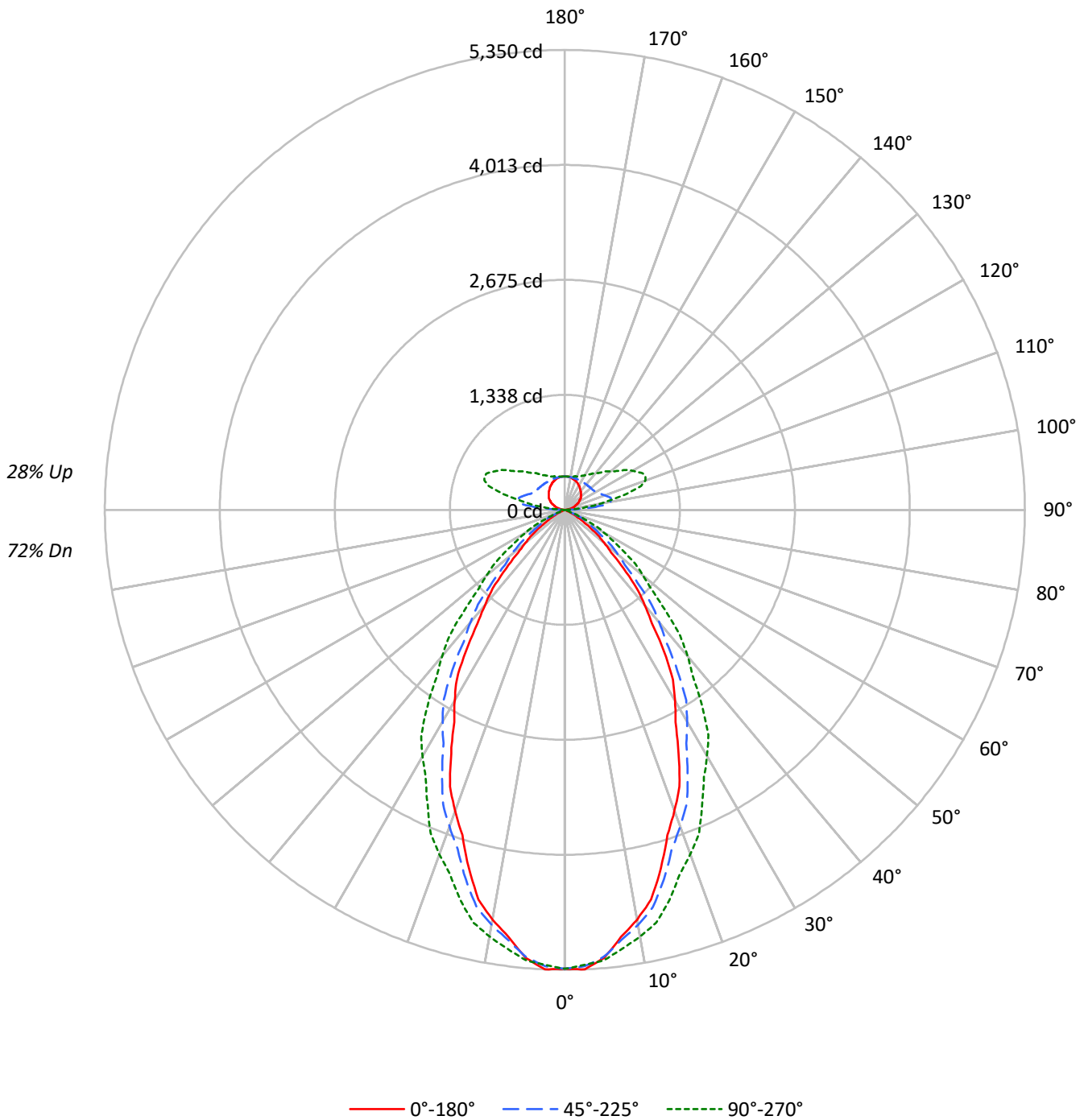
Lumens per Lamp: N/A
Luminaire Lumens: 8887.7 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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	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°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3867	5683
55°	1856	2797	4417
60°	1064	1969	3193
65°	282	1203	1616
70°	139	371	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.2	5.5
10°-20°	1245.8	14.0
20°-30°	1559.6	17.5
30°-40°	1440.6	16.2
40°-50°	968.0	10.9
50°-60°	500.0	5.6
60°-70°	156.6	1.8
70°-80°	9.9	0.1
80°-90°	2.3	0.0
90°-100°	189.3	2.1
100°-110°	497.7	5.6
110°-120°	516.1	5.8
120°-130°	414.0	4.7
130°-140°	324.8	3.7
140°-150°	249.3	2.8
150°-160°	179.6	2.0
160°-170°	109.9	1.2
170°-180°	37.1	0.4
0°-30°	3292.6	37.0
0°-40°	4733.1	53.3
0°-60°	6201.1	69.8
0°-90°	6369.9	71.7
90°-120°	1203.2	13.5
90°-150°	2191.3	24.7
90°-180°	2518.0	28.3
0°-180°	8887.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5232	5179	5219	5238	5258	485
15°	4315	4300	4452	4602	4700	1202
25°	3130	3155	3378	3609	3778	1435
35°	2009	2060	2283	2552	2784	1245
45°	963	1021	1193	1425	1648	757
55°	346	404	522	670	824	323
65°	39	74	165	199	222	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	326	168	114	28
105°	90	136	550	835	779	95
115°	159	194	441	879	1004	157
125°	222	248	401	678	799	197
135°	264	291	388	547	620	204
145°	306	326	384	466	503	192
155°	346	356	384	421	433	159
165°	374	378	384	398	403	105
175°	388	388	386	391	391	37
180°	388	388	388	388	388	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5338.0	5338.0	5338.0	5338.0	5338.0
2.5°	5350.4	5299.9	5313.2	5312.9	5298.7
5°	5232.1	5179.1	5219.2	5237.7	5257.9
7.5°	5011.1	4969.6	5046.7	5104.5	5146.4
10°	4839.6	4804.2	4904.1	4982.9	5041.0
12.5°	4641.2	4614.0	4734.7	4842.8	4917.1
15°	4315.3	4300.2	4452.2	4601.6	4700.1
17.5°	3966.2	3965.7	4139.2	4324.7	4443.4
20°	3726.5	3734.1	3920.2	4124.8	4263.7
22.5°	3486.9	3504.5	3703.3	3916.6	4075.7
25°	3130.0	3155.2	3377.9	3609.0	3778.2
27.5°	2787.0	2823.9	3058.2	3298.4	3504.4
30°	2561.8	2604.8	2843.3	3096.1	3308.2
32.5°	2340.8	2391.8	2624.3	2891.6	3107.8
35°	2009.2	2059.7	2282.9	2551.6	2783.9
37.5°	1666.7	1716.2	1934.3	2198.8	2449.7
40°	1443.6	1499.2	1707.0	1963.3	2218.4
42.5°	1241.1	1296.7	1492.2	1744.0	1984.9
45°	963.3	1021.3	1193.1	1425.4	1647.6
47.5°	732.9	796.0	946.7	1156.9	1359.4
50°	596.6	659.7	808.3	993.5	1187.9
52.5°	487.1	548.2	682.3	856.8	1035.1
55°	346.1	404.1	521.7	669.8	823.8
57.5°	239.1	289.1	394.6	518.2	638.9
60°	173.0	221.0	320.2	420.6	519.1
62.5°	115.2	159.1	256.2	333.1	399.3
65°	38.7	74.1	165.3	199.4	222.1
67.5°	19.6	23.7	86.8	91.6	99.2
70°	15.5	15.5	41.3	44.1	51.6
72.5°	11.4	11.4	16.5	21.2	22.7
75°	5.2	5.2	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	19.9	10.0	10.0
92.5°	10.5	50.4	111.6	49.4	31.9
95°	24.9	97.9	326.2	168.1	114.5
97.5°	43.3	107.6	488.1	388.1	285.9
100°	57.3	115.7	537.9	545.1	423.3
102.5°	69.2	123.8	551.8	678.9	574.7
105°	89.6	135.9	550.3	835.4	779.4
107.5°	110.6	153.4	518.9	916.7	930.3
110°	124.5	163.5	493.0	937.6	996.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	138.5	175.5	469.1	924.4	1014.0
115°	159.4	193.5	440.8	879.3	1003.5
117.5°	179.8	211.0	421.3	816.9	954.7
120°	191.7	221.0	413.4	775.0	908.9
122.5°	203.7	232.9	407.4	733.1	865.1
125°	221.6	248.4	400.9	677.6	799.3
127.5°	236.1	263.3	395.4	632.8	735.6
130°	244.0	273.2	393.4	604.8	699.7
132.5°	252.0	281.2	391.4	580.6	665.9
135°	264.0	290.7	388.5	547.0	620.0
137.5°	276.4	302.7	388.0	521.8	581.7
140°	286.4	310.7	386.0	501.8	557.8
142.5°	294.3	316.7	386.0	487.7	535.9
145°	306.3	325.8	383.5	466.5	503.0
147.5°	318.2	337.2	383.5	448.9	479.1
150°	326.2	343.3	383.5	438.8	463.2
152.5°	334.2	347.3	383.5	430.7	449.2
155°	346.1	355.9	383.5	421.1	433.3
157.5°	355.1	364.3	383.5	412.6	421.3
160°	361.1	368.4	383.5	408.5	413.4
162.5°	367.0	372.4	383.5	404.5	409.4
165°	373.5	378.4	383.5	398.5	403.4
167.5°	379.5	381.9	386.0	396.0	397.9
170°	383.5	385.9	386.0	395.9	395.9
172.5°	385.5	386.0	386.0	393.9	391.9
175°	388.5	388.5	386.0	390.9	390.9
177.5°	388.5	388.5	386.5	390.4	388.5
180°	388.5	388.5	388.5	388.5	388.5

(END OF REPORT)