

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: P518545

Luminaire Tested: **SQ4-BB-075U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518545
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

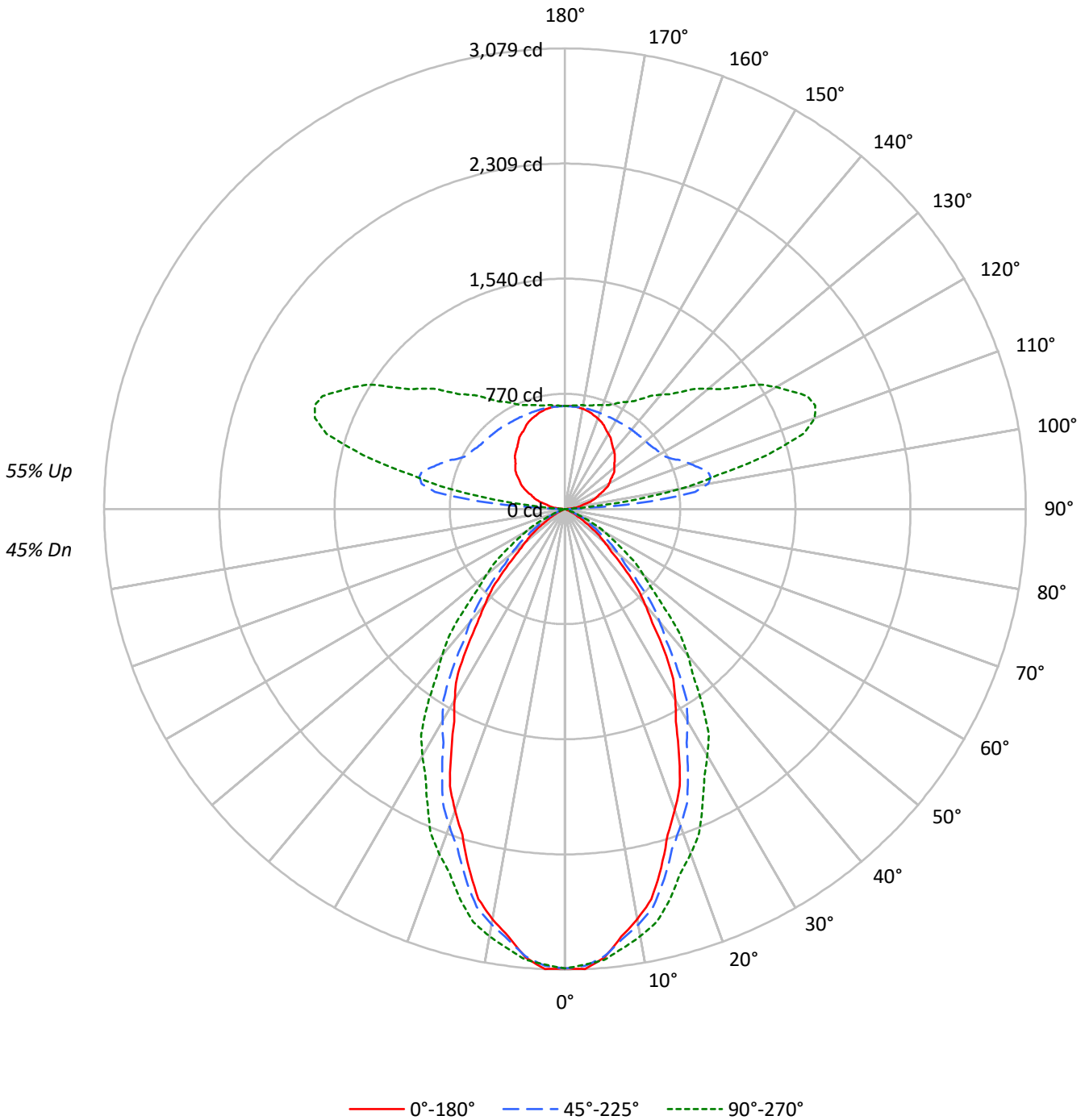
Lumens per Lamp: N/A
Luminaire Lumens: 8156.7 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	3.4
10°-20°	716.9	8.8
20°-30°	897.5	11.0
30°-40°	829.0	10.2
40°-50°	557.0	6.8
50°-60°	287.7	3.5
60°-70°	90.1	1.1
70°-80°	5.7	0.1
80°-90°	1.9	0.0
90°-100°	325.1	4.0
100°-110°	894.5	11.0
110°-120°	923.3	11.3
120°-130°	739.7	9.1
130°-140°	581.0	7.1
140°-150°	445.2	5.5
150°-160°	320.1	3.9
160°-170°	195.7	2.4
170°-180°	66.0	0.8
0°-30°	1894.7	23.2
0°-40°	2723.7	33.4
0°-60°	3568.4	43.7
0°-90°	3666.1	44.9
90°-120°	2142.9	26.3
90°-150°	3908.8	47.9
90°-180°	4491.0	55.1
0°-180°	8156.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	2	6	10	13	13	3
95°	48	178	575	246	157	51
105°	160	246	986	1501	1401	169
115°	283	345	790	1574	1786	279
125°	390	445	717	1213	1421	348
135°	471	522	697	981	1110	363
145°	544	581	686	836	900	341
155°	616	636	682	751	773	283
165°	666	674	685	713	717	188
175°	689	691	686	695	694	65
180°	689	689	689	689	689	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.6	2.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	20.2	86.5	149.9	57.6	47.2
95°	48.4	177.5	574.9	245.8	156.9
97.5°	78.9	196.8	877.3	676.0	477.0
100°	101.2	208.8	972.4	981.5	800.8
102.5°	122.3	223.0	997.0	1217.7	1051.9
105°	159.9	245.9	985.6	1501.0	1400.6
107.5°	195.7	274.2	929.6	1639.8	1669.6
110°	221.5	293.2	887.3	1674.3	1777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	244.9	314.3	845.1	1652.1	1809.3
115°	283.1	344.7	790.5	1574.1	1786.4
117.5°	319.4	376.2	755.9	1464.8	1704.8
120°	341.7	396.2	740.7	1382.8	1630.9
122.5°	361.7	416.2	730.1	1311.0	1546.4
125°	390.1	444.6	717.2	1213.2	1421.2
127.5°	417.1	469.0	708.7	1131.7	1314.1
130°	431.2	484.3	704.0	1083.2	1249.6
132.5°	447.6	500.7	700.5	1040.6	1190.9
135°	470.8	522.4	696.7	981.2	1110.3
137.5°	492.5	540.4	693.4	933.2	1039.6
140°	508.9	553.4	692.3	901.2	997.3
142.5°	523.0	564.0	689.9	872.8	955.1
145°	544.1	581.4	686.4	836.0	900.5
147.5°	566.7	598.8	684.6	803.4	855.1
150°	580.8	609.5	683.5	785.6	825.7
152.5°	593.7	620.1	682.3	770.2	803.4
155°	616.0	636.1	682.0	751.4	772.9
157.5°	632.1	648.5	682.0	736.0	750.9
160°	643.9	656.8	682.0	727.7	739.2
162.5°	653.2	663.9	683.2	720.6	729.8
165°	665.9	674.5	684.9	712.9	717.2
167.5°	674.7	681.3	686.4	706.4	707.5
170°	680.5	684.8	686.4	704.0	704.0
172.5°	685.2	687.2	686.4	700.4	699.3
175°	689.3	690.8	686.4	695.2	693.7
177.5°	690.5	690.5	685.8	692.8	690.5
180°	689.3	689.3	689.3	689.3	689.3

(END OF REPORT)