

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: P518354

Luminaire Tested: **SQ4-BB-025U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518354
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-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

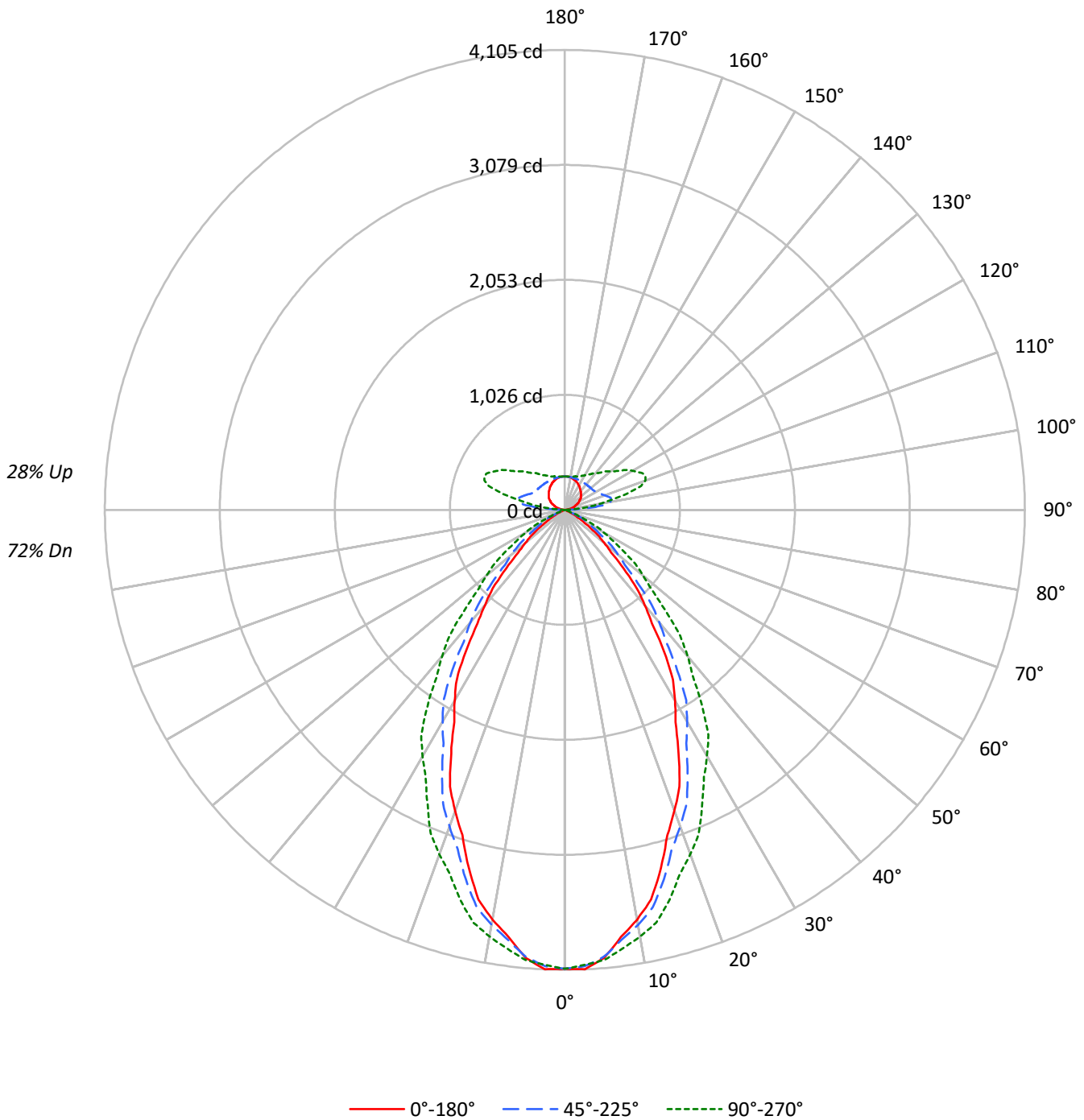
Lumens per Lamp: N/A
Luminaire Lumens: 6819.2 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 82.2
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	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°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7887	10250
45°	4822	5972	8248
50°	3285	4451	6542
55°	2135	3219	5084
60°	1225	2267	3675
65°	324	1384	1860
70°	161	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°	373.8	5.5
10°-20°	955.9	14.0
20°-30°	1196.6	17.5
30°-40°	1105.3	16.2
40°-50°	742.7	10.9
50°-60°	383.6	5.6
60°-70°	120.2	1.8
70°-80°	7.6	0.1
80°-90°	1.7	0.0
90°-100°	145.3	2.1
100°-110°	381.9	5.6
110°-120°	396.0	5.8
120°-130°	317.6	4.7
130°-140°	249.2	3.7
140°-150°	191.3	2.8
150°-160°	137.8	2.0
160°-170°	84.3	1.2
170°-180°	28.5	0.4
0°-30°	2526.3	37.0
0°-40°	3631.5	53.3
0°-60°	4757.9	69.8
0°-90°	4887.4	71.7
90°-120°	923.2	13.5
90°-150°	1681.3	24.7
90°-180°	1932.0	28.3
0°-180°	6819.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4096	4096	4096	4096	4096	
5°	4014	3974	4004	4019	4034	372
15°	3311	3299	3416	3531	3606	922
25°	2402	2421	2592	2769	2899	1101
35°	1542	1580	1752	1958	2136	955
45°	739	784	915	1094	1264	580
55°	266	310	400	514	632	248
65°	30	57	127	153	170	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	2	6	15	8	8	2
95°	19	75	250	129	88	21
105°	69	104	422	641	598	73
115°	122	148	338	675	770	121
125°	170	191	308	520	613	151
135°	202	223	298	420	476	157
145°	235	250	294	358	386	147
155°	266	273	294	323	332	122
165°	287	290	294	306	310	81
175°	298	298	296	300	300	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4095.6	4095.6	4095.6	4095.6	4095.6
2.5°	4105.1	4066.4	4076.6	4076.4	4065.5
5°	4014.4	3973.7	4004.5	4018.7	4034.2
7.5°	3844.8	3813.0	3872.1	3916.4	3948.6
10°	3713.2	3686.1	3762.8	3823.2	3867.8
12.5°	3561.0	3540.1	3632.8	3715.7	3772.7
15°	3311.0	3299.4	3416.0	3530.7	3606.2
17.5°	3043.1	3042.7	3175.8	3318.2	3409.3
20°	2859.2	2865.0	3007.8	3164.8	3271.4
22.5°	2675.3	2688.9	2841.4	3005.0	3127.1
25°	2401.5	2420.9	2591.7	2769.0	2898.8
27.5°	2138.4	2166.7	2346.4	2530.7	2688.8
30°	1965.6	1998.5	2181.6	2375.5	2538.2
32.5°	1796.0	1835.1	2013.5	2218.6	2384.5
35°	1541.6	1580.3	1751.6	1957.7	2136.0
37.5°	1278.8	1316.8	1484.1	1687.0	1879.6
40°	1107.6	1150.2	1309.7	1506.4	1702.1
42.5°	952.3	994.9	1144.9	1338.1	1522.9
45°	739.1	783.6	915.4	1093.7	1264.2
47.5°	562.3	610.8	726.4	887.6	1043.0
50°	457.7	506.1	620.2	762.3	911.5
52.5°	373.7	420.6	523.5	657.4	794.2
55°	265.5	310.1	400.3	513.9	632.1
57.5°	183.5	221.8	302.8	397.6	490.2
60°	132.8	169.6	245.7	322.7	398.3
62.5°	88.4	122.1	196.6	255.6	306.3
65°	29.7	56.8	126.8	153.0	170.4
67.5°	15.1	18.2	66.6	70.3	76.1
70°	11.9	11.9	31.7	33.8	39.6
72.5°	8.7	8.7	12.7	16.3	17.4
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.6	15.3	7.6	7.6
92.5°	8.0	38.7	85.6	37.9	24.5
95°	19.1	75.1	250.3	129.0	87.9
97.5°	33.2	82.6	374.5	297.8	219.3
100°	43.9	88.8	412.7	418.2	324.8
102.5°	53.1	95.0	423.4	520.9	441.0
105°	68.8	104.3	422.2	641.0	598.0
107.5°	84.8	117.7	398.2	703.3	713.8
110°	95.5	125.4	378.3	719.4	764.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	134.6	360.0	709.2	778.0
115°	122.3	148.4	338.2	674.7	770.0
117.5°	137.9	161.9	323.3	626.8	732.5
120°	147.1	169.5	317.2	594.6	697.4
122.5°	156.3	178.7	312.6	562.5	663.7
125°	170.0	190.6	307.6	519.9	613.3
127.5°	181.1	202.0	303.4	485.5	564.4
130°	187.2	209.7	301.9	464.0	536.9
132.5°	193.4	215.8	300.3	445.5	510.9
135°	202.5	223.1	298.0	419.7	475.7
137.5°	212.1	232.2	297.7	400.4	446.3
140°	219.7	238.4	296.1	385.0	428.0
142.5°	225.8	243.0	296.1	374.2	411.2
145°	235.0	249.9	294.2	357.9	385.9
147.5°	244.2	258.7	294.2	344.4	367.6
150°	250.3	263.4	294.2	336.7	355.4
152.5°	256.4	266.5	294.2	330.5	344.7
155°	265.6	273.0	294.2	323.1	332.4
157.5°	272.4	279.5	294.2	316.5	323.3
160°	277.0	282.6	294.2	313.4	317.2
162.5°	281.6	285.7	294.2	310.4	314.1
165°	286.6	290.3	294.2	305.8	309.5
167.5°	291.2	293.0	296.1	303.8	305.3
170°	294.2	296.1	296.1	303.8	303.8
172.5°	295.8	296.1	296.1	302.2	300.7
175°	298.0	298.0	296.1	300.0	300.0
177.5°	298.0	298.0	296.5	299.5	298.0
180°	298.0	298.0	298.0	298.0	298.0

(END OF REPORT)