

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: P518546

Luminaire Tested: **SQ4-BB-075U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518546
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-8
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

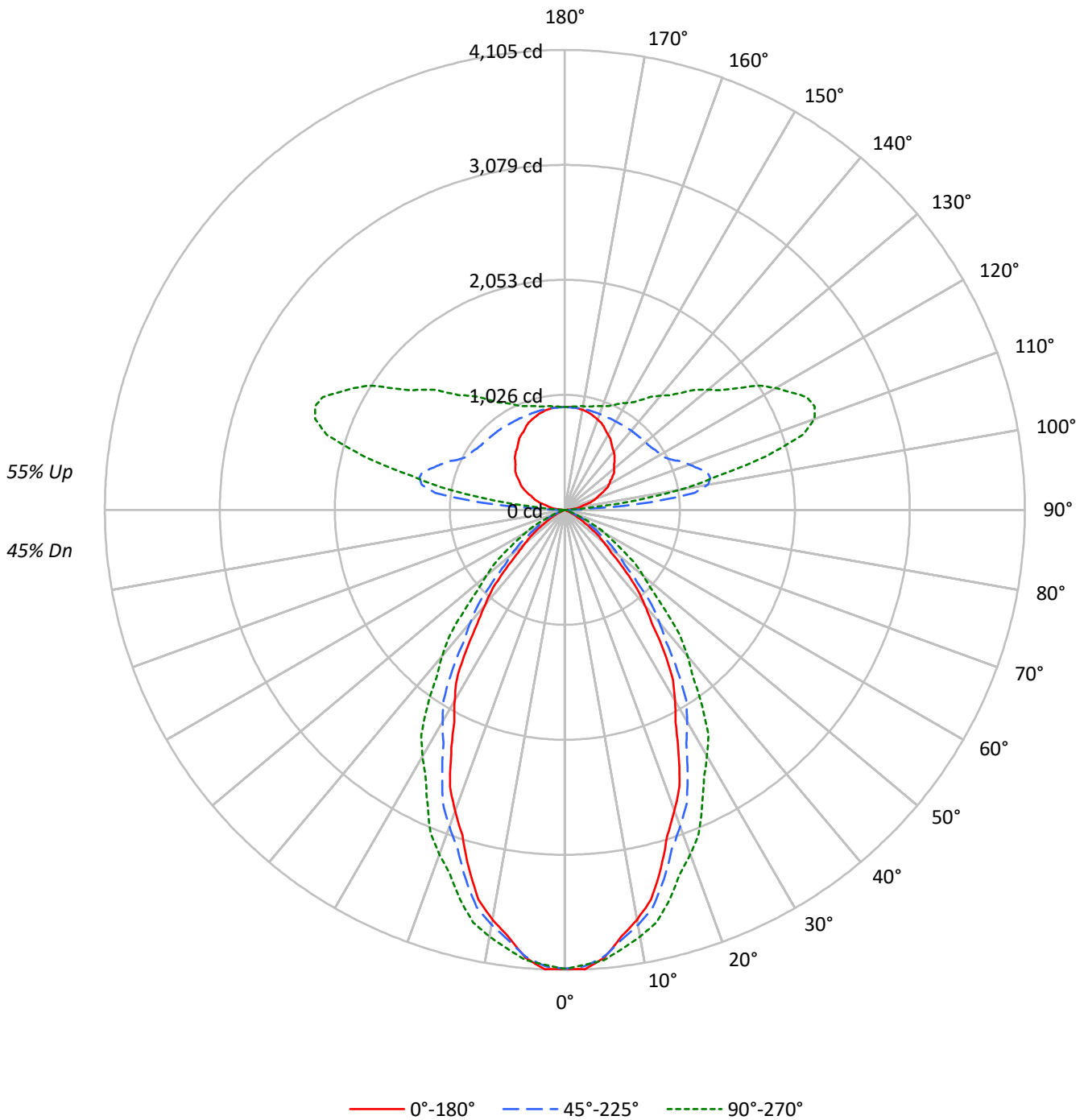
Lumens per Lamp: N/A
Luminaire Lumens: 10875.6 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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	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	3.4
10°-20°	955.9	8.8
20°-30°	1196.6	11.0
30°-40°	1105.3	10.2
40°-50°	742.7	6.8
50°-60°	383.6	3.5
60°-70°	120.2	1.1
70°-80°	7.6	0.1
80°-90°	2.5	0.0
90°-100°	433.5	4.0
100°-110°	1192.6	11.0
110°-120°	1231.0	11.3
120°-130°	986.3	9.1
130°-140°	774.7	7.1
140°-150°	593.7	5.5
150°-160°	426.8	3.9
160°-170°	261.0	2.4
170°-180°	88.0	0.8
0°-30°	2526.3	23.2
0°-40°	3631.5	33.4
0°-60°	4757.9	43.7
0°-90°	4888.1	44.9
90°-120°	2857.1	26.3
90°-150°	5211.7	47.9
90°-180°	5988.0	55.1
0°-180°	10875.6	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	8	14	18	18	4
95°	64	237	767	328	209	68
105°	213	328	1314	2001	1868	225
115°	377	460	1054	2099	2382	372
125°	520	593	956	1618	1895	464
135°	628	697	929	1308	1480	484
145°	726	775	915	1115	1201	455
155°	821	848	909	1002	1031	377
165°	888	899	913	950	956	250
175°	919	921	915	927	925	87
180°	919	919	919	919	919	

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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	1.5	2.7	3.5	3.5
90°	2.0	7.7	13.7	17.6	17.6
92.5°	27.0	115.3	199.9	76.7	63.0
95°	64.5	236.6	766.6	327.8	209.2
97.5°	105.2	262.4	1169.8	901.3	635.9
100°	134.9	278.3	1296.5	1308.6	1067.7
102.5°	163.1	297.3	1329.4	1623.5	1402.5
105°	213.2	327.9	1314.1	2001.4	1867.5
107.5°	260.9	365.6	1239.4	2186.4	2226.2
110°	295.3	390.9	1183.1	2232.4	2370.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.6	419.1	1126.8	2202.8	2412.3
115°	377.4	459.6	1054.0	2098.8	2381.8
117.5°	425.9	501.6	1007.9	1953.0	2273.1
120°	455.6	528.3	987.5	1843.8	2174.6
122.5°	482.2	554.9	973.5	1747.9	2061.9
125°	520.2	592.8	956.3	1617.7	1894.9
127.5°	556.2	625.4	944.9	1508.9	1752.2
130°	574.9	645.7	938.7	1444.3	1666.1
132.5°	596.8	667.6	934.0	1387.5	1587.9
135°	627.7	696.6	928.9	1308.3	1480.3
137.5°	656.7	720.5	924.6	1244.2	1386.1
140°	678.6	737.8	923.0	1201.7	1329.8
142.5°	697.3	752.0	919.9	1163.7	1273.4
145°	725.5	775.2	915.2	1114.7	1200.7
147.5°	755.6	798.4	912.8	1071.2	1140.1
150°	774.4	812.6	911.3	1047.4	1101.0
152.5°	791.6	826.8	909.7	1026.9	1071.2
155°	821.3	848.1	909.3	1001.9	1030.6
157.5°	842.8	864.6	909.3	981.3	1001.2
160°	858.5	875.7	909.3	970.3	985.6
162.5°	871.0	885.1	910.9	960.8	973.1
165°	887.8	899.3	913.2	950.5	956.3
167.5°	899.5	908.3	915.2	941.8	943.3
170°	907.4	913.1	915.2	938.7	938.7
172.5°	913.6	916.3	915.2	933.9	932.4
175°	919.1	921.0	915.2	926.9	925.0
177.5°	920.7	920.7	914.4	923.7	920.7
180°	919.1	919.1	919.1	919.1	919.1

(END OF REPORT)