

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: P518542

Luminaire Tested: **SQ4-BB-075U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518542
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

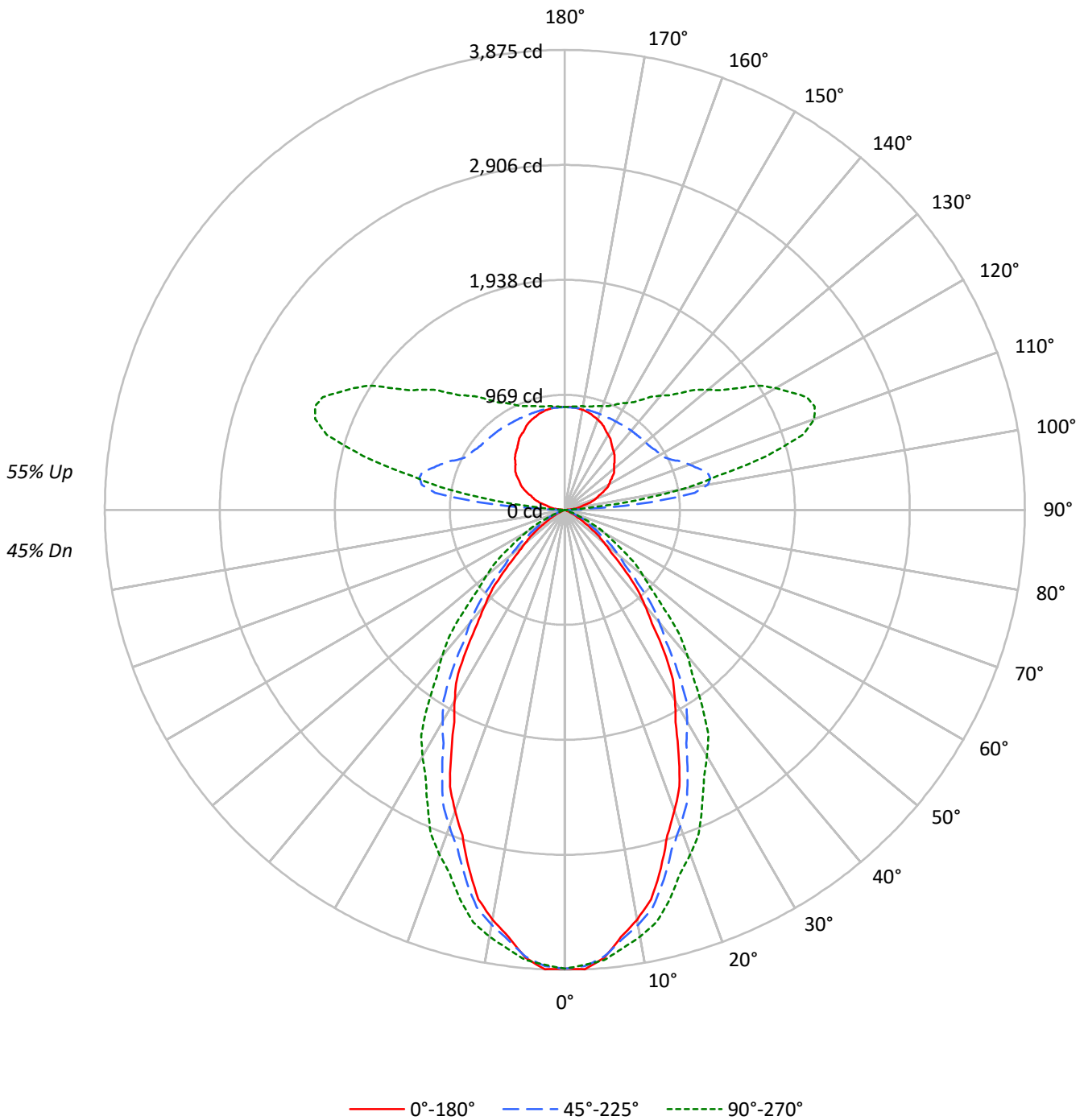
Lumens per Lamp: N/A
Luminaire Lumens: 10265.4 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	17833	17833	17833
5°	17547	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13938	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7444	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	307	1307	1755
70°	151	403	504
75°	66	34	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.8	3.4
10°-20°	902.2	8.8
20°-30°	1129.5	11.0
30°-40°	1043.3	10.2
40°-50°	701.0	6.8
50°-60°	362.1	3.5
60°-70°	113.4	1.1
70°-80°	7.2	0.1
80°-90°	2.3	0.0
90°-100°	409.2	4.0
100°-110°	1125.7	11.0
110°-120°	1161.9	11.3
120°-130°	931.0	9.1
130°-140°	731.2	7.1
140°-150°	560.3	5.5
150°-160°	402.9	3.9
160°-170°	246.4	2.4
170°-180°	83.0	0.8
0°-30°	2384.5	23.2
0°-40°	3427.8	33.4
0°-60°	4490.9	43.7
0°-90°	4613.8	44.9
90°-120°	2696.8	26.3
90°-150°	4919.3	47.9
90°-180°	5652.0	55.1
0°-180°	10265.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3866	3866	3866	3866	3866	
5°	3789	3751	3780	3793	3808	351
15°	3125	3114	3224	3333	3404	870
25°	2267	2285	2446	2614	2736	1039
35°	1455	1492	1653	1848	2016	901
45°	698	740	864	1032	1193	548
55°	251	293	378	485	597	234
65°	28	54	120	144	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	2	7	13	17	17	4
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3865.8	3865.8	3865.8	3865.8	3865.8
2.5°	3874.8	3838.2	3847.9	3847.6	3837.4
5°	3789.2	3750.8	3779.8	3793.2	3807.9
7.5°	3629.1	3599.1	3654.9	3696.7	3727.1
10°	3504.9	3479.3	3551.6	3608.7	3650.8
12.5°	3361.2	3341.5	3428.9	3507.2	3561.0
15°	3125.2	3114.2	3224.3	3332.6	3403.9
17.5°	2872.4	2872.0	2997.7	3132.0	3218.0
20°	2698.8	2704.3	2839.1	2987.2	3087.8
22.5°	2525.2	2538.0	2682.0	2836.4	2951.7
25°	2266.8	2285.0	2446.3	2613.7	2736.2
27.5°	2018.4	2045.1	2214.8	2388.7	2537.9
30°	1855.3	1886.4	2059.2	2242.2	2395.8
32.5°	1695.2	1732.1	1900.6	2094.1	2250.7
35°	1455.1	1491.6	1653.3	1847.9	2016.1
37.5°	1207.1	1242.9	1400.8	1592.4	1774.1
40°	1045.5	1085.7	1236.2	1421.9	1606.6
42.5°	898.8	939.1	1080.6	1263.0	1437.5
45°	697.6	739.7	864.1	1032.3	1193.2
47.5°	530.8	576.5	685.6	837.8	984.5
50°	432.0	477.7	585.4	719.5	860.3
52.5°	352.7	397.0	494.1	620.5	749.6
55°	250.6	292.7	377.8	485.1	596.6
57.5°	173.2	209.4	285.8	375.3	462.7
60°	125.3	160.1	231.9	304.6	375.9
62.5°	83.4	115.2	185.5	241.2	289.1
65°	28.1	53.7	119.7	144.4	160.8
67.5°	14.2	17.1	62.8	66.3	71.8
70°	11.2	11.2	29.9	31.9	37.4
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	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	2.6	3.3	3.3
90°	1.8	7.3	12.9	16.6	16.6
92.5°	25.5	108.9	188.6	72.4	59.4
95°	60.9	223.3	723.6	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.8	1235.2	1007.8
102.5°	153.9	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.1	1762.7
107.5°	246.2	345.1	1169.9	2063.7	2101.3
110°	278.7	369.0	1116.7	2107.2	2237.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.3	395.6	1063.6	2079.2	2277.0
115°	356.2	433.8	994.9	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.4	2145.6
120°	430.1	498.7	932.1	1740.3	2052.5
122.5°	455.2	523.8	918.8	1649.9	1946.2
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	524.9	590.3	891.9	1424.3	1653.8
130°	542.7	609.4	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.8	1397.3
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.2
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.8	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.1	1076.1
150°	730.9	767.0	860.1	988.7	1039.2
152.5°	747.2	780.4	858.7	969.3	1011.1
155°	775.2	800.5	858.3	945.7	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.6	858.3	915.9	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.8	889.0	890.4
170°	856.5	861.9	863.8	886.0	886.0
172.5°	862.4	864.9	863.8	881.5	880.1
175°	867.5	869.3	863.8	874.9	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)