

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: P518559

Luminaire Tested: **SQ4-BB-075U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518559
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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

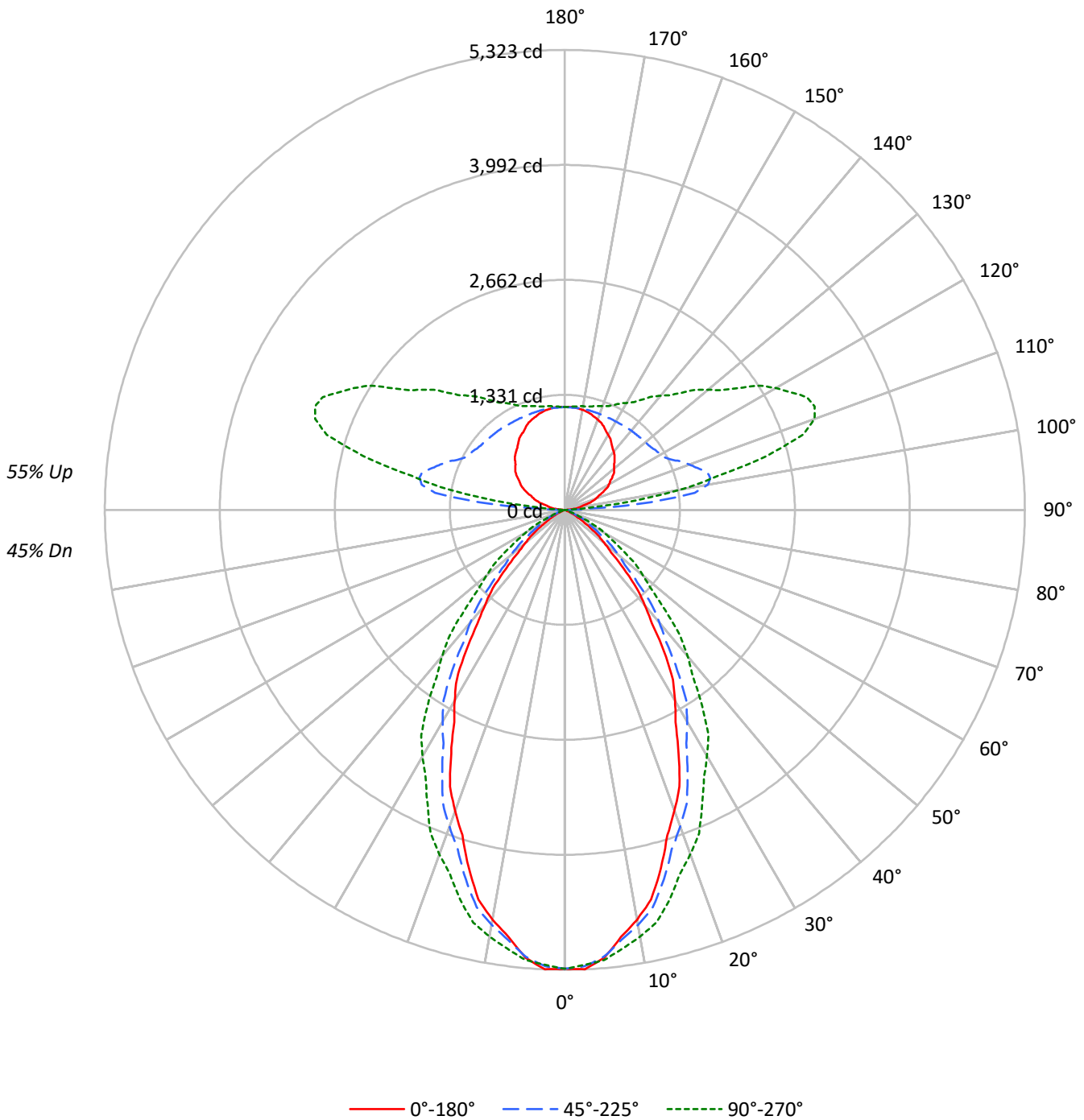
Lumens per Lamp: N/A
Luminaire Lumens: 14102.6 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.2
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	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°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7130
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	280	1196	1608
70°	138	370	462
75°	61	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.7	3.4
10°-20°	1239.5	8.8
20°-30°	1551.7	11.0
30°-40°	1433.3	10.2
40°-50°	963.1	6.8
50°-60°	497.4	3.5
60°-70°	155.8	1.1
70°-80°	9.8	0.1
80°-90°	3.2	0.0
90°-100°	562.1	4.0
100°-110°	1546.5	11.0
110°-120°	1596.3	11.3
120°-130°	1279.0	9.1
130°-140°	1004.5	7.1
140°-150°	769.8	5.5
150°-160°	553.5	3.9
160°-170°	338.4	2.4
170°-180°	114.1	0.8
0°-30°	3275.8	23.2
0°-40°	4709.1	33.4
0°-60°	6169.6	43.7
0°-90°	6338.5	44.9
90°-120°	3704.9	26.3
90°-150°	6758.2	47.9
90°-180°	7764.0	55.1
0°-180°	14102.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5311	5311	5311	5311	5311	
5°	5206	5153	5193	5211	5231	483
15°	4293	4278	4430	4578	4676	1196
25°	3114	3139	3361	3591	3759	1428
35°	1999	2049	2271	2539	2770	1238
45°	958	1016	1187	1418	1639	753
55°	344	402	519	666	820	321
65°	38	74	164	198	221	65
75°	5	5	3	0	0	7
85°	0	0	0	0	0	1
90°	2	10	18	23	23	6
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	489	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1233	1240	324
175°	1192	1194	1187	1202	1199	113
180°	1192	1192	1192	1192	1192	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5310.9	5310.9	5310.9	5310.9	5310.9
2.5°	5323.2	5273.0	5286.2	5285.9	5271.8
5°	5205.5	5152.8	5192.7	5211.1	5231.2
7.5°	4985.6	4944.4	5021.1	5078.5	5120.2
10°	4815.0	4779.8	4879.2	4957.6	5015.4
12.5°	4617.7	4590.5	4710.7	4818.2	4892.1
15°	4293.4	4278.3	4429.6	4578.3	4676.3
17.5°	3946.0	3945.5	4118.2	4302.8	4420.9
20°	3707.6	3715.1	3900.3	4103.9	4242.0
22.5°	3469.2	3486.8	3684.5	3896.7	4055.0
25°	3114.1	3139.2	3360.7	3590.7	3759.0
27.5°	2772.9	2809.5	3042.7	3281.6	3486.6
30°	2548.8	2591.5	2828.9	3080.3	3291.4
32.5°	2328.9	2379.6	2611.0	2876.9	3092.0
35°	1999.0	2049.2	2271.3	2538.7	2769.8
37.5°	1658.3	1707.5	1924.5	2187.6	2437.3
40°	1436.3	1491.5	1698.4	1953.4	2207.1
42.5°	1234.8	1290.1	1484.6	1735.1	1974.8
45°	958.4	1016.2	1187.0	1418.2	1639.3
47.5°	729.2	792.0	941.9	1151.0	1352.5
50°	593.5	656.3	804.2	988.5	1181.9
52.5°	484.6	545.4	678.8	852.4	1029.8
55°	344.3	402.1	519.0	666.4	819.6
57.5°	237.9	287.7	392.6	515.6	635.7
60°	172.1	219.9	318.6	418.5	516.4
62.5°	114.6	158.3	254.9	331.4	397.2
65°	38.5	73.7	164.4	198.4	221.0
67.5°	19.5	23.5	86.3	91.1	98.7
70°	15.4	15.4	41.1	43.9	51.4
72.5°	11.3	11.3	16.4	21.1	22.6
75°	5.1	5.1	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	2.0	3.6	4.6	4.6
90°	2.5	10.0	17.8	22.8	22.8
92.5°	35.0	149.5	259.2	99.5	81.7
95°	83.7	306.8	994.0	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.6
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.5	1723.8	2105.3	1818.7
105°	276.4	425.2	1704.0	2595.2	2421.7
107.5°	338.3	474.1	1607.2	2835.2	2886.7
110°	382.9	506.9	1534.1	2894.8	3073.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.5	543.5	1461.1	2856.4	3128.1
115°	489.4	596.0	1366.8	2721.6	3088.6
117.5°	552.3	650.5	1306.9	2532.5	2947.6
120°	590.8	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.2
127.5°	721.2	810.9	1225.3	1956.7	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.7	1211.1	1799.2	2059.1
135°	814.0	903.2	1204.5	1696.4	1919.6
137.5°	851.5	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1509.0	1651.3
145°	940.8	1005.2	1186.7	1445.4	1557.0
147.5°	979.8	1035.4	1183.7	1389.1	1478.4
150°	1004.2	1053.8	1181.7	1358.2	1427.6
152.5°	1026.5	1072.1	1179.6	1331.6	1389.1
155°	1065.0	1099.7	1179.1	1299.2	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.3
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.6	1240.0
167.5°	1166.5	1177.9	1186.7	1221.3	1223.3
170°	1176.6	1184.0	1186.7	1217.2	1217.2
172.5°	1184.7	1188.2	1186.7	1211.0	1209.1
175°	1191.8	1194.3	1186.7	1201.9	1199.4
177.5°	1193.8	1193.8	1185.7	1197.8	1193.8
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)