

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: P518943

Luminaire Tested: **SQ4-BB-150U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518943
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

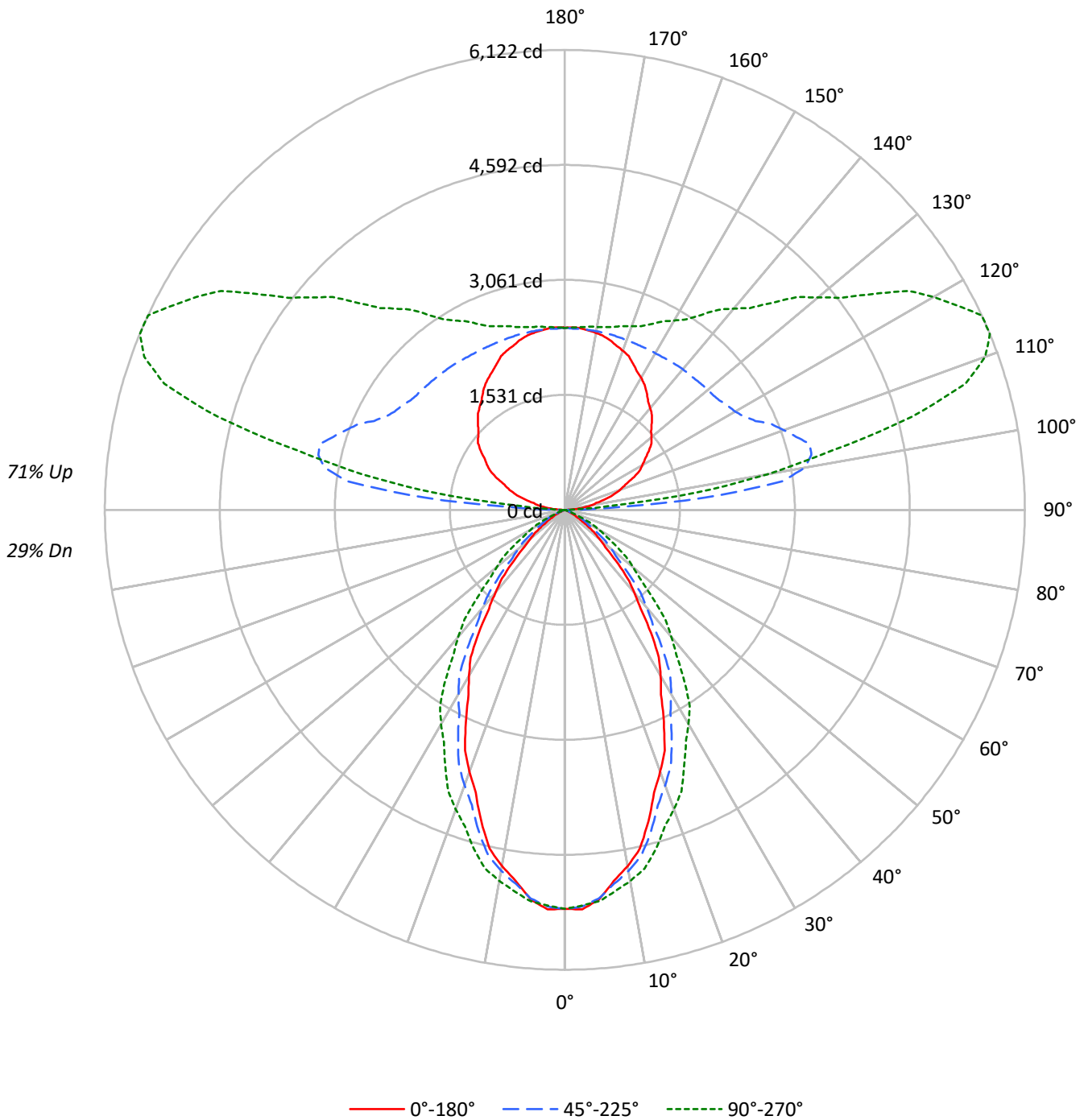
Lumens per Lamp: N/A
Luminaire Lumens: 21963.3 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

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	2.2
10°-20°	1239.5	5.6
20°-30°	1551.7	7.1
30°-40°	1433.3	6.5
40°-50°	963.1	4.4
50°-60°	497.4	2.3
60°-70°	155.8	0.7
70°-80°	9.8	0.0
80°-90°	5.2	0.0
90°-100°	1126.1	5.1
100°-110°	3044.8	13.9
110°-120°	3201.2	14.6
120°-130°	2600.2	11.8
130°-140°	2039.6	9.3
140°-150°	1565.4	7.1
150°-160°	1125.8	5.1
160°-170°	687.8	3.1
170°-180°	231.9	1.1
0°-30°	3275.8	14.9
0°-40°	4709.1	21.4
0°-60°	6169.6	28.1
0°-90°	6340.5	28.9
90°-120°	7372.0	33.6
90°-150°	13577.3	61.8
90°-180°	15623.0	71.1
0°-180°	21963.3	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°	5	15	34	36	34	12
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

TEST NUMBER: P518943

CATALOG NUMBER: SQ4-BB-150U-100D-940-1D-UNV-STD-W-12

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°	1.0	3.1	6.8	7.3	6.8
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



TEST NUMBER: P518943

CATALOG NUMBER: SQ4-BB-150U-100D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)