

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: P518895

Luminaire Tested: **SQ4-BB-150U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518895
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-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

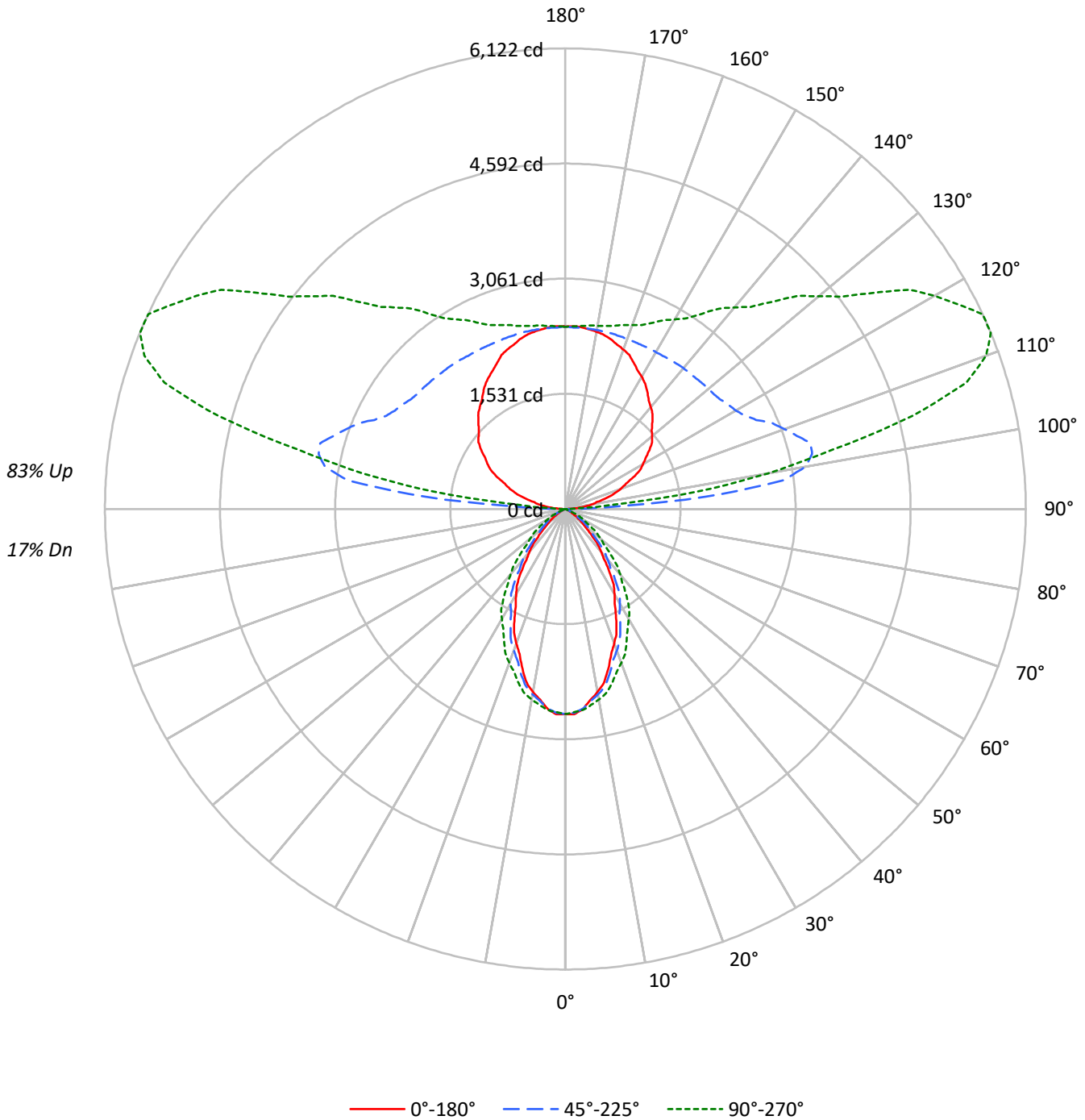
Lumens per Lamp: N/A
Luminaire Lumens: 18878.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3498	4547
45°	2139	2649	3658
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1630
65°	144	614	825
70°	71	190	237
75°	31	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.7	1.3
10°-20°	636.0	3.4
20°-30°	796.2	4.2
30°-40°	735.4	3.9
40°-50°	494.2	2.6
50°-60°	255.2	1.4
60°-70°	79.9	0.4
70°-80°	5.0	0.0
80°-90°	5.2	0.0
90°-100°	1126.1	6.0
100°-110°	3044.8	16.1
110°-120°	3201.2	17.0
120°-130°	2600.2	13.8
130°-140°	2039.6	10.8
140°-150°	1565.4	8.3
150°-160°	1125.8	6.0
160°-170°	687.8	3.6
170°-180°	231.9	1.2
0°-30°	1680.8	8.9
0°-40°	2416.2	12.8
0°-60°	3165.6	16.8
0°-90°	3255.8	17.2
90°-120°	7372.0	39.0
90°-150°	13577.3	71.9
90°-180°	15623.0	82.8
0°-180°	18878.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2671	2644	2664	2674	2684	248
15°	2203	2195	2273	2349	2399	614
25°	1598	1611	1724	1842	1929	733
35°	1026	1052	1165	1303	1421	635
45°	492	521	609	728	841	386
55°	177	206	266	342	421	165
65°	20	38	84	102	113	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
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: P518895

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.0	2725.0	2725.0	2725.0	2725.0
2.5°	2731.4	2705.6	2712.4	2712.2	2705.0
5°	2671.0	2643.9	2664.4	2673.8	2684.2
7.5°	2558.1	2537.0	2576.3	2605.8	2627.2
10°	2470.6	2452.5	2503.5	2543.8	2573.4
12.5°	2369.3	2355.4	2417.1	2472.2	2510.1
15°	2203.0	2195.2	2272.8	2349.1	2399.4
17.5°	2024.7	2024.5	2113.0	2207.8	2268.3
20°	1902.4	1906.2	2001.3	2105.7	2176.6
22.5°	1780.0	1789.1	1890.5	1999.4	2080.6
25°	1597.8	1610.7	1724.4	1842.4	1928.7
27.5°	1422.8	1441.6	1561.2	1683.8	1789.0
30°	1307.8	1329.7	1451.5	1580.5	1688.8
32.5°	1195.0	1221.0	1339.7	1476.2	1586.5
35°	1025.7	1051.5	1165.4	1302.6	1421.2
37.5°	850.9	876.1	987.4	1122.5	1250.6
40°	737.0	765.3	871.4	1002.3	1132.5
42.5°	633.6	662.0	761.7	890.3	1013.3
45°	491.7	521.4	609.1	727.7	841.1
47.5°	374.1	406.4	483.3	590.6	694.0
50°	304.5	336.8	412.6	507.2	606.4
52.5°	248.6	279.8	348.3	437.4	528.4
55°	176.7	206.3	266.3	341.9	420.6
57.5°	122.1	147.6	201.4	264.5	326.2
60°	88.3	112.8	163.5	214.7	265.0
62.5°	58.8	81.2	130.8	170.0	203.8
65°	19.8	37.8	84.4	101.8	113.4
67.5°	10.0	12.1	44.3	46.8	50.6
70°	7.9	7.9	21.1	22.5	26.4
72.5°	5.8	5.8	8.4	10.8	11.6
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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

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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)