

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: P518787

Luminaire Tested: **SQ4-BB-125U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518787
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

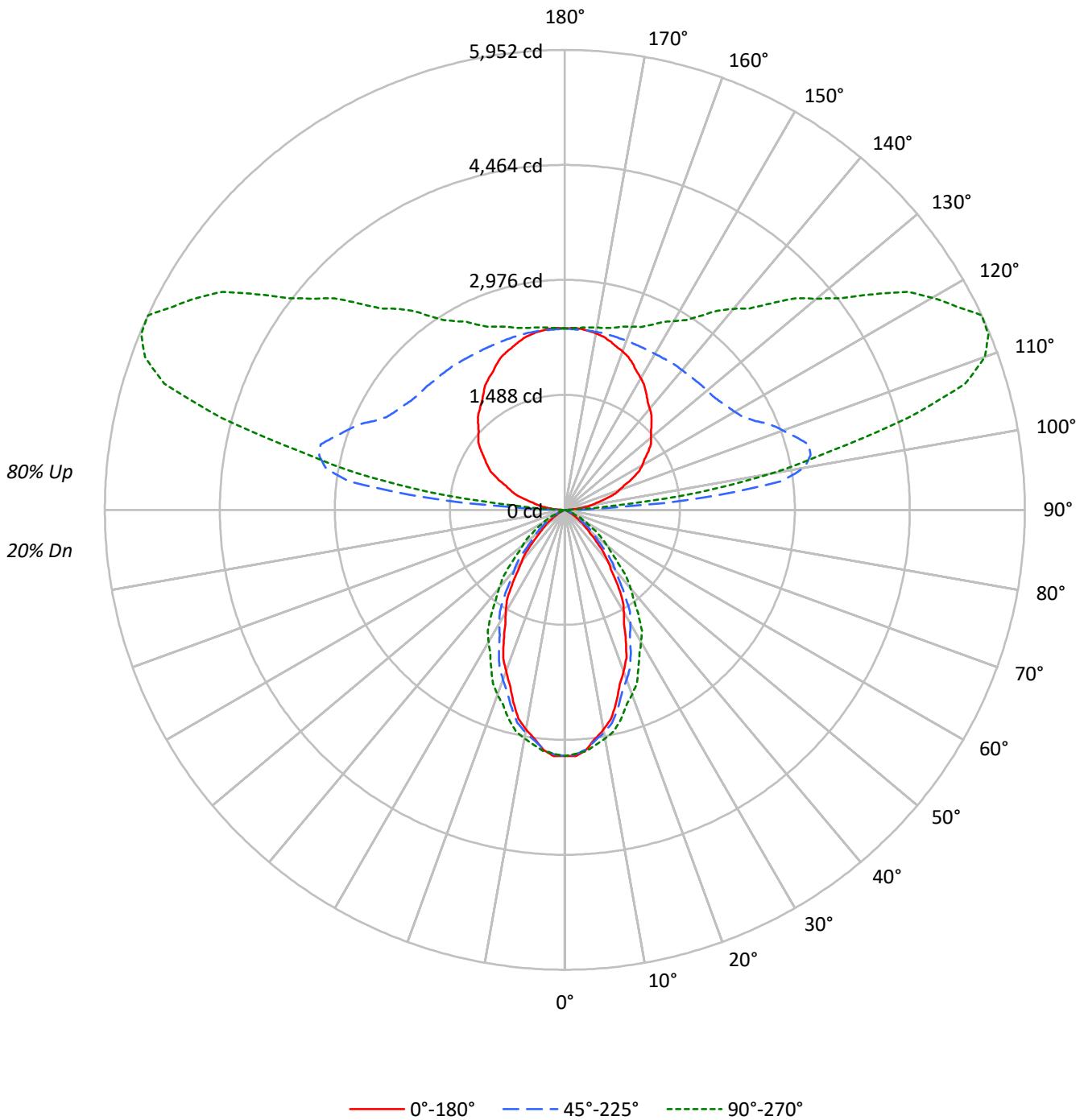
Lumens per Lamp: N/A
Luminaire Lumens: 18952.5 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 146.4
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	50	30	10	0	
RCR																						
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20				
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18				
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17				
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15				
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14				
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12				
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11				
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10				
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9				
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9				
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7653	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	168	718	964
70°	83	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.6	1.5
10°-20°	743.1	3.9
20°-30°	930.3	4.9
30°-40°	859.2	4.5
40°-50°	577.4	3.0
50°-60°	298.2	1.6
60°-70°	93.4	0.5
70°-80°	5.9	0.0
80°-90°	5.6	0.0
90°-100°	1097.8	5.8
100°-110°	2957.1	15.6
110°-120°	3103.4	16.4
120°-130°	2518.3	13.3
130°-140°	1975.0	10.4
140°-150°	1516.3	8.0
150°-160°	1090.2	5.8
160°-170°	666.1	3.5
170°-180°	224.6	1.2
0°-30°	1963.9	10.4
0°-40°	2823.1	14.9
0°-60°	3698.7	19.5
0°-90°	3803.7	20.1
90°-120°	7158.3	37.8
90°-150°	13168.0	69.5
90°-180°	15149.0	79.9
0°-180°	18952.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3121	3089	3113	3124	3136	289
15°	2574	2565	2656	2745	2804	717
25°	1867	1882	2015	2153	2254	856
35°	1198	1228	1362	1522	1660	742
45°	575	609	712	850	983	451
55°	206	241	311	400	491	193
65°	23	44	99	119	132	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	6	18	36	39	39	12
95°	167	597	1800	920	637	175
105°	547	851	3270	4893	4592	575
115°	966	1182	2723	5262	5952	950
125°	1318	1514	2445	4133	4864	1177
135°	1587	1772	2376	3334	3776	1225
145°	1836	1979	2347	2851	3061	1151
155°	2084	2160	2326	2558	2640	959
165°	2260	2286	2335	2428	2439	637
175°	2350	2347	2338	2370	2365	223
180°	2347	2347	2347	2347	2347	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3183.9	3183.9	3183.9	3183.9	3183.9
2.5°	3191.3	3161.2	3169.1	3168.9	3160.5
5°	3120.8	3089.1	3113.1	3124.1	3136.2
7.5°	2988.9	2964.2	3010.2	3044.6	3069.6
10°	2886.6	2865.6	2925.1	2972.1	3006.8
12.5°	2768.3	2752.1	2824.1	2888.6	2932.8
15°	2573.9	2564.9	2655.6	2744.7	2803.5
17.5°	2365.7	2365.4	2468.9	2579.6	2650.3
20°	2222.7	2227.3	2338.3	2460.3	2543.1
22.5°	2079.8	2090.3	2208.9	2336.1	2431.0
25°	1866.9	1882.0	2014.8	2152.6	2253.5
27.5°	1662.4	1684.3	1824.1	1967.4	2090.3
30°	1528.0	1553.6	1695.9	1846.7	1973.2
32.5°	1396.2	1426.6	1565.3	1724.7	1853.7
35°	1198.4	1228.5	1361.7	1521.9	1660.5
37.5°	994.1	1023.7	1153.7	1311.5	1461.2
40°	861.1	894.2	1018.2	1171.1	1323.2
42.5°	740.3	773.4	890.0	1040.2	1183.9
45°	574.6	609.2	711.6	850.2	982.8
47.5°	437.2	474.8	564.7	690.1	810.8
50°	355.8	393.5	482.1	592.6	708.6
52.5°	290.5	327.0	407.0	511.0	617.4
55°	206.4	241.0	311.2	399.5	491.4
57.5°	142.6	172.5	235.4	309.1	381.1
60°	103.2	131.8	191.0	250.9	309.6
62.5°	68.7	94.9	152.8	198.7	238.1
65°	23.1	44.2	98.6	118.9	132.5
67.5°	11.7	14.1	51.8	54.6	59.1
70°	9.2	9.2	24.6	26.3	30.8
72.5°	6.8	6.8	9.9	12.7	13.6
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	1.2	3.5	7.2	7.8	7.8
90°	6.0	17.7	35.9	38.9	38.9
92.5°	72.9	257.7	509.4	245.2	170.4
95°	167.4	597.1	1799.6	920.3	636.7
97.5°	267.2	683.5	2822.5	2358.0	1778.1
100°	343.8	717.9	3147.8	3293.5	2732.3
102.5°	417.9	766.3	3255.4	3994.1	3533.4
105°	547.0	851.0	3270.3	4892.7	4591.6
107.5°	669.0	940.3	3131.0	5354.5	5432.2
110°	750.3	1007.5	3004.3	5497.9	5781.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	836.4	1074.9	2882.3	5466.1	5932.0
115°	965.6	1181.9	2723.3	5262.0	5951.8
117.5°	1083.3	1286.2	2600.1	4936.1	5704.3
120°	1159.9	1355.7	2538.0	4702.2	5491.4
122.5°	1226.8	1420.3	2492.5	4463.0	5249.9
125°	1318.3	1514.1	2445.3	4132.9	4863.7
127.5°	1406.2	1599.1	2415.4	3841.8	4494.2
130°	1458.8	1651.7	2403.4	3675.0	4247.9
132.5°	1511.4	1702.0	2391.5	3528.0	4054.1
135°	1587.3	1771.5	2376.5	3334.2	3775.5
137.5°	1659.7	1836.2	2368.8	3169.8	3532.2
140°	1709.9	1879.4	2361.6	3068.5	3395.9
142.5°	1762.5	1920.4	2356.8	2974.1	3250.0
145°	1835.5	1978.7	2346.6	2850.6	3061.1
147.5°	1914.4	2038.9	2336.5	2746.8	2912.2
150°	1967.0	2075.1	2331.7	2681.6	2818.9
152.5°	2014.8	2108.9	2329.3	2628.4	2740.0
155°	2083.6	2159.6	2325.7	2557.7	2639.6
157.5°	2144.0	2203.0	2326.3	2508.1	2563.1
160°	2182.2	2231.9	2328.7	2479.1	2520.0
162.5°	2215.7	2256.0	2331.1	2454.9	2484.1
165°	2259.9	2286.2	2334.7	2427.6	2439.3
167.5°	2295.8	2311.0	2337.7	2406.5	2411.2
170°	2319.7	2325.6	2337.7	2394.5	2394.5
172.5°	2334.1	2335.2	2340.1	2382.5	2382.5
175°	2349.6	2346.7	2337.7	2370.4	2364.6
177.5°	2356.2	2351.5	2339.5	2358.5	2353.8
180°	2346.6	2346.6	2346.6	2346.6	2346.6

(END OF REPORT)