

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: P518811

Luminaire Tested: **SQ4-BB-125U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518811
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-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

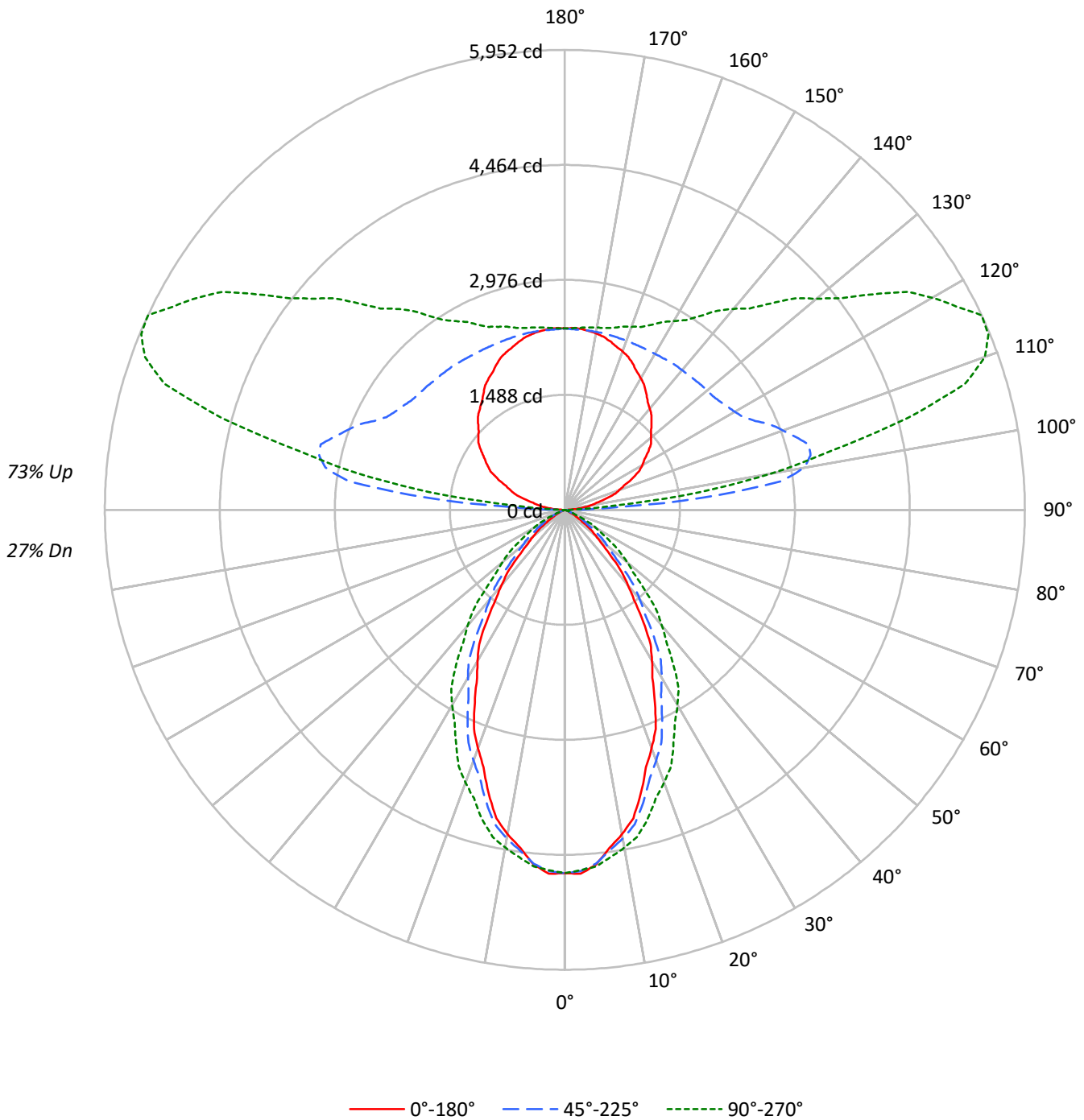
Lumens per Lamp: N/A
Luminaire Lumens: 20763.8 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 172.4
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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27				
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25				
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22				
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20				
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18				
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17				
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15				
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14				
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13				
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12				
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14193	14299
10°	13313	13491	13867
15°	12103	12487	13183
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3690	4571	6313
50°	2514	3407	5007
55°	1634	2464	3891
60°	937	1735	2813
65°	248	1060	1423
70°	122	327	409
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.1	2.1
10°-20°	1097.4	5.3
20°-30°	1373.9	6.6
30°-40°	1269.0	6.1
40°-50°	852.7	4.1
50°-60°	440.4	2.1
60°-70°	137.9	0.7
70°-80°	8.7	0.0
80°-90°	5.7	0.0
90°-100°	1097.8	5.3
100°-110°	2957.1	14.2
110°-120°	3103.4	14.9
120°-130°	2518.3	12.1
130°-140°	1975.0	9.5
140°-150°	1516.3	7.3
150°-160°	1090.2	5.3
160°-170°	666.1	3.2
170°-180°	224.6	1.1
0°-30°	2900.4	14.0
0°-40°	4169.4	20.1
0°-60°	5462.6	26.3
0°-90°	5614.9	27.0
90°-120°	7158.3	34.5
90°-150°	13168.0	63.4
90°-180°	15149.0	73.0
0°-180°	20763.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4702	4702	4702	4702	4702	
5°	4609	4562	4598	4614	4632	427
15°	3801	3788	3922	4054	4140	1059
25°	2757	2779	2976	3179	3328	1264
35°	1770	1814	2011	2248	2452	1096
45°	848	900	1051	1256	1451	666
55°	305	356	460	590	726	284
65°	34	65	146	176	196	58
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
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°	4702.3	4702.3	4702.3	4702.3	4702.3
2.5°	4713.2	4668.7	4680.4	4680.1	4667.7
5°	4609.0	4562.3	4597.6	4613.9	4631.7
7.5°	4414.3	4377.8	4445.6	4496.5	4533.5
10°	4263.2	4232.1	4320.1	4389.5	4440.6
12.5°	4088.5	4064.5	4170.8	4266.0	4331.4
15°	3801.4	3788.0	3922.0	4053.6	4140.4
17.5°	3493.8	3493.4	3646.2	3809.7	3914.2
20°	3282.7	3289.4	3453.3	3633.6	3755.9
22.5°	3071.6	3087.2	3262.2	3450.1	3590.3
25°	2757.2	2779.4	2975.6	3179.2	3328.2
27.5°	2455.1	2487.6	2694.0	2905.6	3087.1
30°	2256.7	2294.5	2504.7	2727.3	2914.2
32.5°	2062.0	2106.9	2311.8	2547.2	2737.6
35°	1769.9	1814.4	2011.0	2247.7	2452.4
37.5°	1468.2	1511.8	1703.9	1936.9	2158.0
40°	1271.7	1320.6	1503.7	1729.5	1954.2
42.5°	1093.3	1142.3	1314.4	1536.3	1748.5
45°	848.5	899.7	1051.0	1255.7	1451.4
47.5°	645.6	701.2	834.0	1019.1	1197.5
50°	525.5	581.1	712.0	875.2	1046.5
52.5°	429.0	482.9	601.0	754.7	911.8
55°	304.8	356.0	459.5	590.0	725.7
57.5°	210.7	254.7	347.6	456.5	562.8
60°	152.4	194.7	282.1	370.5	457.3
62.5°	101.5	140.2	225.7	293.4	351.7
65°	34.1	65.3	145.6	175.6	195.6
67.5°	17.3	20.8	76.4	80.7	87.4
70°	13.6	13.6	36.4	38.8	45.5
72.5°	10.0	10.0	14.6	18.7	20.0
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	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°	1.2	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)