

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: P518835

Luminaire Tested: **SQ4-BB-125U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518835
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-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

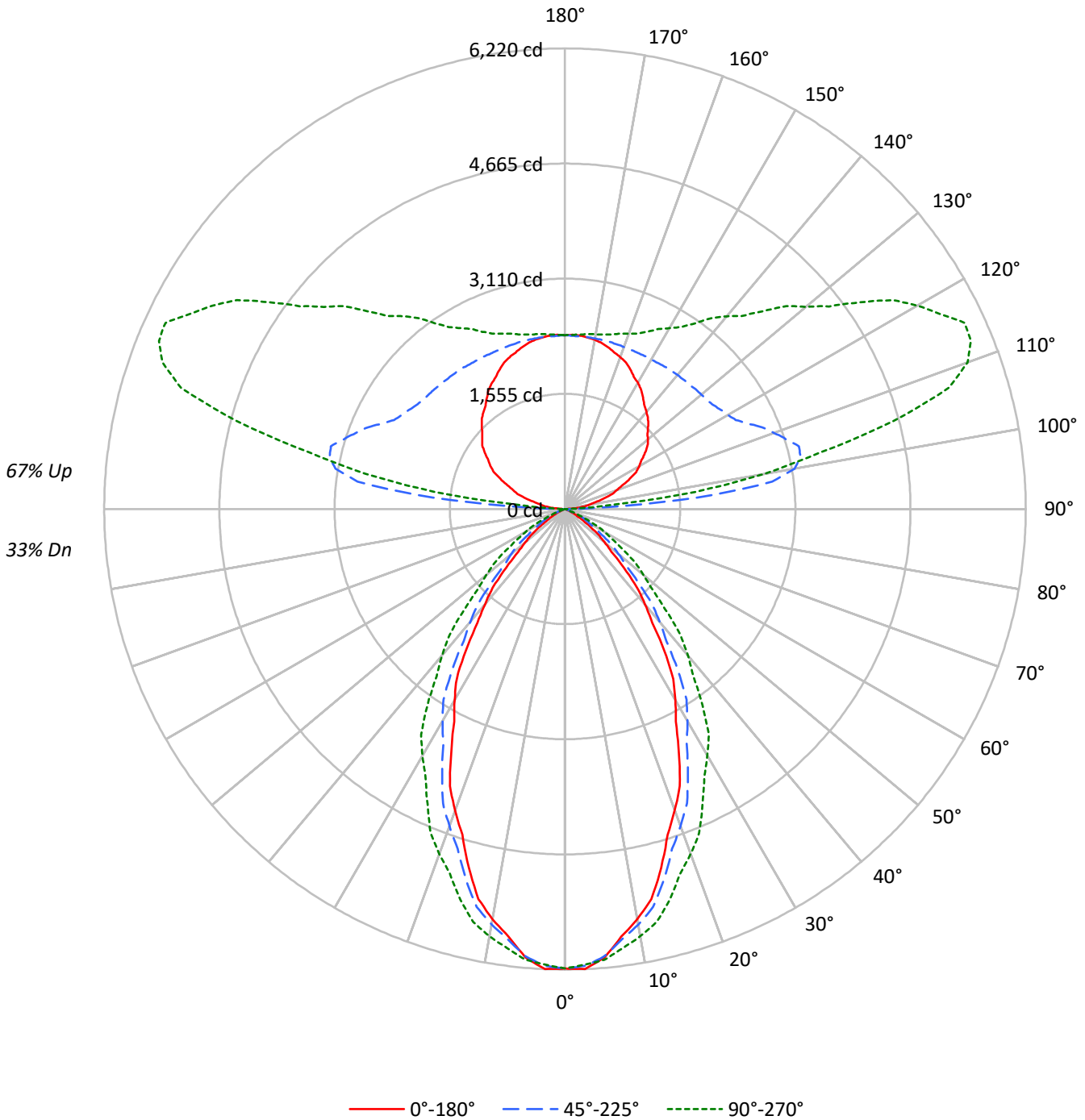
Lumens per Lamp: N/A
Luminaire Lumens: 22556.8 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 201.2
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19084	19084	19084
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14914	16221
25°	12347	13325	14904
30°	10575	11738	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3251	5135
60°	1237	2290	3711
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.3	2.5
10°-20°	1448.2	6.4
20°-30°	1813.0	8.0
30°-40°	1674.6	7.4
40°-50°	1125.3	5.0
50°-60°	581.2	2.6
60°-70°	182.0	0.8
70°-80°	11.5	0.1
80°-90°	5.7	0.0
90°-100°	1097.8	4.9
100°-110°	2957.1	13.1
110°-120°	3103.4	13.8
120°-130°	2518.3	11.2
130°-140°	1975.0	8.8
140°-150°	1516.3	6.7
150°-160°	1090.2	4.8
160°-170°	666.1	3.0
170°-180°	224.6	1.0
0°-30°	3827.5	17.0
0°-40°	5502.1	24.4
0°-60°	7208.6	32.0
0°-90°	7407.9	32.8
90°-120°	7158.3	31.7
90°-150°	13168.0	58.4
90°-180°	15149.0	67.2
0°-180°	22556.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6205	6205	6205	6205	6205	
5°	6082	6020	6067	6089	6112	564
15°	5016	4999	5176	5349	5464	1397
25°	3638	3668	3927	4195	4392	1668
35°	2336	2394	2654	2966	3236	1447
45°	1120	1187	1387	1657	1915	879
55°	402	470	606	779	958	375
65°	45	86	192	232	258	76
75°	6	6	3	0	0	9
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°	6205.3	6205.3	6205.3	6205.3	6205.3
2.5°	6219.7	6161.0	6176.4	6176.1	6159.6
5°	6082.2	6020.5	6067.2	6088.7	6112.2
7.5°	5825.2	5777.1	5866.6	5933.8	5982.5
10°	5625.9	5584.8	5700.9	5792.5	5860.0
12.5°	5395.3	5363.6	5504.0	5629.6	5715.9
15°	5016.4	4998.8	5175.6	5349.3	5463.8
17.5°	4610.6	4610.0	4811.7	5027.4	5165.4
20°	4332.0	4340.8	4557.1	4795.0	4956.4
22.5°	4053.4	4073.9	4305.0	4552.9	4737.9
25°	3638.5	3667.9	3926.7	4195.4	4392.0
27.5°	3239.8	3282.7	3555.0	3834.3	4073.8
30°	2978.0	3027.9	3305.3	3599.1	3845.6
32.5°	2721.1	2780.4	3050.7	3361.4	3612.7
35°	2335.6	2394.3	2653.8	2966.2	3236.2
37.5°	1937.5	1995.1	2248.5	2556.0	2847.8
40°	1678.2	1742.7	1984.4	2282.3	2578.8
42.5°	1442.8	1507.4	1734.6	2027.4	2307.4
45°	1119.8	1187.3	1387.0	1657.0	1915.3
47.5°	852.0	925.4	1100.6	1344.9	1580.3
50°	693.5	766.9	939.6	1154.9	1380.9
52.5°	566.2	637.2	793.1	996.0	1203.2
55°	402.3	469.8	606.4	778.6	957.7
57.5°	278.0	336.1	458.7	602.4	742.7
60°	201.1	256.9	372.3	488.9	603.4
62.5°	133.9	185.0	297.8	387.2	464.1
65°	45.0	86.1	192.1	231.8	258.2
67.5°	22.8	27.5	100.9	106.5	115.3
70°	18.0	18.0	48.0	51.2	60.0
72.5°	13.2	13.2	19.2	24.7	26.4
75°	6.0	6.0	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	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)