

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: P518807

Luminaire Tested: **SQ4-BB-125U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518807
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

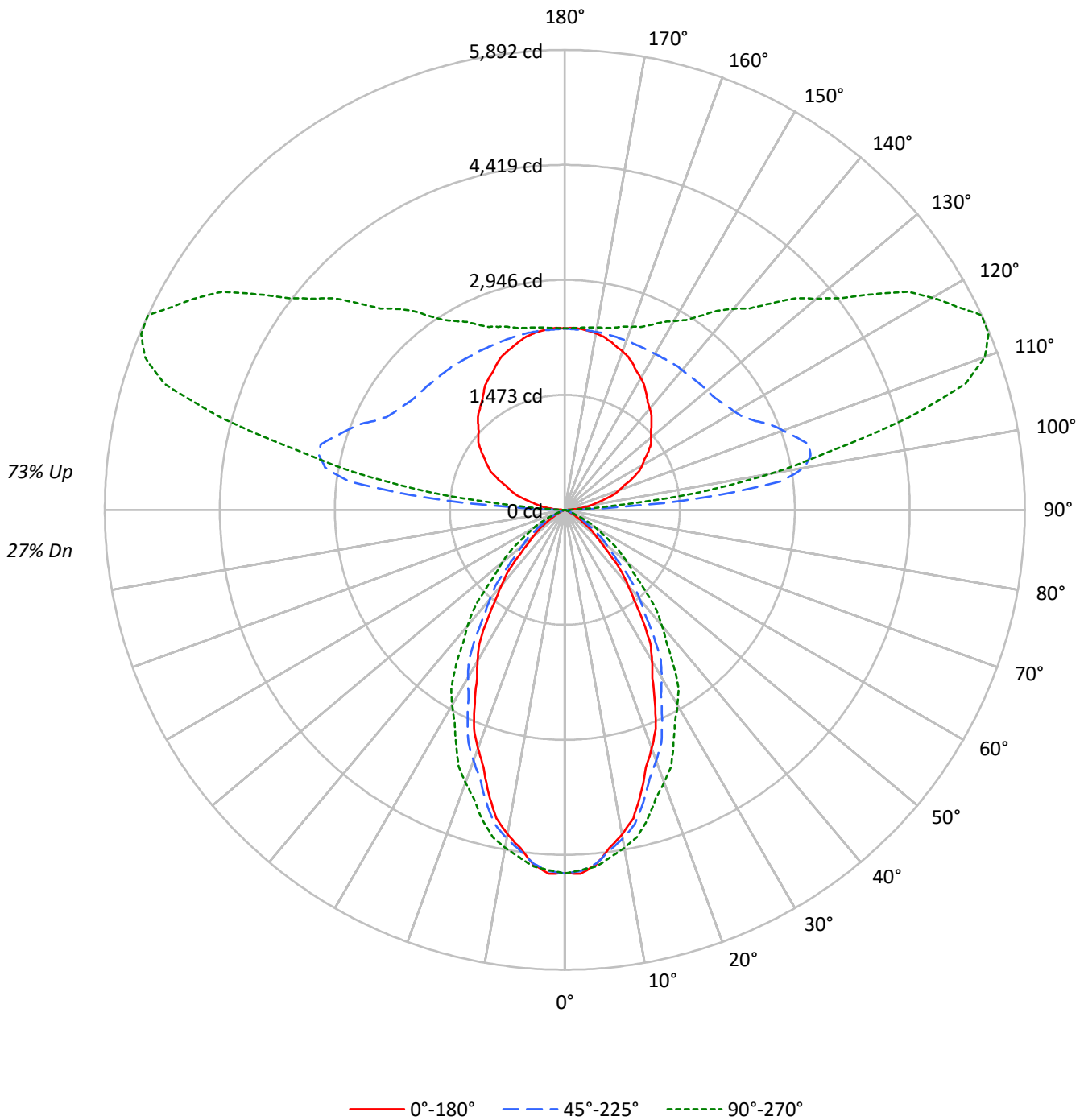
Lumens per Lamp: N/A
Luminaire Lumens: 20557.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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



TEST NUMBER: P518807
CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P518807

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-12

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	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°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4525	6249
50°	2489	3373	4957
55°	1618	2440	3852
60°	928	1718	2784
65°	246	1049	1410
70°	121	324	405
75°	53	27	0
80°	41	0	0
85°	0	0	0



TEST NUMBER: P518807

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.9	2.1
10°-20°	1086.5	5.3
20°-30°	1360.2	6.6
30°-40°	1256.4	6.1
40°-50°	844.2	4.1
50°-60°	436.0	2.1
60°-70°	136.6	0.7
70°-80°	8.6	0.0
80°-90°	5.6	0.0
90°-100°	1086.8	5.3
100°-110°	2927.6	14.2
110°-120°	3072.5	14.9
120°-130°	2493.2	12.1
130°-140°	1955.4	9.5
140°-150°	1501.2	7.3
150°-160°	1079.4	5.3
160°-170°	659.4	3.2
170°-180°	222.4	1.1
0°-30°	2871.5	14.0
0°-40°	4127.9	20.1
0°-60°	5408.1	26.3
0°-90°	5559.0	27.0
90°-120°	7086.9	34.5
90°-150°	13036.8	63.4
90°-180°	14998.0	73.0
0°-180°	20557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4655	4655	4655	4655	4655	
5°	4563	4517	4552	4568	4586	423
15°	3764	3750	3883	4013	4099	1048
25°	2730	2752	2946	3148	3295	1251
35°	1752	1796	1991	2225	2428	1085
45°	840	891	1040	1243	1437	660
55°	302	352	455	584	718	282
65°	34	65	144	174	194	57
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	6	18	36	38	38	12
95°	166	591	1782	911	630	173
105°	542	843	3238	4844	4546	569
115°	956	1170	2696	5210	5892	941
125°	1305	1499	2421	4092	4815	1165
135°	1572	1754	2353	3301	3738	1213
145°	1817	1959	2323	2822	3031	1140
155°	2063	2138	2302	2532	2613	950
165°	2237	2264	2311	2403	2415	631
175°	2326	2323	2314	2347	2341	221
180°	2323	2323	2323	2323	2323	

TEST NUMBER: P518807

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4655.4	4655.4	4655.4	4655.4	4655.4
2.5°	4666.2	4622.2	4633.8	4633.5	4621.2
5°	4563.1	4516.8	4551.8	4568.0	4585.6
7.5°	4370.3	4334.2	4401.4	4451.7	4488.3
10°	4220.7	4189.9	4277.0	4345.8	4396.4
12.5°	4047.8	4024.0	4129.3	4223.5	4288.3
15°	3763.5	3750.3	3882.9	4013.2	4099.1
17.5°	3459.0	3458.6	3609.9	3771.7	3875.2
20°	3250.0	3256.6	3418.9	3597.4	3718.5
22.5°	3041.0	3056.4	3229.7	3415.8	3554.5
25°	2729.7	2751.8	2946.0	3147.5	3295.0
27.5°	2430.6	2462.8	2667.1	2876.6	3056.3
30°	2234.2	2271.7	2479.7	2700.2	2885.1
32.5°	2041.4	2085.9	2288.7	2521.9	2710.4
35°	1752.3	1796.3	1991.0	2225.3	2427.9
37.5°	1453.6	1496.8	1686.9	1917.6	2136.5
40°	1259.0	1307.5	1488.7	1712.3	1934.7
42.5°	1082.4	1130.9	1301.4	1521.0	1731.1
45°	840.1	890.7	1040.5	1243.1	1436.9
47.5°	639.2	694.2	825.7	1009.0	1185.6
50°	520.3	575.3	705.0	866.5	1036.0
52.5°	424.8	478.1	595.0	747.2	902.7
55°	301.8	352.5	455.0	584.1	718.5
57.5°	208.6	252.2	344.1	451.9	557.2
60°	150.9	192.7	279.3	366.8	452.7
62.5°	100.5	138.8	223.4	290.5	348.2
65°	33.8	64.6	144.1	173.9	193.7
67.5°	17.1	20.6	75.7	79.9	86.5
70°	13.5	13.5	36.0	38.4	45.0
72.5°	9.9	9.9	14.4	18.5	19.8
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	7.1	7.7	7.7
90°	5.9	17.5	35.5	38.5	38.5
92.5°	72.2	255.1	504.3	242.8	168.7
95°	165.7	591.1	1781.7	911.1	630.4
97.5°	264.6	676.7	2794.4	2334.5	1760.3
100°	340.3	710.8	3116.4	3260.6	2705.0
102.5°	413.7	758.7	3223.0	3954.3	3498.2
105°	541.6	842.6	3237.8	4843.9	4545.9
107.5°	662.3	930.9	3099.8	5301.1	5378.1
110°	742.8	997.5	2974.4	5443.1	5723.8



TEST NUMBER: P518807

CATALOG NUMBER: SQ4-BB-125U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	828.1	1064.2	2853.6	5411.7	5873.0
115°	955.9	1170.1	2696.2	5209.5	5892.5
117.5°	1072.5	1273.4	2574.2	4886.9	5647.4
120°	1148.3	1342.2	2512.7	4655.4	5436.7
122.5°	1214.6	1406.2	2467.7	4418.6	5197.6
125°	1305.2	1499.1	2420.9	4091.8	4815.2
127.5°	1392.2	1583.2	2391.3	3803.5	4449.4
130°	1444.3	1635.3	2379.5	3638.4	4205.5
132.5°	1496.4	1685.0	2367.6	3492.9	4013.8
135°	1571.5	1753.8	2352.9	3301.0	3737.9
137.5°	1643.1	1817.9	2345.2	3138.2	3497.0
140°	1692.9	1860.7	2338.1	3038.0	3362.1
142.5°	1745.0	1901.2	2333.3	2944.5	3217.6
145°	1817.2	1959.0	2323.3	2822.2	3030.6
147.5°	1895.3	2018.6	2313.2	2719.4	2883.2
150°	1947.4	2054.5	2308.5	2654.9	2790.9
152.5°	1994.7	2087.9	2306.1	2602.2	2712.7
155°	2062.8	2138.1	2302.5	2532.3	2613.3
157.5°	2122.6	2181.1	2303.1	2483.1	2537.5
160°	2160.5	2209.7	2305.5	2454.4	2494.9
162.5°	2193.6	2233.6	2307.9	2430.5	2459.4
165°	2237.4	2263.5	2311.4	2403.4	2415.0
167.5°	2272.9	2288.0	2314.4	2382.6	2387.2
170°	2296.6	2302.4	2314.4	2370.6	2370.6
172.5°	2310.8	2312.0	2316.7	2358.8	2358.8
175°	2326.2	2323.3	2314.4	2346.8	2341.0
177.5°	2332.7	2328.1	2316.2	2335.0	2330.4
180°	2323.3	2323.3	2323.3	2323.3	2323.3

(END OF REPORT)