

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: P518783

Luminaire Tested: **SQ4-BB-125U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518783
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

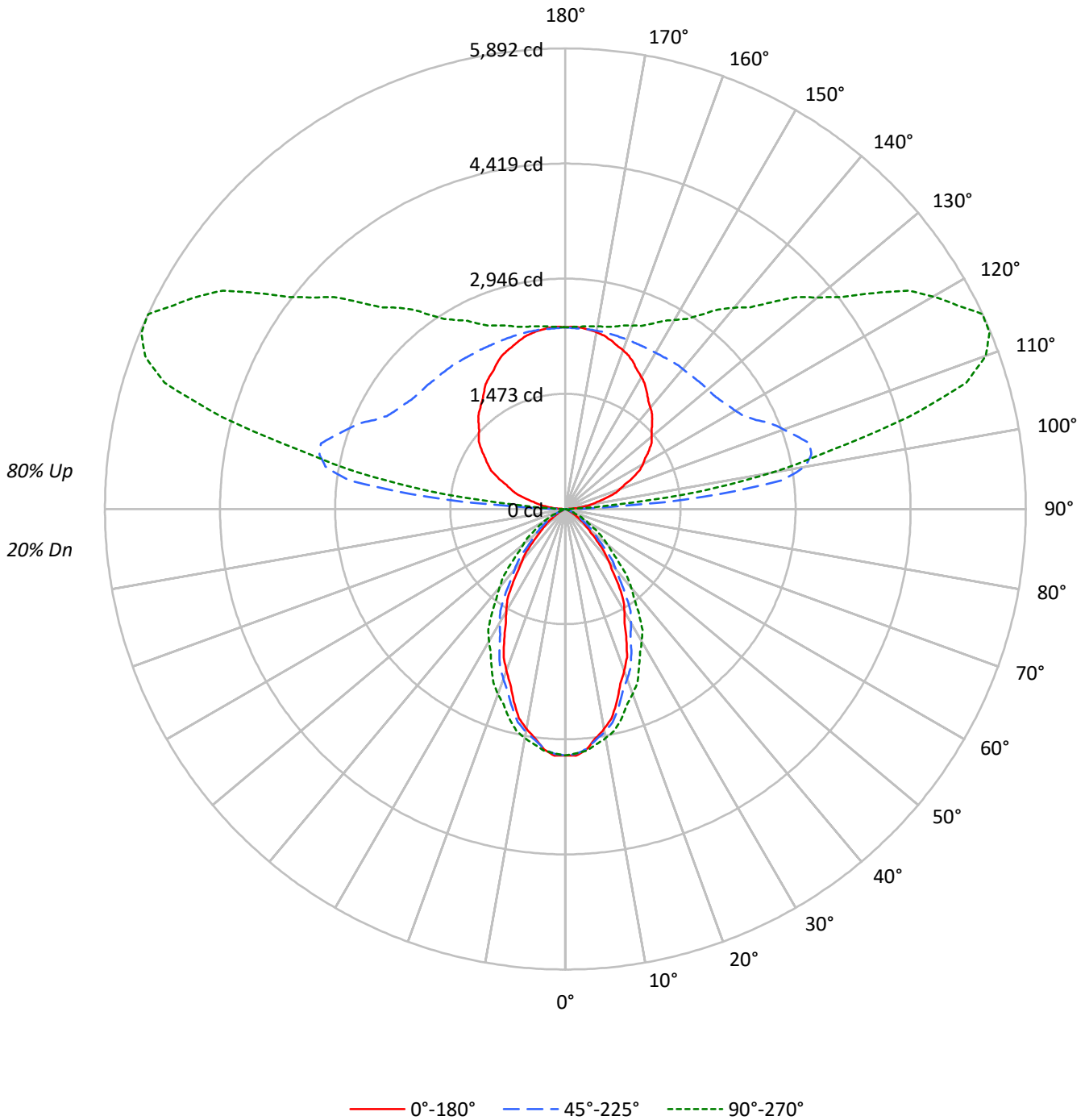
Lumens per Lamp: N/A
Luminaire Lumens: 18763.8 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	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°	9694	9694	9694
5°	9538	9515	9585
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6937
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1686	2284	3356
55°	1096	1652	2609
60°	629	1163	1885
65°	167	710	955
70°	83	219	274
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.7	1.5
10°-20°	735.7	3.9
20°-30°	921.0	4.9
30°-40°	850.7	4.5
40°-50°	571.6	3.0
50°-60°	295.2	1.6
60°-70°	92.5	0.5
70°-80°	5.8	0.0
80°-90°	5.6	0.0
90°-100°	1086.8	5.8
100°-110°	2927.6	15.6
110°-120°	3072.5	16.4
120°-130°	2493.2	13.3
130°-140°	1955.4	10.4
140°-150°	1501.2	8.0
150°-160°	1079.4	5.8
160°-170°	659.4	3.5
170°-180°	222.4	1.2
0°-30°	1944.3	10.4
0°-40°	2795.0	14.9
0°-60°	3661.9	19.5
0°-90°	3765.8	20.1
90°-120°	7086.9	37.8
90°-150°	13036.8	69.5
90°-180°	14998.0	79.9
0°-180°	18763.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3090	3058	3082	3093	3105	286
15°	2548	2539	2629	2717	2776	710
25°	1848	1863	1995	2131	2231	847
35°	1186	1216	1348	1507	1644	735
45°	569	603	705	842	973	447
55°	204	239	308	396	486	191
65°	23	44	98	118	131	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3152.2	3152.2	3152.2	3152.2	3152.2
2.5°	3159.5	3129.7	3137.6	3137.4	3129.0
5°	3089.7	3058.4	3082.1	3093.0	3104.9
7.5°	2959.1	2934.7	2980.2	3014.3	3039.1
10°	2857.9	2837.0	2896.0	2942.5	2976.8
12.5°	2740.8	2724.7	2796.0	2859.8	2903.6
15°	2548.3	2539.4	2629.1	2717.4	2775.5
17.5°	2342.1	2341.8	2444.3	2553.9	2623.9
20°	2200.6	2205.1	2315.0	2435.8	2517.8
22.5°	2059.1	2069.5	2186.9	2312.8	2406.8
25°	1848.3	1863.2	1994.7	2131.2	2231.1
27.5°	1645.8	1667.6	1805.9	1947.8	2069.4
30°	1512.8	1538.2	1679.0	1828.3	1953.5
32.5°	1382.3	1412.4	1549.7	1707.6	1835.2
35°	1186.5	1216.3	1348.1	1506.8	1644.0
37.5°	984.2	1013.5	1142.2	1298.4	1446.6
40°	852.5	885.3	1008.0	1159.4	1310.0
42.5°	732.9	765.7	881.2	1029.9	1172.1
45°	568.8	603.1	704.6	841.7	973.0
47.5°	432.8	470.1	559.1	683.2	802.8
50°	352.3	389.6	477.3	586.7	701.5
52.5°	287.6	323.7	402.9	506.0	611.2
55°	204.4	238.6	308.1	395.5	486.5
57.5°	141.2	170.7	233.0	306.0	377.3
60°	102.2	130.5	189.1	248.4	306.5
62.5°	68.0	94.0	151.3	196.7	235.8
65°	22.9	43.8	97.6	117.7	131.2
67.5°	11.6	14.0	51.2	54.1	58.6
70°	9.2	9.2	24.4	26.0	30.5
72.5°	6.7	6.7	9.8	12.5	13.4
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	7.1	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



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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)