

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P844865

Luminaire Tested: **SQ4P-BB-100U-125D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844865
REPORT IS A COMBINATION OF REPORTS P700078 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-100U-125D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

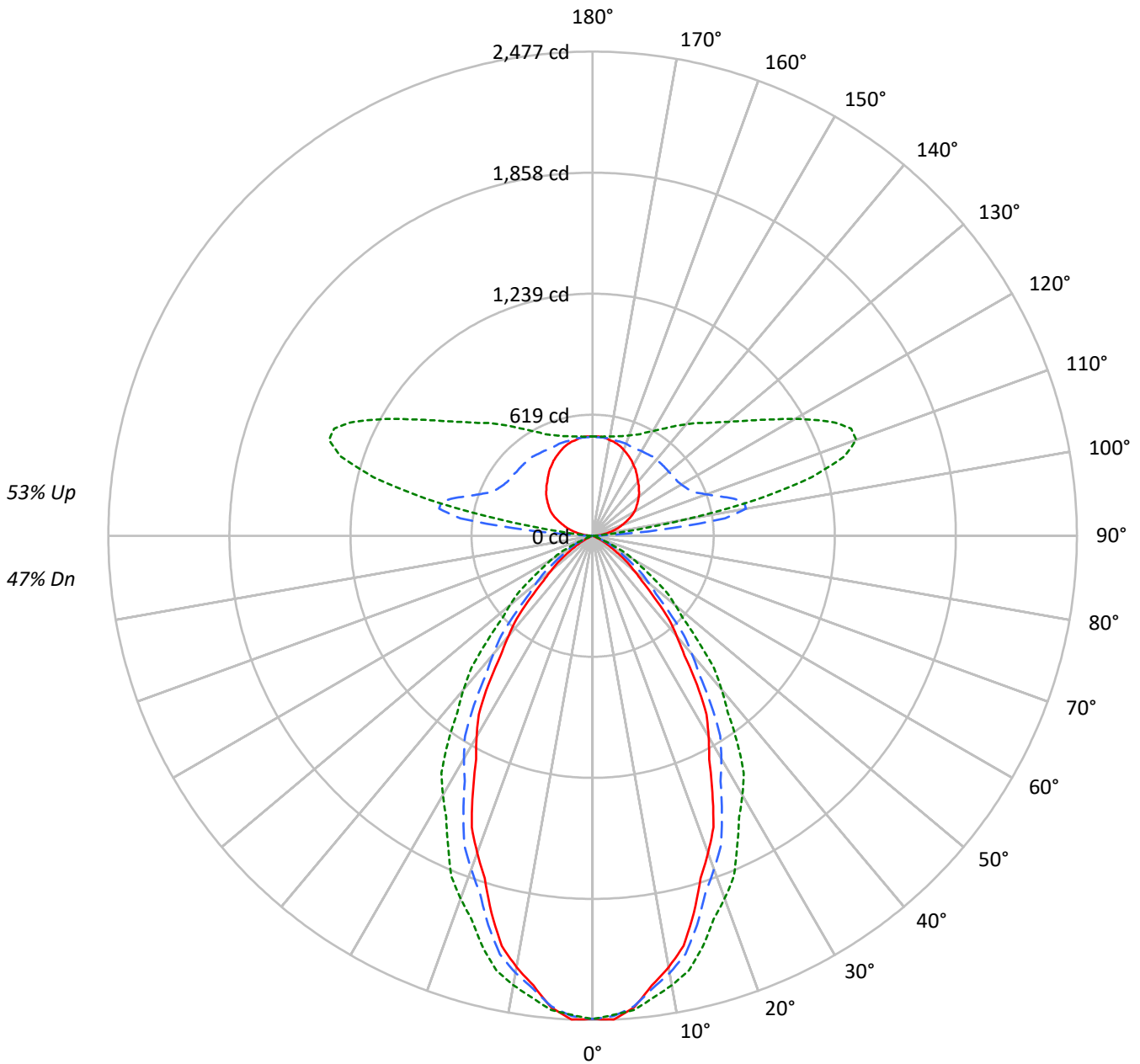
Lumens per Lamp: N/A
Luminaire Lumens: 6250.4 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47															
1	99	95	92	89	91	88	85	83	74	72	71	62	60	59	50	49	48				43																
2	91	85	80	76	84	79	74	71	67	64	61	56	54	52	46	45	44				39																
3	85	76	70	65	78	71	66	61	61	57	54	51	49	46	42	41	39				35																
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	35				32																
5	73	62	55	50	67	58	52	47	50	46	42	43	40	37	36	34	32				29																
6	67	57	49	44	62	53	47	42	46	41	38	40	36	33	34	31	29				26																
7	63	52	45	40	58	49	42	38	42	38	34	37	33	30	31	29	27				24																
8	59	48	41	36	54	45	38	34	39	34	31	34	30	28	29	26	24				22																
9	55	44	37	32	51	41	35	31	36	31	28	32	28	25	27	25	23				21																
10	52	41	34	30	48	38	32	28	34	29	26	30	26	23	26	23	21				19																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22804	22804	22804
5°	22437	22382	22548
10°	20992	21274	21868
15°	19085	19691	20787
20°	16942	17821	19382
25°	14753	15920	17809
30°	12638	14025	16318
35°	10477	11906	14517
40°	8050	9521	12370
45°	5821	7209	9954
50°	3964	5370	7896
55°	2578	3885	6135
60°	1478	2738	4436
65°	391	1672	2244
70°	197	518	642
75°	86	39	0
80°	58	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.6	3.6
10°-20°	576.8	9.2
20°-30°	722.1	11.6
30°-40°	667.0	10.7
40°-50°	448.2	7.2
50°-60°	231.5	3.7
60°-70°	72.5	1.2
70°-80°	4.6	0.1
80°-90°	1.3	0.0
90°-100°	202.4	3.2
100°-110°	704.3	11.3
110°-120°	682.2	10.9
120°-130°	535.2	8.6
130°-140°	423.6	6.8
140°-150°	326.9	5.2
150°-160°	234.3	3.7
160°-170°	143.3	2.3
170°-180°	48.5	0.8
0°-30°	1524.5	24.4
0°-40°	2191.6	35.1
0°-60°	2871.3	45.9
0°-90°	2949.6	47.2
90°-120°	1588.9	25.4
90°-150°	2874.6	46.0
90°-180°	3301.0	52.8
0°-180°	6250.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2472	2472	2472	2472	2472	
5°	2423	2398	2417	2425	2435	225
15°	1998	1991	2062	2130	2176	557
25°	1449	1461	1564	1671	1749	664
35°	930	954	1057	1181	1289	576
45°	446	473	552	660	763	350
55°	160	187	242	310	381	150
65°	18	34	77	92	103	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	8	11	11	8	4	5
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2471.7	2471.7	2471.7	2471.7	2471.7
2.5°	2477.3	2454.0	2460.0	2460.0	2453.6
5°	2422.6	2398.1	2416.7	2425.1	2434.6
7.5°	2320.4	2301.1	2336.8	2363.3	2382.9
10°	2240.7	2224.5	2270.8	2307.1	2334.2
12.5°	2148.9	2136.2	2192.3	2242.4	2276.7
15°	1998.1	1991.2	2061.5	2130.5	2176.3
17.5°	1836.6	1836.3	1916.4	2002.5	2057.4
20°	1725.6	1729.1	1815.1	1910.0	1974.1
22.5°	1614.5	1622.7	1714.7	1813.6	1887.2
25°	1449.2	1460.8	1563.9	1671.2	1749.4
27.5°	1290.5	1307.6	1416.2	1527.2	1622.7
30°	1186.3	1206.1	1316.5	1433.5	1531.7
32.5°	1083.7	1107.5	1215.0	1339.0	1438.9
35°	930.2	953.7	1057.1	1181.4	1288.9
37.5°	771.8	794.6	895.6	1018.2	1134.4
40°	668.4	694.1	790.5	909.1	1027.1
42.5°	574.7	600.4	690.9	807.5	919.1
45°	446.1	472.9	552.5	660.0	762.9
47.5°	339.5	368.4	438.3	535.8	629.4
50°	276.2	305.4	374.1	459.9	550.1
52.5°	225.5	253.9	315.9	396.6	479.2
55°	160.3	187.1	241.5	310.2	381.4
57.5°	110.7	134.0	182.7	239.8	295.9
60°	80.1	102.4	148.4	194.6	240.4
62.5°	53.3	73.6	118.6	154.3	184.9
65°	17.9	34.3	76.6	92.3	102.8
67.5°	9.2	10.9	40.0	42.5	46.0
70°	7.3	7.3	19.2	20.3	23.8
72.5°	5.2	5.2	7.5	9.8	10.6
75°	2.4	2.4	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	0.0	0.0
80°	1.1	1.1	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°	0.0	0.0	0.0	0.0	0.0
90°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)