

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: P844867

Luminaire Tested: **SQ4P-BB-100U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844867
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

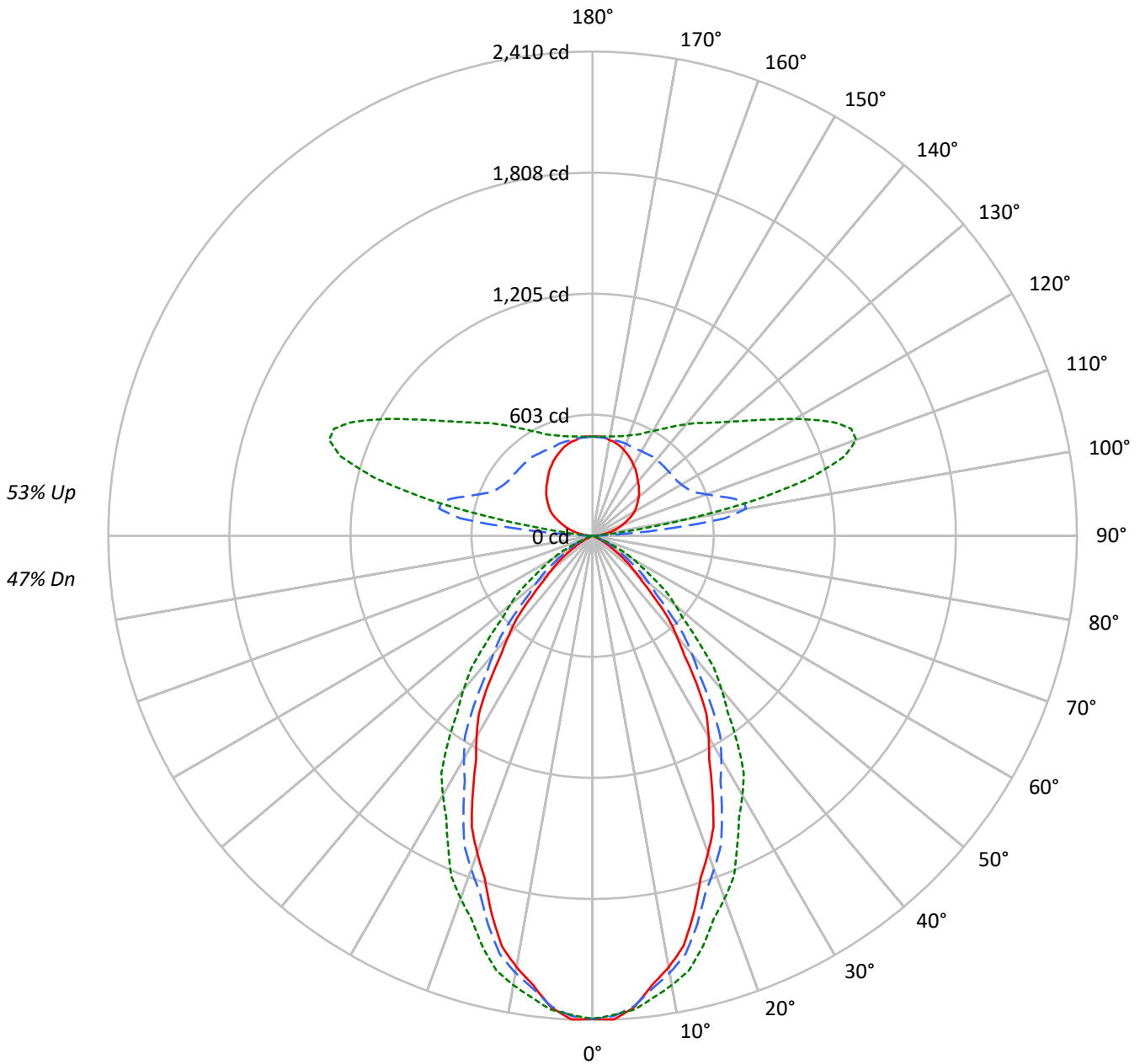
Lumens per Lamp: N/A
Luminaire Lumens: 6080.9 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22185	22185	22185
5°	21828	21775	21936
10°	20422	20697	21275
15°	18567	19157	20224
20°	16483	17338	18856
25°	14353	15489	17325
30°	12295	13645	15876
35°	10193	11584	14123
40°	7831	9262	12034
45°	5663	7013	9684
50°	3857	5225	7682
55°	2508	3780	5969
60°	1439	2663	4316
65°	380	1626	2185
70°	192	504	623
75°	86	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.4	3.6
10°-20°	561.2	9.2
20°-30°	702.6	11.6
30°-40°	648.9	10.7
40°-50°	436.0	7.2
50°-60°	225.2	3.7
60°-70°	70.5	1.2
70°-80°	4.4	0.1
80°-90°	1.3	0.0
90°-100°	196.9	3.2
100°-110°	685.2	11.3
110°-120°	663.7	10.9
120°-130°	520.7	8.6
130°-140°	412.1	6.8
140°-150°	318.0	5.2
150°-160°	228.0	3.7
160°-170°	139.4	2.3
170°-180°	47.2	0.8
0°-30°	1483.2	24.4
0°-40°	2132.1	35.1
0°-60°	2793.4	45.9
0°-90°	2869.6	47.2
90°-120°	1545.9	25.4
90°-150°	2796.7	46.0
90°-180°	3211.0	52.8
0°-180°	6080.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2405	2405	2405	2405	2405	
5°	2357	2333	2351	2359	2368	219
15°	1944	1937	2006	2073	2117	541
25°	1410	1421	1522	1626	1702	646
35°	905	928	1028	1149	1254	561
45°	434	460	538	642	742	341
55°	156	182	235	302	371	145
65°	17	33	74	90	100	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	7	11	11	7	4	5
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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CATALOG NUMBER: SQ4P-BB-100U-125D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2404.6	2404.6	2404.6	2404.6	2404.6
2.5°	2410.1	2387.5	2393.3	2393.3	2387.0
5°	2356.9	2333.0	2351.1	2359.3	2368.5
7.5°	2257.4	2238.7	2273.4	2299.2	2318.3
10°	2179.9	2164.1	2209.2	2244.5	2270.9
12.5°	2090.6	2078.3	2132.8	2181.6	2215.0
15°	1943.9	1937.2	2005.6	2072.7	2117.3
17.5°	1786.8	1786.5	1864.4	1948.2	2001.6
20°	1678.8	1682.2	1765.9	1858.2	1920.5
22.5°	1570.7	1578.6	1668.2	1764.4	1836.0
25°	1409.9	1421.2	1521.5	1625.9	1701.9
27.5°	1255.5	1272.1	1377.8	1485.7	1578.6
30°	1154.1	1173.4	1280.8	1394.6	1490.2
32.5°	1054.3	1077.5	1182.0	1302.7	1399.9
35°	905.0	927.8	1028.5	1149.4	1253.9
37.5°	750.9	773.0	871.3	990.6	1103.6
40°	650.2	675.3	769.0	884.4	999.2
42.5°	559.1	584.2	672.1	785.6	894.1
45°	434.0	460.1	537.5	642.1	742.2
47.5°	330.3	358.4	426.4	521.2	612.3
50°	268.7	297.1	364.0	447.5	535.2
52.5°	219.3	247.1	307.3	385.9	466.2
55°	155.9	182.0	235.0	301.8	371.1
57.5°	107.7	130.3	177.7	233.3	287.9
60°	78.0	99.6	144.3	189.4	233.9
62.5°	51.9	71.6	115.4	150.1	179.9
65°	17.4	33.4	74.5	89.8	100.1
67.5°	8.9	10.6	38.9	41.3	44.7
70°	7.1	7.1	18.7	19.7	23.1
72.5°	5.0	5.0	7.3	9.5	10.3
75°	2.4	2.4	1.0	0.0	0.0
77.5°	1.0	1.0	1.0	0.0	0.0
80°	1.0	1.0	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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CATALOG NUMBER: SQ4P-BB-100U-125D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)