

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: P844821

Luminaire Tested: **SQ4P-BB-050U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844821
REPORT IS A COMBINATION OF REPORTS P700187 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-050U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

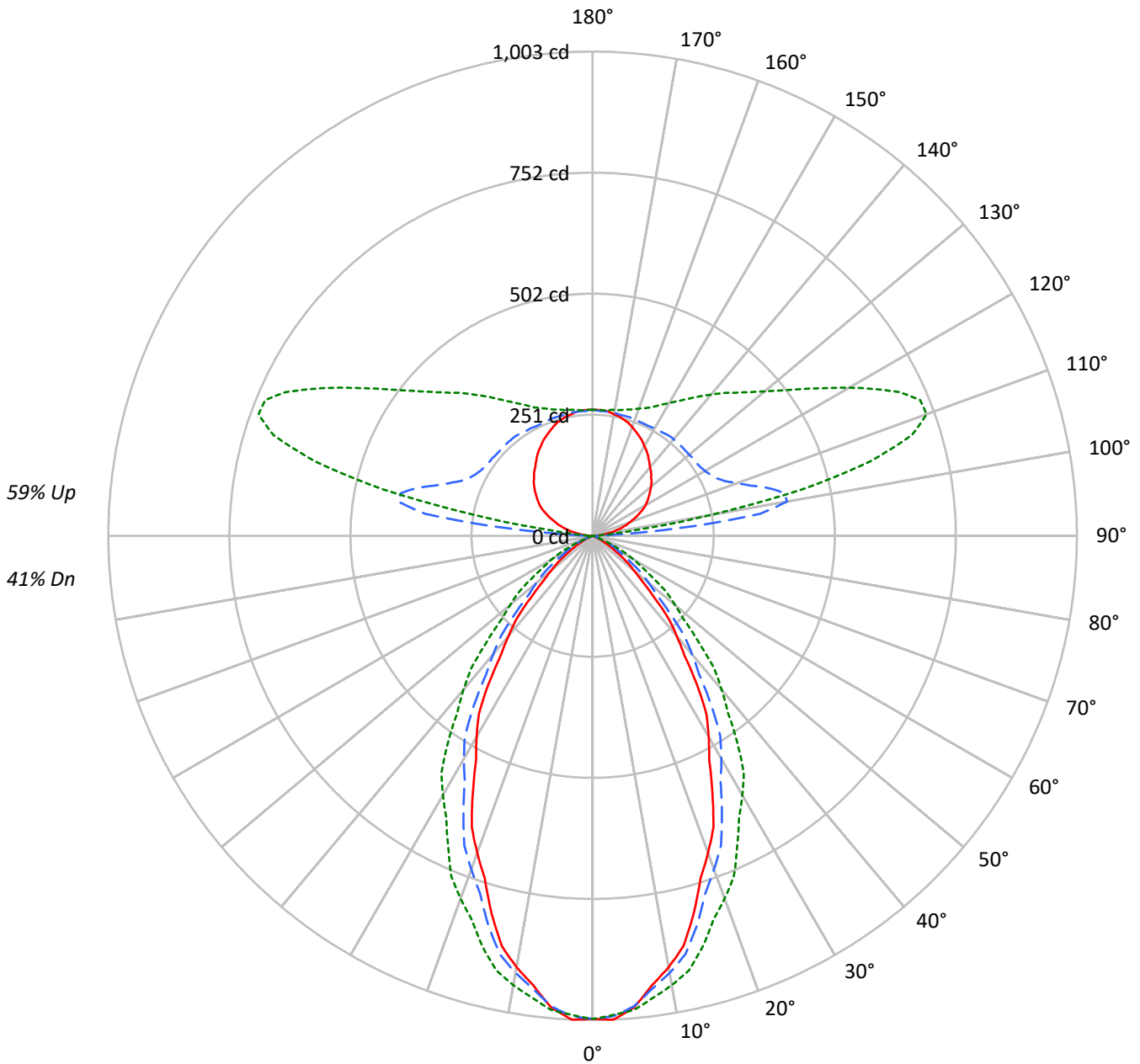
Lumens per Lamp: N/A
Luminaire Lumens: 2888.1 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29.8
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41																			
1	97	94	90	87	89	86	83	80	71	69	67	57	56	55	45	44	44	38																			
2	90	83	78	74	82	77	72	69	64	61	58	52	50	48	41	40	39	34																			
3	83	75	68	63	76	69	63	59	58	54	51	48	45	43	38	36	35	31																			
4	77	67	60	55	70	62	56	52	52	48	45	43	40	38	35	33	32	28																			
5	71	61	54	48	65	56	50	45	48	43	40	40	37	34	32	30	29	25																			
6	66	55	48	43	60	51	45	40	44	39	35	37	33	31	30	28	26	23																			
7	61	50	43	38	56	47	40	36	40	35	32	34	30	28	28	26	24	21																			
8	57	46	39	34	53	43	37	32	37	32	29	31	28	25	26	24	22	19																			
9	53	42	36	31	49	40	33	29	34	29	26	29	26	23	24	22	20	18																			
10	50	39	32	28	46	37	31	27	32	27	24	27	24	21	23	20	19	17																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9234	9234	9234
5°	9085	9063	9130
10°	8500	8614	8854
15°	7728	7974	8418
20°	6860	7216	7849
25°	5974	6447	7212
30°	5118	5679	6607
35°	4243	4821	5878
40°	3260	3855	5009
45°	2356	2920	4030
50°	1605	2175	3198
55°	1044	1573	2485
60°	600	1109	1797
65°	159	677	910
70°	81	210	262
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	3.2
10°-20°	233.6	8.1
20°-30°	292.4	10.1
30°-40°	270.1	9.4
40°-50°	181.5	6.3
50°-60°	93.8	3.2
60°-70°	29.4	1.0
70°-80°	1.9	0.1
80°-90°	0.7	0.0
90°-100°	103.8	3.6
100°-110°	361.4	12.5
110°-120°	350.0	12.1
120°-130°	274.6	9.5
130°-140°	217.3	7.5
140°-150°	167.7	5.8
150°-160°	120.2	4.2
160°-170°	73.5	2.5
170°-180°	24.9	0.9
0°-30°	617.3	21.4
0°-40°	887.4	30.7
0°-60°	1162.7	40.3
0°-90°	1194.6	41.4
90°-120°	815.2	28.2
90°-150°	1474.9	51.1
90°-180°	1694.0	58.7
0°-180°	2888.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	981	971	979	982	986	91
15°	809	806	835	863	881	225
25°	587	592	633	677	708	269
35°	377	386	428	478	522	233
45°	181	192	224	267	309	142
55°	65	76	98	126	154	61
65°	7	14	31	37	42	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.8	1000.8	1000.8	1000.8	1000.8
2.5°	1003.2	993.7	996.1	996.1	993.5
5°	981.0	971.0	978.6	982.0	985.8
7.5°	939.6	931.8	946.3	956.9	964.9
10°	907.3	900.7	919.5	934.2	945.1
12.5°	870.1	865.0	887.7	908.0	921.9
15°	809.1	806.3	834.8	862.8	881.3
17.5°	743.7	743.6	776.0	810.9	833.1
20°	698.7	700.1	735.0	773.4	799.4
22.5°	653.7	657.0	694.3	734.4	764.2
25°	586.8	591.5	633.3	676.7	708.4
27.5°	522.5	529.5	573.4	618.4	657.0
30°	480.4	488.4	533.1	580.5	620.2
32.5°	438.8	448.5	492.0	542.2	582.6
35°	376.7	386.2	428.0	478.4	521.9
37.5°	312.5	321.7	362.6	412.2	459.3
40°	270.7	281.0	320.1	368.1	415.9
42.5°	232.8	243.1	279.8	327.0	372.1
45°	180.6	191.5	223.8	267.3	308.9
47.5°	137.5	149.2	177.4	217.0	254.9
50°	111.8	123.7	151.5	186.3	222.8
52.5°	91.3	102.8	127.9	160.6	194.0
55°	64.9	75.8	97.8	125.6	154.5
57.5°	44.9	54.3	74.0	97.1	119.8
60°	32.5	41.5	60.1	78.8	97.4
62.5°	21.6	29.8	48.0	62.5	74.9
65°	7.3	14.0	31.0	37.4	41.7
67.5°	3.7	4.4	16.2	17.2	18.6
70°	3.0	3.0	7.8	8.2	9.7
72.5°	2.0	2.0	3.1	4.0	4.3
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)