

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: P844870

Luminaire Tested: **SQ4P-BB-125U-050D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844870
REPORT IS A COMBINATION OF REPORTS P700103 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-125U-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

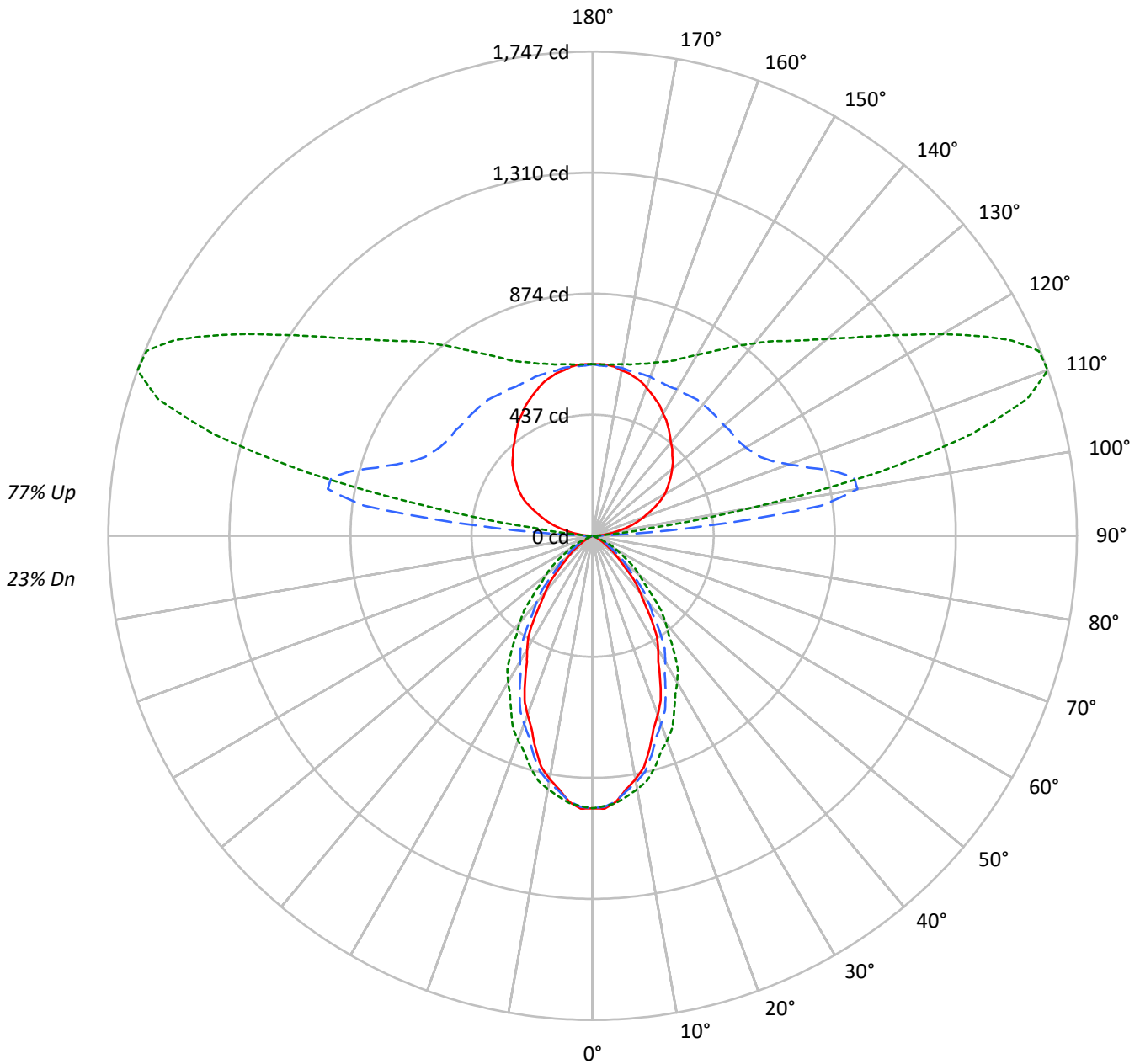
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5192.8 lumens
Efficiency: N/A
Efficacy: 102.2 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: Semi-Indirect

Input Watts (W): 50.8
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23																			
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21																			
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19																			
3	78	69	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17																			
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15																			
5	66	55	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14																			
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13																			
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12																			
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11																			
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10																			
10	46	35	28	23	41	31	26	22	25	21	18	19	17	15	14	12	11	9																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9072	9072	9072
5°	8925	8904	8970
10°	8351	8464	8699
15°	7592	7833	8270
20°	6739	7090	7710
25°	5869	6333	7084
30°	5027	5579	6491
35°	4168	4736	5776
40°	3202	3788	4921
45°	2316	2868	3960
50°	1577	2136	3142
55°	1026	1546	2442
60°	589	1089	1766
65°	155	666	893
70°	81	205	256
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.7
10°-20°	229.5	4.4
20°-30°	287.3	5.5
30°-40°	265.3	5.1
40°-50°	178.3	3.4
50°-60°	92.1	1.8
60°-70°	28.8	0.6
70°-80°	1.8	0.0
80°-90°	1.5	0.0
90°-100°	246.4	4.7
100°-110°	857.4	16.5
110°-120°	830.6	16.0
120°-130°	651.5	12.5
130°-140°	515.7	9.9
140°-150°	398.0	7.7
150°-160°	285.3	5.5
160°-170°	174.5	3.4
170°-180°	59.0	1.1
0°-30°	606.5	11.7
0°-40°	871.8	16.8
0°-60°	1142.2	22.0
0°-90°	1174.4	22.6
90°-120°	1934.4	37.3
90°-150°	3499.5	67.4
90°-180°	4018.0	77.4
0°-180°	5192.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	964	954	961	965	968	89
15°	795	792	820	848	866	221
25°	576	581	622	665	696	264
35°	370	379	420	470	513	229
45°	178	188	220	263	304	139
55°	64	74	96	123	152	60
65°	7	14	30	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	9	14	14	9	5	6
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.3	983.3	983.3	983.3	983.3
2.5°	985.5	976.2	978.6	978.6	976.0
5°	963.7	953.9	961.4	964.7	968.5
7.5°	923.1	915.4	929.7	940.1	947.9
10°	891.4	884.9	903.4	917.8	928.5
12.5°	854.8	849.8	872.1	892.0	905.7
15°	794.8	792.1	820.1	847.6	865.8
17.5°	730.6	730.5	762.4	796.7	818.5
20°	686.4	687.8	722.1	759.8	785.3
22.5°	642.2	645.5	682.1	721.4	750.8
25°	576.5	581.1	622.1	664.8	695.9
27.5°	513.3	520.2	563.3	607.5	645.5
30°	471.9	479.8	523.7	570.3	609.3
32.5°	431.1	440.6	483.3	532.7	572.4
35°	370.1	379.4	420.5	470.0	512.8
37.5°	307.0	316.1	356.2	405.0	451.3
40°	265.9	276.1	314.5	361.7	408.6
42.5°	228.7	238.9	274.8	321.2	365.6
45°	177.5	188.1	219.8	262.6	303.5
47.5°	135.1	146.6	174.3	213.2	250.4
50°	109.9	121.5	148.8	183.0	218.9
52.5°	89.7	101.0	125.7	157.8	190.6
55°	63.8	74.4	96.1	123.4	151.8
57.5°	44.1	53.3	72.7	95.4	117.7
60°	31.9	40.7	59.0	77.4	95.7
62.5°	21.2	29.3	47.1	61.4	73.6
65°	7.1	13.7	30.5	36.7	40.9
67.5°	3.6	4.3	15.9	16.9	18.3
70°	3.0	3.0	7.6	8.1	9.5
72.5°	2.0	2.0	3.0	3.9	4.2
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°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6



(END OF REPORT)