

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: P845277

Luminaire Tested: **SQ4P-PW1-100U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845277
REPORT IS A COMBINATION OF REPORTS P700095 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

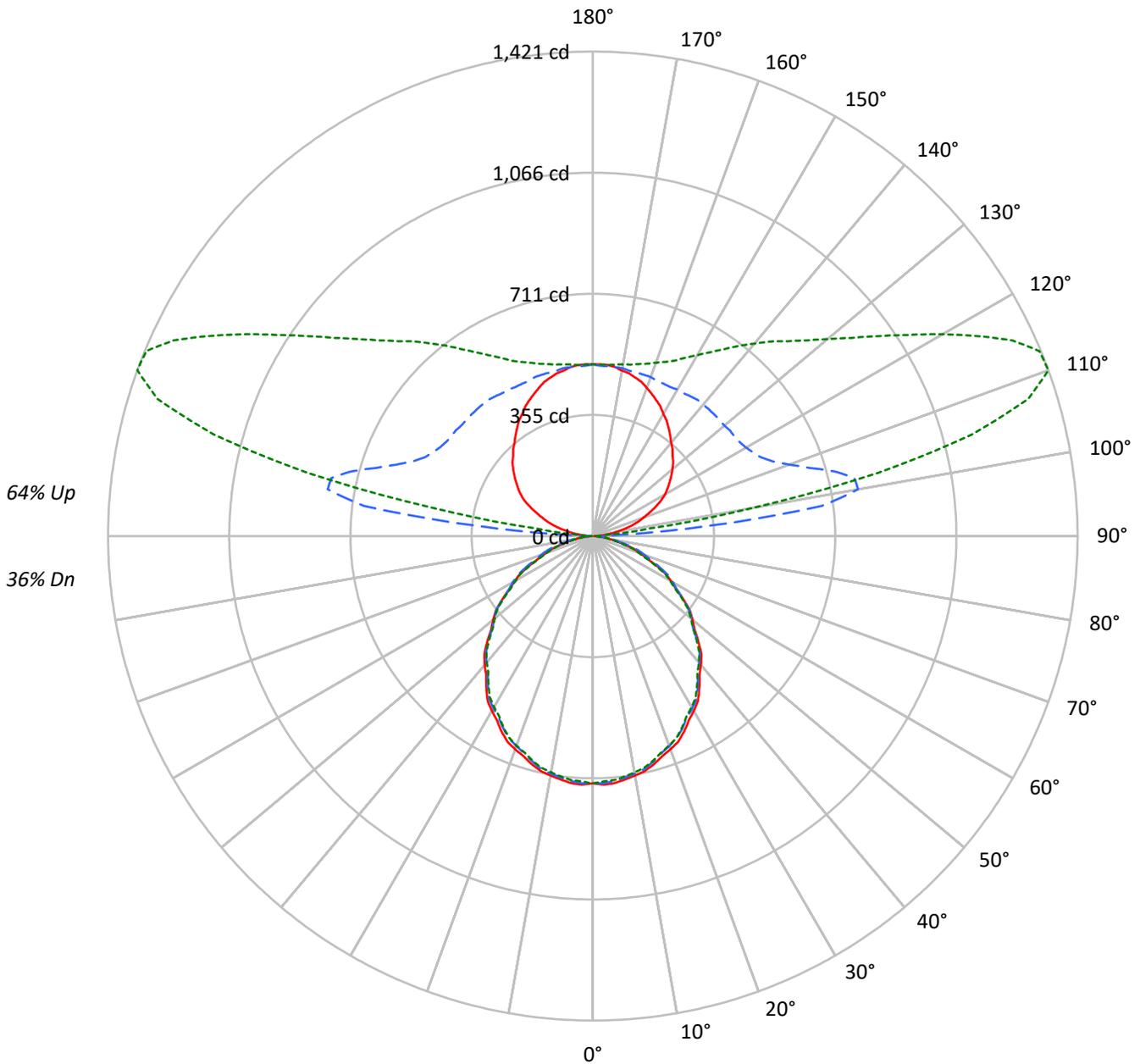
Lumens per Lamp: N/A
Luminaire Lumens: 5116.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
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				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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36				36
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	38	37	31				31
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	32	31	26				26
3	79	70	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22				22
4	72	61	54	48	65	56	49	44	46	41	37	36	32	30	27	25	23	19				19
5	66	55	47	41	59	50	43	38	41	36	32	32	29	26	24	22	20	16				16
6	61	49	41	35	55	45	38	33	37	31	28	29	25	22	22	19	17	14				14
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	17	15	13				13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14	11				11
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	12	10				10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	16	13	11	9				9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6694	6694	6694
5°	6738	6685	6655
10°	6684	6630	6594
15°	6614	6539	6515
20°	6534	6433	6421
25°	6443	6326	6305
30°	6307	6212	6171
35°	6127	6040	6004
40°	5936	5844	5821
45°	5705	5630	5605
50°	5469	5423	5385
55°	5213	5213	5131
60°	4895	4991	4814
65°	4480	4702	4368
70°	3947	4330	3844
75°	3376	3871	3283
80°	2614	3257	2651
85°	1694	2498	2223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	1.3
10°-20°	192.9	3.8
20°-30°	286.1	5.6
30°-40°	334.8	6.5
40°-50°	333.3	6.5
50°-60°	287.8	5.6
60°-70°	207.2	4.0
70°-80°	108.6	2.1
80°-90°	28.2	0.6
90°-100°	200.5	3.9
100°-110°	697.4	13.6
110°-120°	675.6	13.2
120°-130°	530.0	10.4
130°-140°	419.5	8.2
140°-150°	323.7	6.3
150°-160°	232.1	4.5
160°-170°	141.9	2.8
170°-180°	48.0	0.9
0°-30°	547.4	10.7
0°-40°	882.2	17.2
0°-60°	1503.3	29.4
0°-90°	1847.3	36.1
90°-120°	1573.5	30.8
90°-150°	2846.7	55.6
90°-180°	3269.0	63.9
0°-180°	5116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	728	719	722	720	719	69
15°	692	684	685	683	682	195
25°	633	622	621	618	619	291
35°	544	537	536	531	533	340
45°	437	434	432	430	430	337
55°	324	324	324	320	319	289
65°	205	211	215	207	200	203
75°	95	103	109	101	92	101
85°	16	21	24	22	21	21
90°	8	11	11	8	4	5
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	725.5	725.5	725.5	725.5	725.5
2.5°	729.7	723.7	725.5	724.0	720.5
5°	727.5	719.3	721.8	719.8	718.6
7.5°	720.1	712.6	714.3	712.3	711.6
10°	713.4	706.0	707.7	705.2	703.8
12.5°	705.8	697.7	699.6	696.9	696.2
15°	692.4	683.6	684.6	683.3	682.1
17.5°	676.7	667.9	668.0	666.0	665.6
20°	665.5	656.2	655.2	652.7	654.0
22.5°	653.2	643.4	642.5	638.9	640.6
25°	632.9	622.2	621.4	617.6	619.4
27.5°	609.3	598.9	598.9	593.6	595.5
30°	592.0	581.9	583.1	576.7	579.2
32.5°	573.6	564.6	565.1	558.8	561.4
35°	544.0	536.6	536.3	531.2	533.1
37.5°	513.8	507.2	506.1	503.2	503.7
40°	492.9	487.2	485.2	483.3	483.3
42.5°	470.9	465.8	463.7	462.2	461.9
45°	437.2	433.6	431.5	430.2	429.6
47.5°	404.0	400.5	398.8	397.9	397.2
50°	381.0	378.5	377.8	375.9	375.2
52.5°	358.1	356.5	355.8	353.4	352.7
55°	324.1	323.6	324.1	319.7	319.0
57.5°	288.8	289.8	291.9	285.9	284.3
60°	265.3	267.8	270.5	263.4	260.9
62.5°	241.2	245.3	249.0	240.8	237.2
65°	205.2	211.4	215.4	207.0	200.1
67.5°	170.5	178.2	183.0	173.8	166.1
70°	146.3	155.1	160.5	151.3	142.5
72.5°	125.4	135.2	139.5	130.8	122.1
75°	94.7	103.4	108.6	101.4	92.1
77.5°	67.2	75.4	79.8	73.5	65.7
80°	49.2	57.9	61.3	56.1	49.9
82.5°	34.9	42.3	44.5	41.3	37.0
85°	16.0	20.9	23.6	22.4	21.0
87.5°	4.1	7.6	9.7	9.7	10.3
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)