

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: P845248

Luminaire Tested: **SQ4P-PW1-050U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845248
REPORT IS A COMBINATION OF REPORTS P700209 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-050U-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

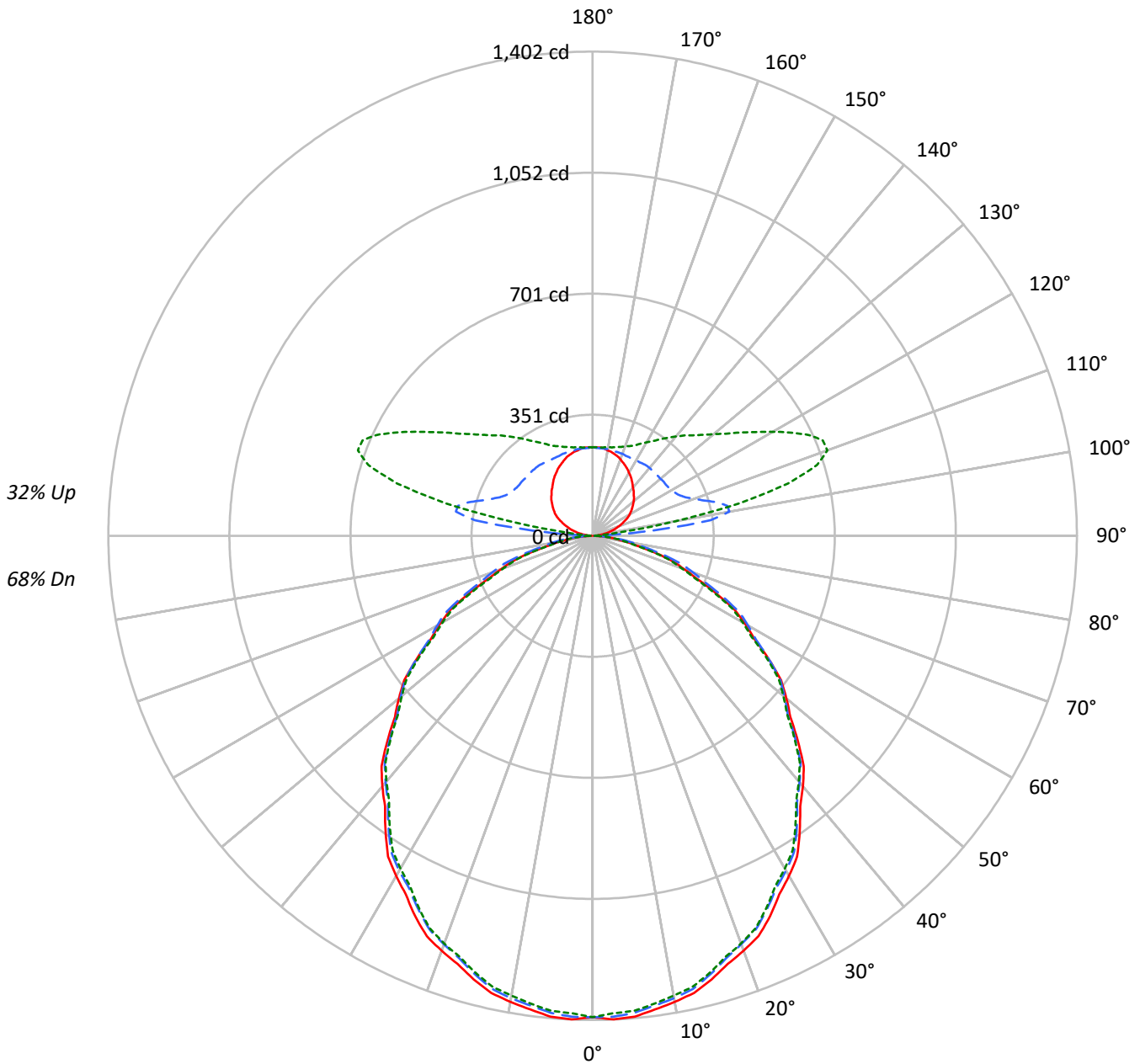
Lumens per Lamp: N/A
Luminaire Lumens: 5210.7 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.9
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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68				68
1	102	98	94	90	96	92	89	86	82	80	77	73	71	69	65	63	62	58				58
2	93	85	79	74	87	81	75	71	72	68	64	64	61	58	57	54	52	48				48
3	85	75	68	62	80	71	64	59	64	58	54	57	53	49	51	47	45	41				41
4	78	67	59	52	73	63	56	50	57	51	46	51	46	42	45	41	38	35				35
5	71	60	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34	31				31
6	66	54	45	39	62	51	43	38	46	40	35	41	36	32	37	33	30	27				27
7	61	48	40	35	57	46	39	33	42	36	31	38	32	29	34	30	26	24				24
8	57	44	36	31	53	42	35	30	38	32	28	35	29	26	31	27	24	21				21
9	53	40	33	27	50	39	31	27	35	29	25	32	27	23	29	24	21	19				19
10	50	37	30	25	47	36	29	24	32	27	22	29	24	21	27	22	19	18				18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12859	12859	12859
5°	12944	12841	12784
10°	12839	12737	12667
15°	12704	12562	12517
20°	12552	12358	12336
25°	12376	12152	12113
30°	12115	11933	11853
35°	11771	11604	11535
40°	11404	11225	11182
45°	10960	10815	10766
50°	10507	10419	10346
55°	10013	10013	9857
60°	9405	9586	9247
65°	8604	9034	8392
70°	7583	8314	7389
75°	6481	7440	6302
80°	5026	6270	5095
85°	3250	4817	4287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	2.5
10°-20°	370.6	7.1
20°-30°	549.7	10.5
30°-40°	643.2	12.3
40°-50°	640.3	12.3
50°-60°	552.9	10.6
60°-70°	398.0	7.6
70°-80°	208.7	4.0
80°-90°	52.4	1.0
90°-100°	102.0	2.0
100°-110°	355.0	6.8
110°-120°	343.9	6.6
120°-130°	269.8	5.2
130°-140°	213.5	4.1
140°-150°	164.8	3.2
150°-160°	118.1	2.3
160°-170°	72.3	1.4
170°-180°	24.4	0.5
0°-30°	1051.5	20.2
0°-40°	1694.6	32.5
0°-60°	2887.8	55.4
0°-90°	3546.9	68.1
90°-120°	800.9	15.4
90°-150°	1449.0	27.8
90°-180°	1664.0	31.9
0°-180°	5210.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1398	1382	1386	1383	1380	132
15°	1330	1313	1315	1313	1310	375
25°	1216	1195	1194	1186	1190	559
35°	1045	1031	1030	1021	1024	653
45°	840	833	829	826	825	648
55°	622	622	622	614	613	555
65°	394	406	414	398	384	391
75°	182	199	209	195	177	195
85°	31	40	46	43	40	40
90°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.8	1393.8	1393.8	1393.8	1393.8
2.5°	1401.8	1390.1	1393.8	1390.8	1384.0
5°	1397.6	1381.9	1386.5	1382.7	1380.4
7.5°	1383.4	1369.0	1372.2	1368.3	1366.8
10°	1370.4	1356.1	1359.5	1354.5	1352.1
12.5°	1355.9	1340.4	1343.8	1338.7	1337.4
15°	1330.0	1313.1	1315.2	1312.7	1310.4
17.5°	1300.0	1283.0	1283.2	1279.4	1278.8
20°	1278.4	1260.4	1258.7	1253.8	1256.4
22.5°	1254.9	1235.8	1234.1	1227.4	1230.8
25°	1215.7	1195.4	1193.7	1186.3	1189.9
27.5°	1170.6	1150.5	1150.5	1140.1	1144.0
30°	1137.2	1118.0	1120.1	1107.8	1112.6
32.5°	1101.9	1084.5	1085.5	1073.5	1078.4
35°	1045.1	1030.7	1030.3	1020.6	1024.1
37.5°	987.1	974.4	972.3	966.8	967.6
40°	946.9	936.0	932.0	928.4	928.4
42.5°	904.5	894.8	890.8	888.0	887.2
45°	840.0	832.7	828.9	826.5	825.1
47.5°	776.0	769.5	766.1	764.4	763.1
50°	732.0	727.2	725.9	722.0	720.8
52.5°	687.7	684.8	683.6	678.9	677.7
55°	622.5	621.5	622.5	614.1	612.8
57.5°	554.8	556.7	560.7	549.1	546.2
60°	509.7	514.4	519.5	505.9	501.1
62.5°	463.4	471.3	478.2	462.5	455.7
65°	394.1	406.2	413.8	397.6	384.4
67.5°	327.5	342.3	351.4	334.1	319.0
70°	281.1	298.1	308.2	290.7	273.9
72.5°	240.9	259.7	268.0	251.2	234.6
75°	181.8	198.6	208.7	194.8	176.8
77.5°	128.9	144.8	153.3	141.2	126.1
80°	94.6	111.4	118.0	107.8	95.9
82.5°	67.1	81.1	85.5	79.4	71.1
85°	30.7	40.2	45.5	42.9	40.5
87.5°	7.8	14.6	18.7	18.7	19.7
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)