

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: P844825

Luminaire Tested: **SQ4P-BB-050U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844825
REPORT IS A COMBINATION OF REPORTS P700188 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-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

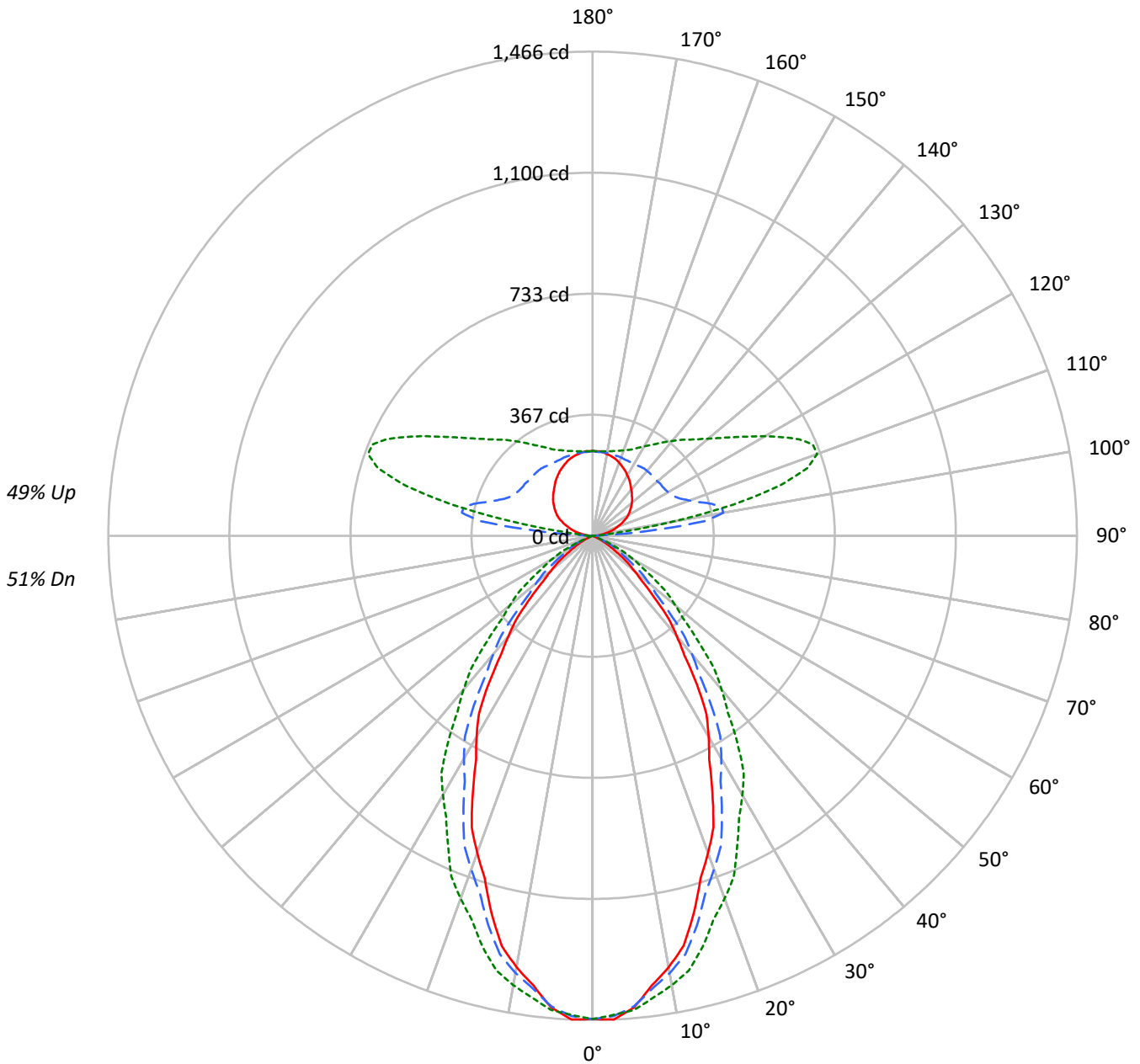
Lumens per Lamp: N/A
Luminaire Lumens: 3409.5 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 38.6
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	100	96	93	90	92	89	87	84	76	74	73	64	63	62	53	53	52	47				47
2	92	86	81	77	86	80	76	72	69	66	63	59	57	55	49	48	47	42				42
3	86	78	71	66	79	72	67	63	63	59	55	54	51	49	45	44	42	38				38
4	79	70	63	58	74	66	60	55	57	53	49	49	46	43	42	40	38	34				34
5	74	63	56	51	68	60	53	49	52	47	44	45	42	39	39	36	34	31				31
6	68	58	51	45	64	54	48	43	48	43	39	42	38	35	36	33	31	29				29
7	64	53	46	41	59	50	43	39	44	39	35	39	35	32	34	31	29	26				26
8	60	49	42	37	56	46	40	35	41	36	32	36	32	29	31	28	26	24				24
9	56	45	38	33	52	42	36	32	38	33	29	33	30	27	29	26	24	22				22
10	53	42	35	30	49	39	33	29	35	30	27	31	27	25	27	25	23	21				21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13497	13497	13497
5°	13279	13247	13346
10°	12425	12591	12943
15°	11296	11654	12304
20°	10027	10549	11472
25°	8731	9424	10540
30°	7480	8301	9658
35°	6201	7047	8593
40°	4765	5634	7322
45°	3446	4267	5891
50°	2347	3178	4673
55°	1525	2299	3630
60°	875	1620	2626
65°	231	989	1330
70°	116	305	380
75°	50	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.9
10°-20°	341.4	10.0
20°-30°	427.4	12.5
30°-40°	394.8	11.6
40°-50°	265.3	7.8
50°-60°	137.0	4.0
60°-70°	42.9	1.3
70°-80°	2.7	0.1
80°-90°	0.7	0.0
90°-100°	102.0	3.0
100°-110°	355.0	10.4
110°-120°	343.9	10.1
120°-130°	269.8	7.9
130°-140°	213.5	6.3
140°-150°	164.8	4.8
150°-160°	118.1	3.5
160°-170°	72.3	2.1
170°-180°	24.4	0.7
0°-30°	902.3	26.5
0°-40°	1297.1	38.0
0°-60°	1699.4	49.8
0°-90°	1745.7	51.2
90°-120°	800.9	23.5
90°-150°	1449.0	42.5
90°-180°	1664.0	48.8
0°-180°	3409.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1434	1419	1430	1435	1441	133
15°	1183	1178	1220	1261	1288	329
25°	858	865	926	989	1035	393
35°	551	564	626	699	763	341
45°	264	280	327	391	452	207
55°	95	111	143	184	226	88
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
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°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1466.2	1452.5	1456.0	1456.0	1452.1
5°	1433.8	1419.3	1430.3	1435.4	1441.0
7.5°	1373.3	1362.0	1383.1	1398.8	1410.3
10°	1326.2	1316.6	1344.0	1365.5	1381.5
12.5°	1271.9	1264.4	1297.5	1327.2	1347.5
15°	1182.6	1178.5	1220.1	1261.0	1288.1
17.5°	1087.0	1086.8	1134.2	1185.2	1217.7
20°	1021.3	1023.4	1074.4	1130.4	1168.4
22.5°	955.6	960.4	1014.9	1073.4	1116.9
25°	857.7	864.6	925.7	989.1	1035.4
27.5°	763.8	773.9	838.2	903.9	960.4
30°	702.1	713.8	779.2	848.4	906.6
32.5°	641.4	655.5	719.1	792.5	851.6
35°	550.6	564.5	625.7	699.3	762.9
37.5°	456.8	470.3	530.0	602.6	671.4
40°	395.6	410.8	467.8	538.1	607.9
42.5°	340.2	355.4	408.9	477.9	544.0
45°	264.1	279.9	327.0	390.6	451.5
47.5°	201.0	218.1	259.4	317.1	372.5
50°	163.5	180.7	221.4	272.2	325.6
52.5°	133.5	150.3	187.0	234.8	283.6
55°	94.8	110.7	142.9	183.6	225.7
57.5°	65.5	79.3	108.2	141.9	175.2
60°	47.4	60.5	87.8	115.2	142.3
62.5°	31.6	43.6	70.2	91.3	109.5
65°	10.6	20.4	45.3	54.6	60.9
67.5°	5.4	6.4	23.7	25.1	27.2
70°	4.3	4.3	11.3	12.0	14.1
72.5°	3.0	3.0	4.5	5.8	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.2	0.2	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°	3.8	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)