

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: P844824

Luminaire Tested: **SQ4P-BB-050U-075D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844824
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

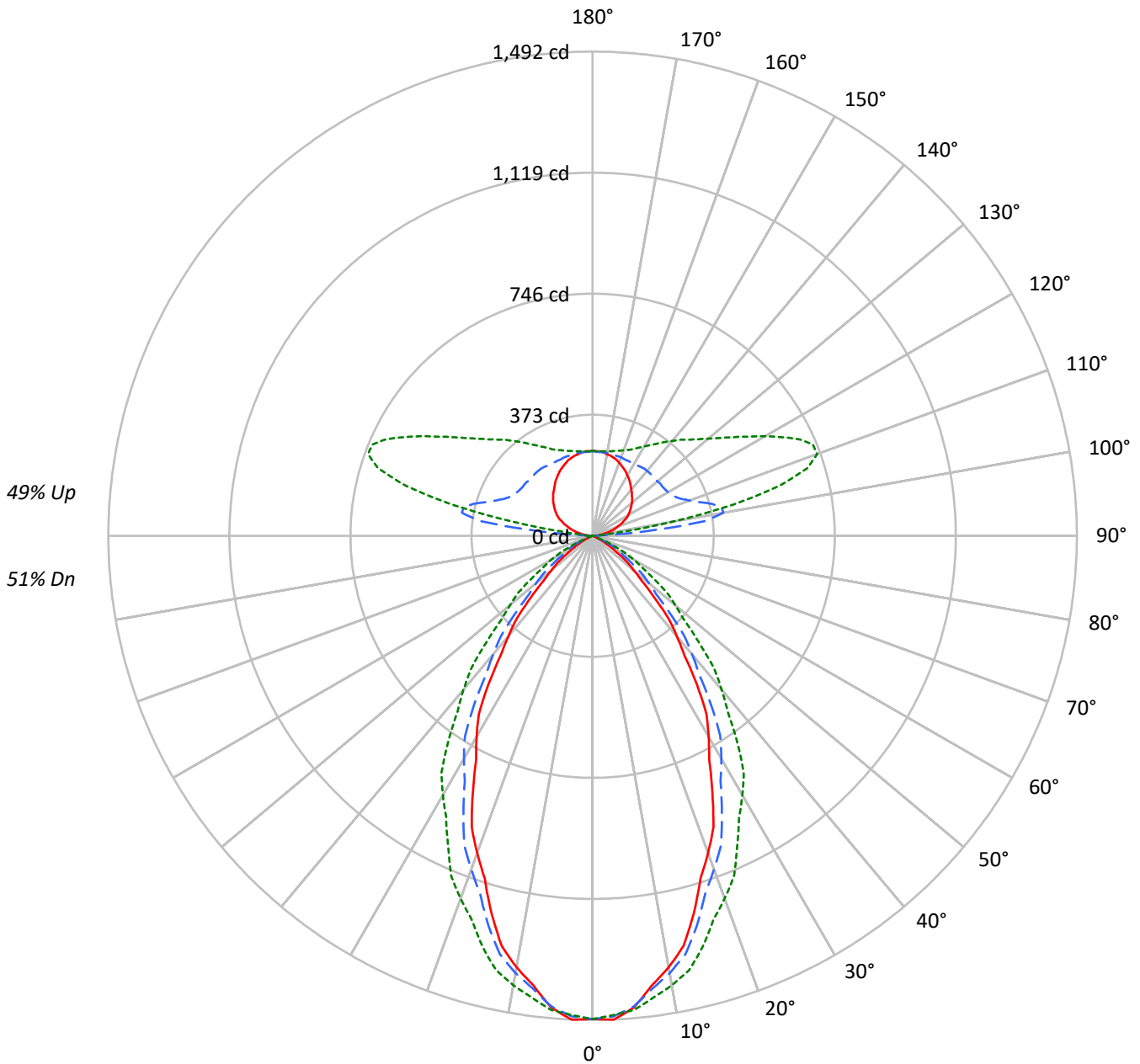
Lumens per Lamp: N/A
Luminaire Lumens: 3470.5 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13739	13739	13739
5°	13517	13484	13585
10°	12647	12816	13174
15°	11498	11863	12523
20°	10207	10737	11677
25°	8887	9592	10730
30°	7614	8450	9831
35°	6312	7173	8746
40°	4849	5735	7452
45°	3507	4344	5997
50°	2388	3235	4757
55°	1552	2340	3696
60°	891	1648	2674
65°	236	1006	1354
70°	119	310	386
75°	53	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	3.9
10°-20°	347.5	10.0
20°-30°	435.1	12.5
30°-40°	401.8	11.6
40°-50°	270.0	7.8
50°-60°	139.5	4.0
60°-70°	43.7	1.3
70°-80°	2.8	0.1
80°-90°	0.7	0.0
90°-100°	103.8	3.0
100°-110°	361.4	10.4
110°-120°	350.0	10.1
120°-130°	274.6	7.9
130°-140°	217.3	6.3
140°-150°	167.7	4.8
150°-160°	120.2	3.5
160°-170°	73.5	2.1
170°-180°	24.9	0.7
0°-30°	918.5	26.5
0°-40°	1320.3	38.0
0°-60°	1729.8	49.8
0°-90°	1776.9	51.2
90°-120°	815.2	23.5
90°-150°	1474.9	42.5
90°-180°	1694.0	48.8
0°-180°	3470.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1460	1445	1456	1461	1467	135
15°	1204	1200	1242	1284	1311	335
25°	873	880	942	1007	1054	400
35°	560	575	637	712	776	347
45°	269	285	333	398	460	211
55°	96	113	146	187	230	90
65°	11	21	46	56	62	18
75°	2	2	1	0	0	2
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°	1489.1	1489.1	1489.1	1489.1	1489.1
2.5°	1492.5	1478.5	1482.1	1482.1	1478.1
5°	1459.5	1444.7	1455.9	1461.1	1466.8
7.5°	1397.9	1386.3	1407.9	1423.8	1435.6
10°	1349.9	1340.1	1368.0	1389.9	1406.2
12.5°	1294.7	1287.0	1320.7	1351.0	1371.6
15°	1203.8	1199.6	1242.0	1283.5	1311.1
17.5°	1106.5	1106.3	1154.5	1206.4	1239.5
20°	1039.6	1041.7	1093.6	1150.7	1189.3
22.5°	972.7	977.6	1033.0	1092.6	1136.9
25°	873.0	880.1	942.2	1006.8	1054.0
27.5°	777.5	787.8	853.2	920.0	977.6
30°	714.7	726.6	793.2	863.6	922.8
32.5°	652.9	667.2	731.9	806.6	866.8
35°	560.4	574.6	636.9	711.8	776.5
37.5°	465.0	478.7	539.5	613.4	683.4
40°	402.6	418.2	476.2	547.7	618.7
42.5°	346.2	361.8	416.2	486.5	553.7
45°	268.8	284.9	332.9	397.6	459.6
47.5°	204.6	222.0	264.1	322.8	379.2
50°	166.4	183.9	225.4	277.1	331.4
52.5°	135.9	153.0	190.3	239.0	288.7
55°	96.5	112.7	145.5	186.9	229.8
57.5°	66.7	80.7	110.1	144.5	178.3
60°	48.3	61.6	89.3	117.3	144.9
62.5°	32.2	44.4	71.4	92.9	111.4
65°	10.8	20.7	46.1	55.6	62.0
67.5°	5.5	6.5	24.1	25.6	27.7
70°	4.4	4.4	11.5	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.4
75°	1.5	1.5	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°	3.9	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)