

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: P844861

Luminaire Tested: **SQ4P-BB-100U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844861
REPORT IS A COMBINATION OF REPORTS P700076 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-100U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

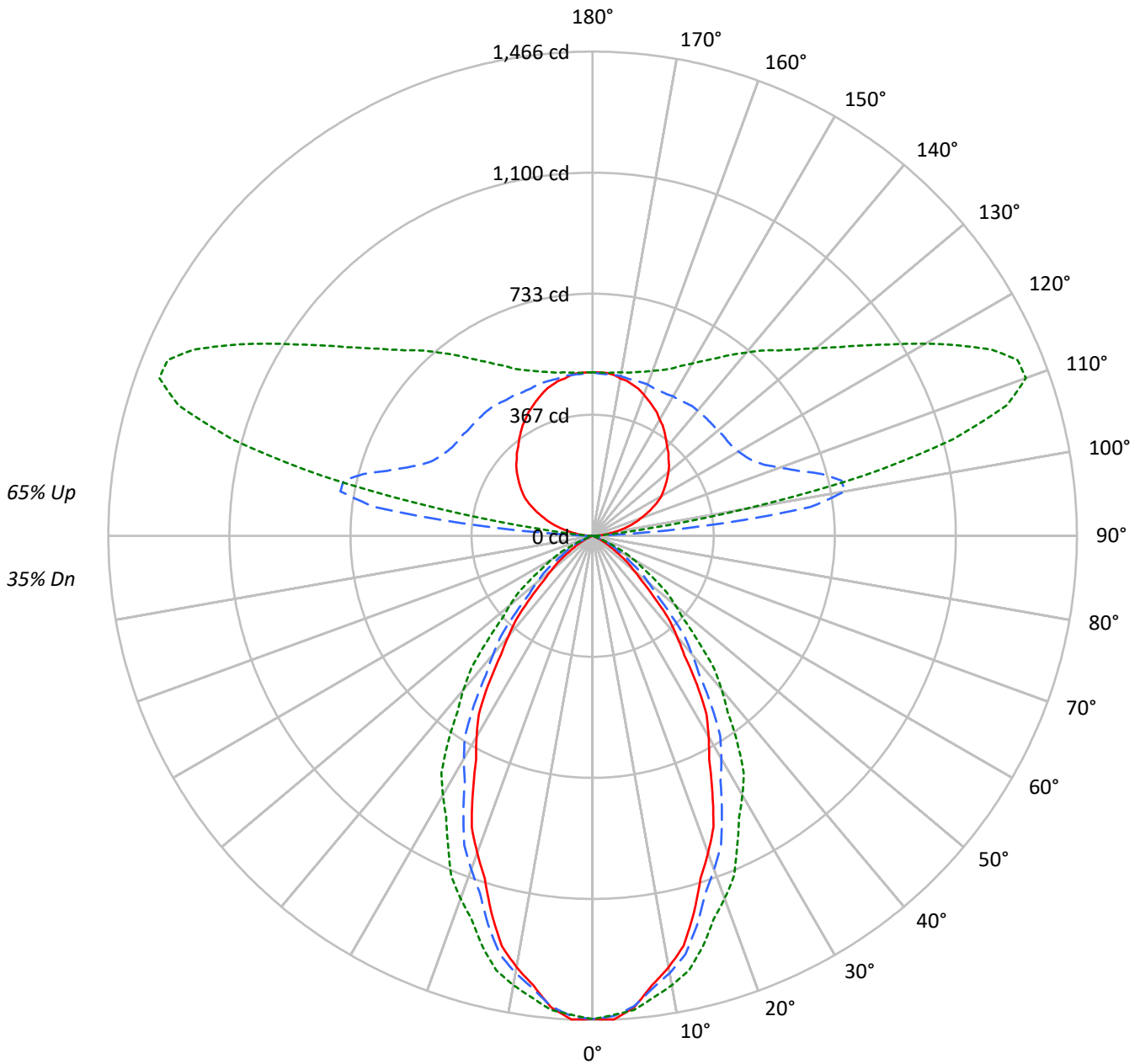
Lumens per Lamp: N/A
Luminaire Lumens: 4957.5 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 51.6
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	0																
RCR																																					
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35																			
1	96	92	89	86	87	83	81	78	68	66	64	53	52	51	39	39	38	32																			
2	88	82	76	72	80	74	70	66	61	58	55	48	46	44	36	35	34	29																			
3	81	73	67	62	74	67	61	57	55	51	48	44	41	39	33	32	31	26																			
4	75	65	59	53	68	60	54	49	50	45	42	40	37	35	31	29	28	24																			
5	69	59	52	46	63	54	48	43	45	40	37	36	33	31	28	27	25	22																			
6	64	53	46	41	58	49	43	38	41	36	33	33	30	28	26	24	23	20																			
7	60	49	41	36	54	45	39	34	38	33	30	31	28	25	24	22	21	18																			
8	56	44	37	33	51	41	35	31	35	30	27	28	25	23	23	21	19	17																			
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	18	15																			
10	49	38	31	27	44	35	29	25	30	25	22	25	21	19	20	18	16	14																			

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	2.7
10°-20°	341.4	6.9
20°-30°	427.4	8.6
30°-40°	394.8	8.0
40°-50°	265.3	5.4
50°-60°	137.0	2.8
60°-70°	42.9	0.9
70°-80°	2.7	0.1
80°-90°	1.3	0.0
90°-100°	196.9	4.0
100°-110°	685.2	13.8
110°-120°	663.7	13.4
120°-130°	520.7	10.5
130°-140°	412.1	8.3
140°-150°	318.0	6.4
150°-160°	228.0	4.6
160°-170°	139.4	2.8
170°-180°	47.2	1.0
0°-30°	902.3	18.2
0°-40°	1297.1	26.2
0°-60°	1699.4	34.3
0°-90°	1746.3	35.2
90°-120°	1545.9	31.2
90°-150°	2796.7	56.4
90°-180°	3211.0	64.8
0°-180°	4957.5	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°	7	11	11	7	4	5
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)