

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: P845163

Luminaire Tested: **SQ4P-PR1-050U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845163
REPORT IS A COMBINATION OF REPORTS P700205 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-050U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

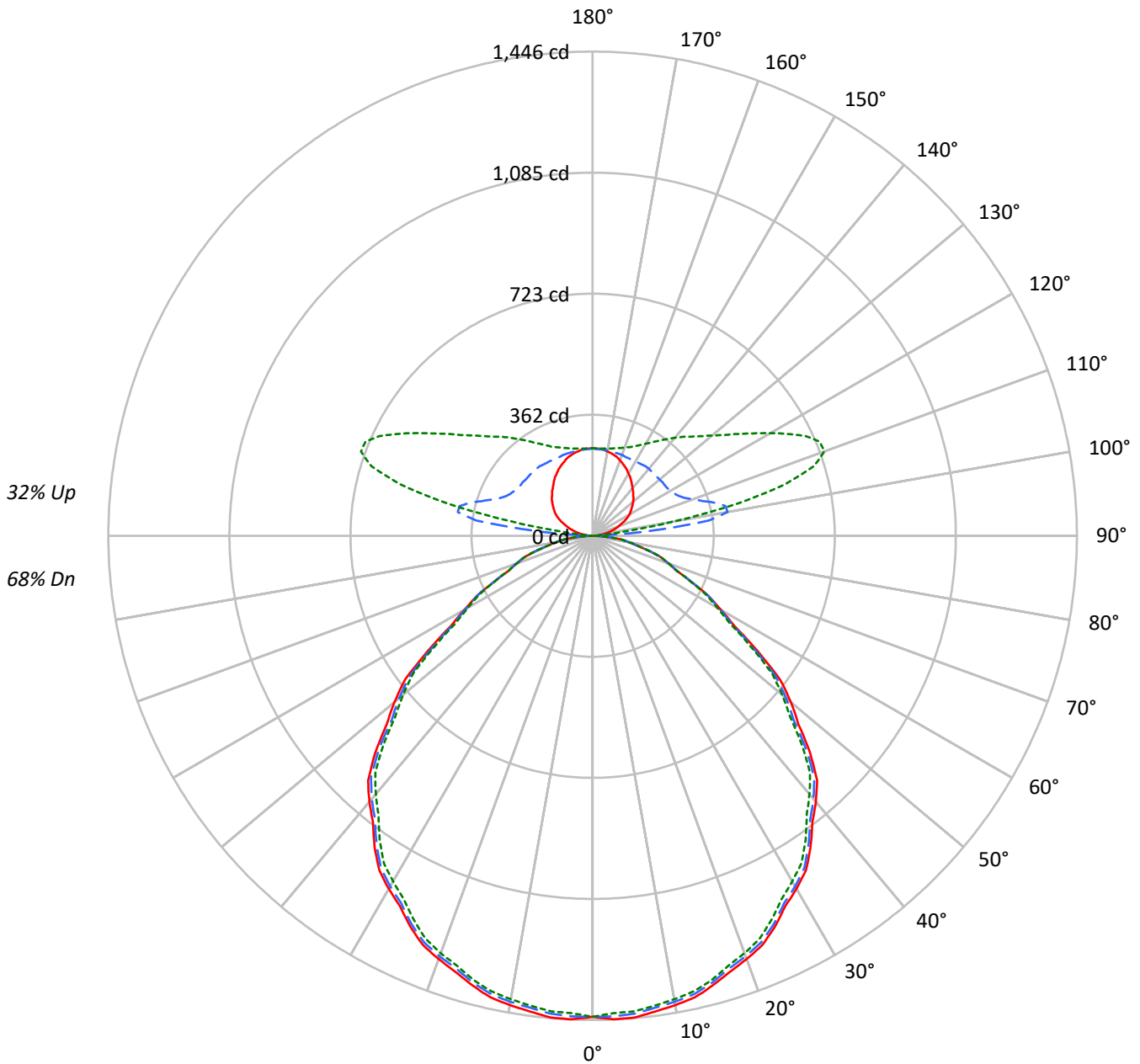
Lumens per Lamp: N/A
Luminaire Lumens: 5285.5 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	91	96	93	89	86	83	80	78	73	71	70	65	63	62	58				58
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	55	53	49				49
3	85	76	69	63	80	72	65	60	65	59	55	58	54	50	51	48	45	42				42
4	78	68	60	53	74	64	57	51	58	52	47	52	47	43	46	42	39	36				36
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32				32
6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28				28
7	62	49	41	36	58	47	40	34	43	36	32	39	33	30	35	30	27	25				25
8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22				22
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	29	25	22	20				20
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20	18				18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13253	13253	13253
5°	13374	13272	13202
10°	13330	13239	13168
15°	13273	13190	13119
20°	13207	13120	13024
25°	13113	13026	12874
30°	12971	12880	12696
35°	12781	12668	12487
40°	12487	12355	12129
45°	11982	11769	11528
50°	11082	10815	10601
55°	9672	9455	9256
60°	8150	8084	7923
65°	7049	7078	7021
70°	6471	6507	6507
75°	6217	6217	6267
80°	5850	5914	5850
85°	4721	5240	5240



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	2.6
10°-20°	388.7	7.4
20°-30°	586.3	11.1
30°-40°	698.5	13.2
40°-50°	688.7	13.0
50°-60°	526.3	10.0
60°-70°	325.7	6.2
70°-80°	185.0	3.5
80°-90°	56.9	1.1
90°-100°	103.8	2.0
100°-110°	361.4	6.8
110°-120°	350.0	6.6
120°-130°	274.6	5.2
130°-140°	217.3	4.1
140°-150°	167.7	3.2
150°-160°	120.2	2.3
160°-170°	73.5	1.4
170°-180°	24.9	0.5
0°-30°	1110.8	21.0
0°-40°	1809.4	34.2
0°-60°	3024.4	57.2
0°-90°	3591.9	68.0
90°-120°	815.2	15.4
90°-150°	1474.9	27.9
90°-180°	1694.0	32.0
0°-180°	5285.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1444	1428	1433	1428	1426	137
15°	1390	1375	1381	1376	1374	392
25°	1288	1272	1280	1266	1265	593
35°	1135	1121	1125	1110	1109	708
45°	918	906	902	886	884	703
55°	601	592	588	578	575	539
65°	323	321	324	322	322	327
75°	174	174	174	176	176	184
85°	45	47	50	50	50	52
90°	4	6	6	4	2	4
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°	1436.5	1436.5	1436.5	1436.5	1436.5
2.5°	1445.6	1433.0	1436.5	1433.5	1426.8
5°	1444.0	1428.2	1433.0	1427.8	1425.5
7.5°	1433.0	1417.4	1422.1	1417.0	1415.7
10°	1422.9	1408.4	1413.1	1408.1	1405.6
12.5°	1412.0	1396.7	1402.2	1396.2	1393.9
15°	1389.6	1375.1	1380.9	1376.0	1373.5
17.5°	1364.9	1349.3	1355.3	1349.5	1346.3
20°	1345.1	1330.5	1336.3	1327.8	1326.5
22.5°	1323.3	1308.8	1314.5	1303.0	1302.8
25°	1288.1	1272.3	1279.6	1265.9	1264.6
27.5°	1246.3	1231.8	1237.6	1223.7	1222.4
30°	1217.5	1203.0	1209.0	1194.1	1191.7
32.5°	1184.9	1171.4	1176.3	1161.4	1159.9
35°	1134.8	1121.3	1124.7	1110.0	1108.7
37.5°	1077.6	1065.4	1067.3	1050.9	1049.9
40°	1036.8	1024.9	1025.8	1008.5	1007.1
42.5°	992.5	980.3	979.2	962.0	960.7
45°	918.3	906.1	902.0	885.8	883.5
47.5°	833.6	821.4	813.9	800.7	799.0
50°	772.1	759.9	753.5	742.3	738.6
52.5°	705.8	693.7	688.3	678.1	674.5
55°	601.3	591.7	587.8	577.9	575.4
57.5°	502.1	495.7	494.4	484.8	483.8
60°	441.7	438.1	438.1	429.4	429.4
62.5°	390.3	387.5	389.5	383.7	382.9
65°	322.9	320.6	324.2	321.6	321.6
67.5°	269.8	269.8	271.9	270.9	270.9
70°	239.9	239.9	241.2	241.2	241.2
72.5°	213.3	212.4	215.6	215.4	214.6
75°	174.4	174.4	174.4	175.8	175.8
77.5°	135.9	136.1	137.1	136.9	135.9
80°	110.1	111.3	111.3	110.1	110.1
82.5°	84.5	85.6	85.6	85.3	84.5
85°	44.6	46.9	49.5	49.5	49.5
87.5°	12.8	16.7	19.9	19.9	18.8
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)