

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: P845199

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

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845199
REPORT IS A COMBINATION OF REPORTS P700093 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

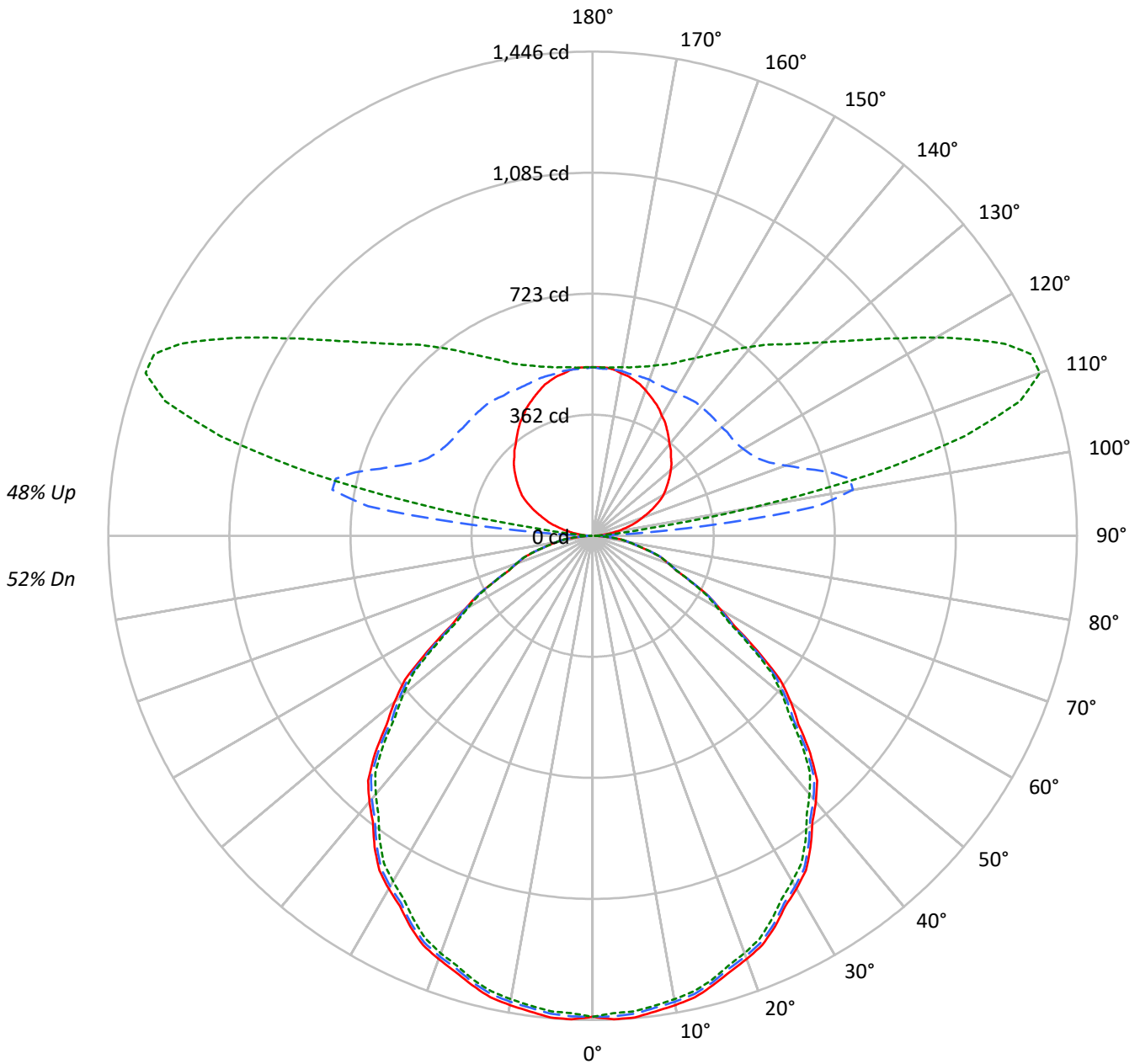
Lumens per Lamp: N/A
Luminaire Lumens: 6861.3 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
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									
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52																			
1	99	94	91	87	91	88	84	81	75	72	70	63	61	60	52	51	50	45																			
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	42	38																			
3	82	73	66	60	76	68	62	57	58	54	50	49	46	43	41	39	36	32																			
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32	28																			
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	33	30	28	25																			
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	30	27	24	22																			
7	59	47	39	34	55	44	37	32	38	33	28	33	28	25	28	24	22	19																			
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	25	22	20	17																			
9	51	39	32	27	47	37	30	25	32	26	23	28	23	20	24	20	18	16																			
10	48	36	29	24	44	34	27	23	29	24	20	26	21	18	22	18	16	14																			

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	2.0
10°-20°	388.7	5.7
20°-30°	586.3	8.5
30°-40°	698.5	10.2
40°-50°	688.7	10.0
50°-60°	526.3	7.7
60°-70°	325.7	4.7
70°-80°	185.0	2.7
80°-90°	57.5	0.8
90°-100°	200.5	2.9
100°-110°	697.4	10.2
110°-120°	675.6	9.8
120°-130°	530.0	7.7
130°-140°	419.5	6.1
140°-150°	323.7	4.7
150°-160°	232.1	3.4
160°-170°	141.9	2.1
170°-180°	48.0	0.7
0°-30°	1110.8	16.2
0°-40°	1809.4	26.4
0°-60°	3024.4	44.1
0°-90°	3592.5	52.4
90°-120°	1573.5	22.9
90°-150°	2846.7	41.5
90°-180°	3269.0	47.6
0°-180°	6861.3	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°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)