

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: P845223

Luminaire Tested: **SQ4P-PR1-150U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845223
REPORT IS A COMBINATION OF REPORTS P700149 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-150U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

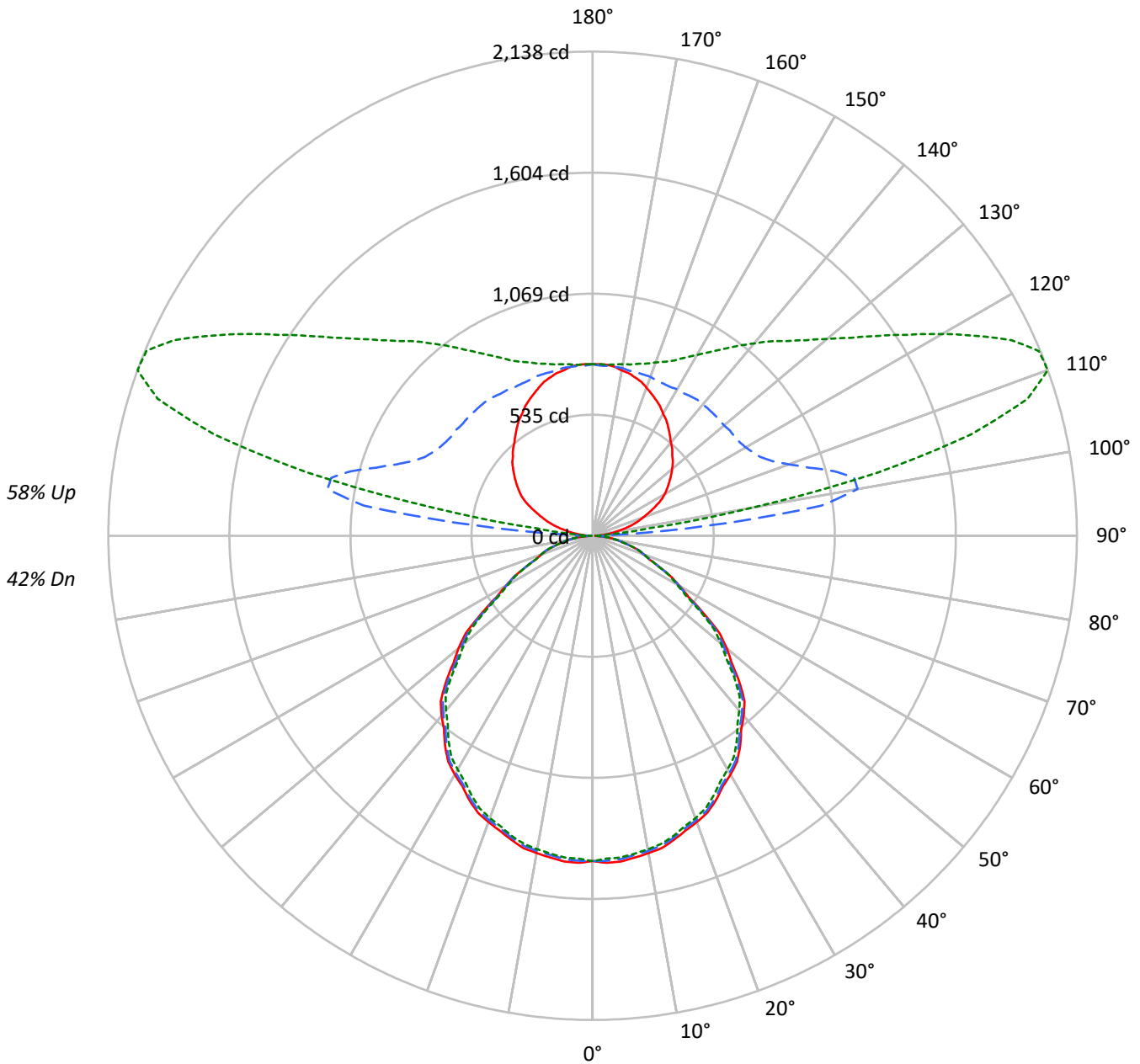
Lumens per Lamp: N/A
Luminaire Lumens: 8511.8 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 77.9
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42				42
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36				36
2	88	81	75	70	80	74	69	65	61	58	54	50	47	45	39	37	36	31				31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	31	26				26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26	23				23
5	67	56	48	42	61	52	45	40	43	38	34	35	31	29	28	25	23	20				20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	25	23	20	17				17
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15				15
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	18	16	14				14
9	50	38	30	25	45	35	28	24	29	24	21	24	21	18	20	17	15	13				13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11				11

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	1.6
10°-20°	388.7	4.6
20°-30°	586.3	6.9
30°-40°	698.5	8.2
40°-50°	688.7	8.1
50°-60°	526.3	6.2
60°-70°	325.7	3.8
70°-80°	185.0	2.2
80°-90°	58.1	0.7
90°-100°	301.6	3.5
100°-110°	1049.5	12.3
110°-120°	1016.6	11.9
120°-130°	797.5	9.4
130°-140°	631.2	7.4
140°-150°	487.1	5.7
150°-160°	349.2	4.1
160°-170°	213.6	2.5
170°-180°	72.2	0.8
0°-30°	1110.8	13.1
0°-40°	1809.4	21.3
0°-60°	3024.4	35.5
0°-90°	3593.2	42.2
90°-120°	2367.8	27.8
90°-150°	4283.6	50.3
90°-180°	4919.0	57.8
0°-180°	8511.8	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°	11	17	17	11	6	9
95°	51	175	509	130	79	54
105°	175	249	1103	1861	1731	184
115°	305	368	820	1731	2042	302
125°	413	509	764	1290	1538	370
135°	498	560	758	1075	1216	386
145°	583	622	752	928	1007	364
155°	662	684	741	826	854	305
165°	724	730	747	780	786	204
175°	758	758	752	764	758	72
180°	758	758	758	758	758	



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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°	11.3	17.0	17.0	11.3	5.6
92.5°	28.3	84.8	79.2	33.9	28.3
95°	50.9	175.3	509.0	130.0	79.2
97.5°	79.2	198.0	1018.1	463.8	248.9
100°	107.5	209.2	1187.8	1114.2	718.3
102.5°	141.4	226.3	1182.1	1566.7	1289.5
105°	175.3	248.9	1102.9	1860.8	1730.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.4	333.7	859.7	1872.1	2132.2
115°	305.4	367.7	820.1	1730.7	2041.8
117.5°	339.4	407.2	797.4	1600.6	1911.7
120°	367.7	441.1	780.5	1476.2	1781.6
122.5°	390.2	475.1	769.2	1374.4	1651.5
125°	412.9	509.0	763.5	1289.5	1538.4
127.5°	435.5	531.6	763.5	1227.3	1436.6
130°	458.2	543.0	757.9	1165.1	1351.7
132.5°	480.8	548.6	757.9	1119.8	1278.2
135°	497.7	559.9	757.9	1074.6	1216.0
137.5°	520.4	571.3	757.9	1035.1	1165.1
140°	537.3	588.2	757.9	995.4	1108.5
142.5°	559.9	605.2	757.9	955.9	1057.6
145°	582.6	622.1	752.2	927.6	1006.8
147.5°	605.2	639.1	746.6	899.3	961.5
150°	622.1	656.1	746.6	871.0	921.9
152.5°	644.8	673.0	740.9	842.7	888.0
155°	661.8	684.4	740.9	825.7	854.0
157.5°	678.7	701.3	740.9	808.8	831.5
160°	695.7	712.6	746.6	797.4	814.4
162.5°	712.6	724.0	746.6	786.2	797.4
165°	724.0	729.6	746.6	780.5	786.2
167.5°	735.2	740.9	746.6	774.9	774.9
170°	740.9	746.6	752.2	769.2	769.2
172.5°	752.2	752.2	752.2	763.5	763.5
175°	757.9	757.9	752.2	763.5	757.9
177.5°	757.9	757.9	752.2	763.5	757.9
180°	757.9	757.9	757.9	757.9	757.9



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	209.2	277.2	1001.1	1990.8	2013.5
110°	237.5	305.4	921.9	1973.9	2137.9



(END OF REPORT)