

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: P845224

Luminaire Tested: **SQ4P-PR1-150U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845224
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

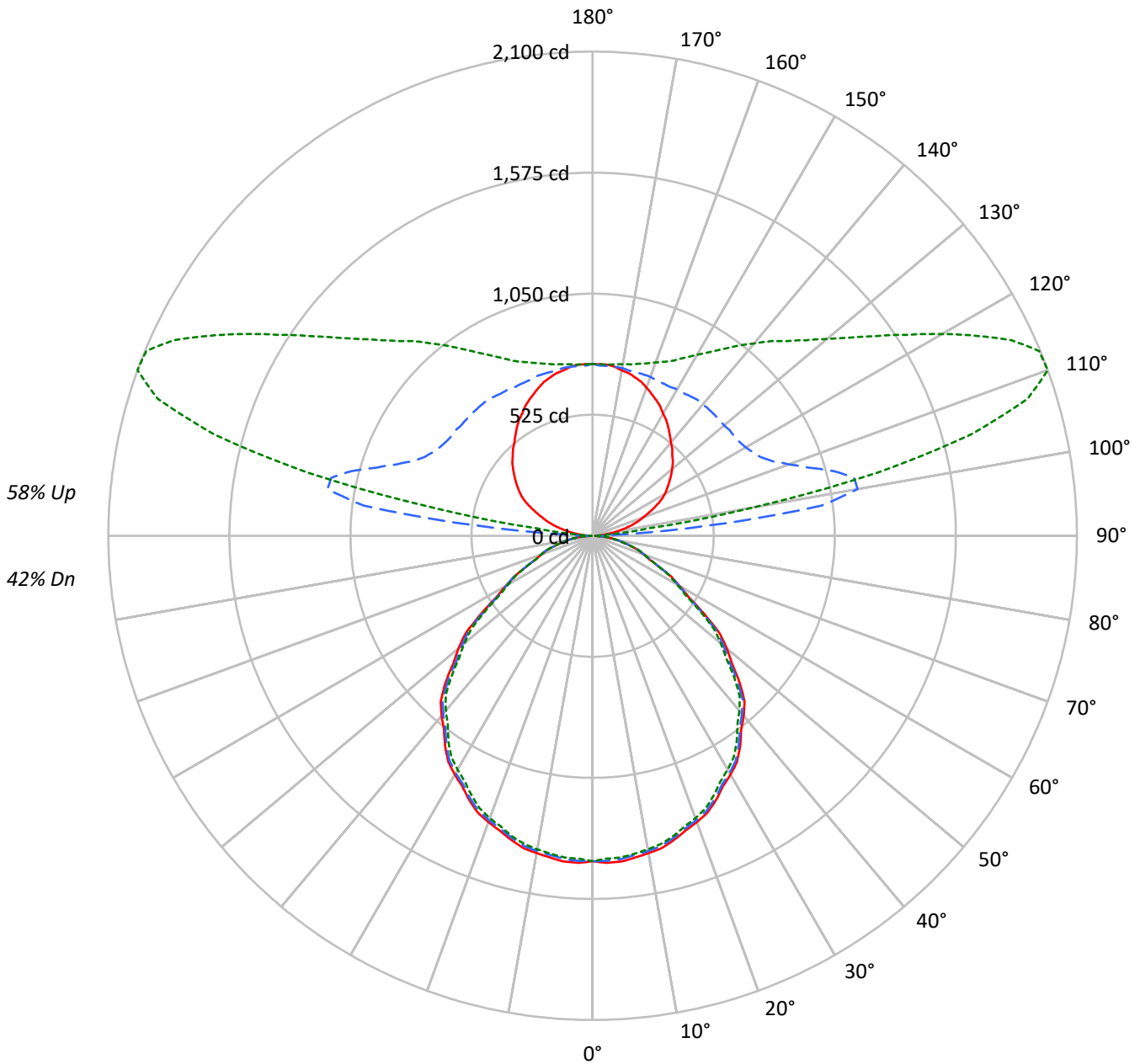
Lumens per Lamp: N/A
Luminaire Lumens: 8362.1 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	13021	13021	13021
5°	13138	13038	12970
10°	13096	13005	12937
15°	13040	12958	12888
20°	12974	12889	12794
25°	12882	12797	12648
30°	12743	12653	12472
35°	12556	12445	12268
40°	12268	12137	11916
45°	11770	11562	11326
50°	10889	10626	10415
55°	9502	9289	9093
60°	8006	7942	7783
65°	6925	6953	6899
70°	6358	6393	6393
75°	6110	6110	6156
80°	5749	5813	5749
85°	4637	5145	5145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	1.6
10°-20°	381.9	4.6
20°-30°	576.0	6.9
30°-40°	686.3	8.2
40°-50°	676.6	8.1
50°-60°	517.1	6.2
60°-70°	319.9	3.8
70°-80°	181.7	2.2
80°-90°	57.1	0.7
90°-100°	296.3	3.5
100°-110°	1031.0	12.3
110°-120°	998.8	11.9
120°-130°	783.5	9.4
130°-140°	620.1	7.4
140°-150°	478.6	5.7
150°-160°	343.1	4.1
160°-170°	209.8	2.5
170°-180°	71.0	0.8
0°-30°	1091.3	13.1
0°-40°	1777.5	21.3
0°-60°	2971.2	35.5
0°-90°	3530.0	42.2
90°-120°	2326.1	27.8
90°-150°	4208.3	50.3
90°-180°	4832.0	57.8
0°-180°	8362.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1419	1403	1408	1403	1400	135
15°	1365	1351	1357	1352	1349	385
25°	1265	1250	1257	1244	1242	582
35°	1115	1102	1105	1090	1089	696
45°	902	890	886	870	868	691
55°	591	581	578	568	565	529
65°	317	315	318	316	316	321
75°	171	171	171	173	173	181
85°	44	46	49	49	49	51
90°	11	17	17	11	6	9
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.3	1411.3	1411.3	1411.3	1411.3
2.5°	1420.1	1407.8	1411.3	1408.3	1401.7
5°	1418.6	1403.1	1407.8	1402.7	1400.4
7.5°	1407.8	1392.4	1397.1	1392.1	1390.8
10°	1397.9	1383.7	1388.2	1383.4	1380.9
12.5°	1387.2	1372.2	1377.6	1371.7	1369.4
15°	1365.2	1350.9	1356.6	1351.8	1349.3
17.5°	1340.9	1325.6	1331.5	1325.8	1322.6
20°	1321.4	1307.1	1312.8	1304.5	1303.1
22.5°	1300.0	1285.8	1291.4	1280.1	1279.9
25°	1265.4	1249.9	1257.1	1243.6	1242.4
27.5°	1224.4	1210.1	1215.8	1202.2	1200.9
30°	1196.1	1181.8	1187.7	1173.1	1170.7
32.5°	1164.0	1150.8	1155.7	1141.0	1139.5
35°	1114.8	1101.6	1104.9	1090.4	1089.2
37.5°	1058.7	1046.7	1048.6	1032.5	1031.4
40°	1018.6	1006.9	1007.7	990.8	989.4
42.5°	975.1	963.1	962.0	945.1	943.8
45°	902.1	890.1	886.1	870.2	868.0
47.5°	818.9	806.9	799.6	786.7	784.9
50°	758.6	746.6	740.3	729.3	725.6
52.5°	693.4	681.5	676.2	666.1	662.6
55°	590.7	581.3	577.5	567.7	565.3
57.5°	493.2	487.0	485.7	476.3	475.3
60°	433.9	430.4	430.4	421.8	421.8
62.5°	383.5	380.7	382.6	377.0	376.1
65°	317.2	314.9	318.5	316.0	316.0
67.5°	265.0	265.0	267.1	266.1	266.1
70°	235.7	235.7	237.0	237.0	237.0
72.5°	209.5	208.7	211.8	211.6	210.8
75°	171.4	171.4	171.4	172.7	172.7
77.5°	133.5	133.7	134.7	134.5	133.5
80°	108.2	109.4	109.4	108.2	108.2
82.5°	83.0	84.1	84.1	83.8	83.0
85°	43.8	46.1	48.6	48.6	48.6
87.5°	12.6	16.4	19.5	19.5	18.5
90°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4



(END OF REPORT)