

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: P845212

Luminaire Tested: **SQ4P-PR1-125U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845212
REPORT IS A COMBINATION OF REPORTS P700121 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-125U-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

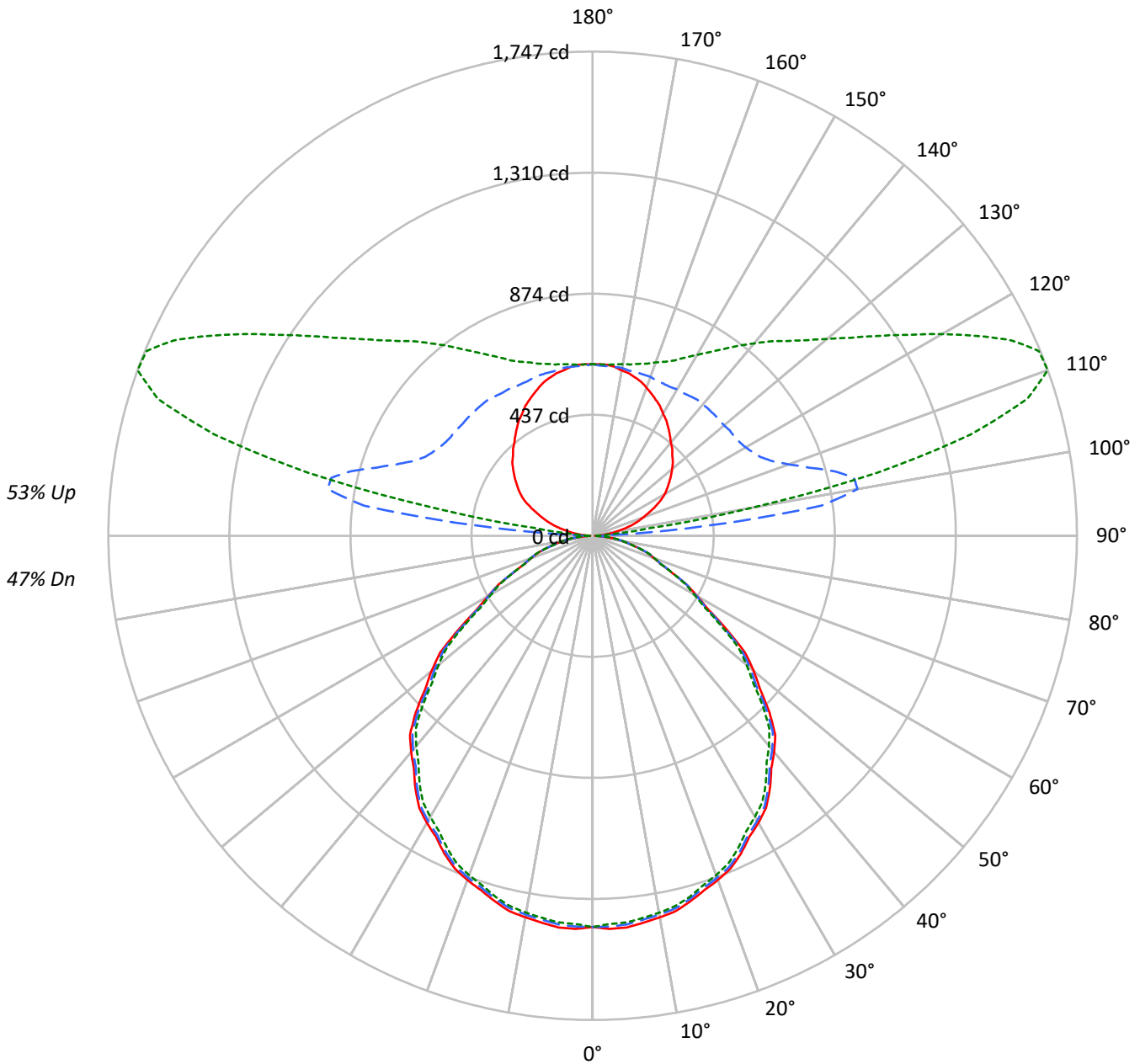
Lumens per Lamp: N/A
Luminaire Lumens: 7548.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.9
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47	47	47	47																
1	97	93	89	86	89	86	82	80	72	70	67	59	58	56	47	46	45	40	40	40	40																
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	40	39	34	34	34	34																
3	81	72	65	59	74	66	60	55	56	51	48	46	43	40	37	35	33	29	29	29	29																
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29	25	25	25	25																
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	30	27	25	22	22	22	22																
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19	19	19	19																
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20	17	17	17	17																
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15	15	15	15																
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16	14	14	14	14																
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13	13	13	13																

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	1.8
10°-20°	381.9	5.1
20°-30°	576.0	7.6
30°-40°	686.3	9.1
40°-50°	676.6	9.0
50°-60°	517.1	6.9
60°-70°	319.9	4.2
70°-80°	181.7	2.4
80°-90°	56.8	0.8
90°-100°	246.4	3.3
100°-110°	857.4	11.4
110°-120°	830.6	11.0
120°-130°	651.5	8.6
130°-140°	515.7	6.8
140°-150°	398.0	5.3
150°-160°	285.3	3.8
160°-170°	174.5	2.3
170°-180°	59.0	0.8
0°-30°	1091.3	14.5
0°-40°	1777.5	23.5
0°-60°	2971.2	39.4
0°-90°	3529.7	46.8
90°-120°	1934.4	25.6
90°-150°	3499.5	46.4
90°-180°	4018.0	53.2
0°-180°	7548.0	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°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	



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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°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6



(END OF REPORT)