

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P701250

Luminaire Tested: SQ4P-PW1-125U-125D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701250
REPORT IS A COMBINATION OF REPORTS P700126 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-125U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1250 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

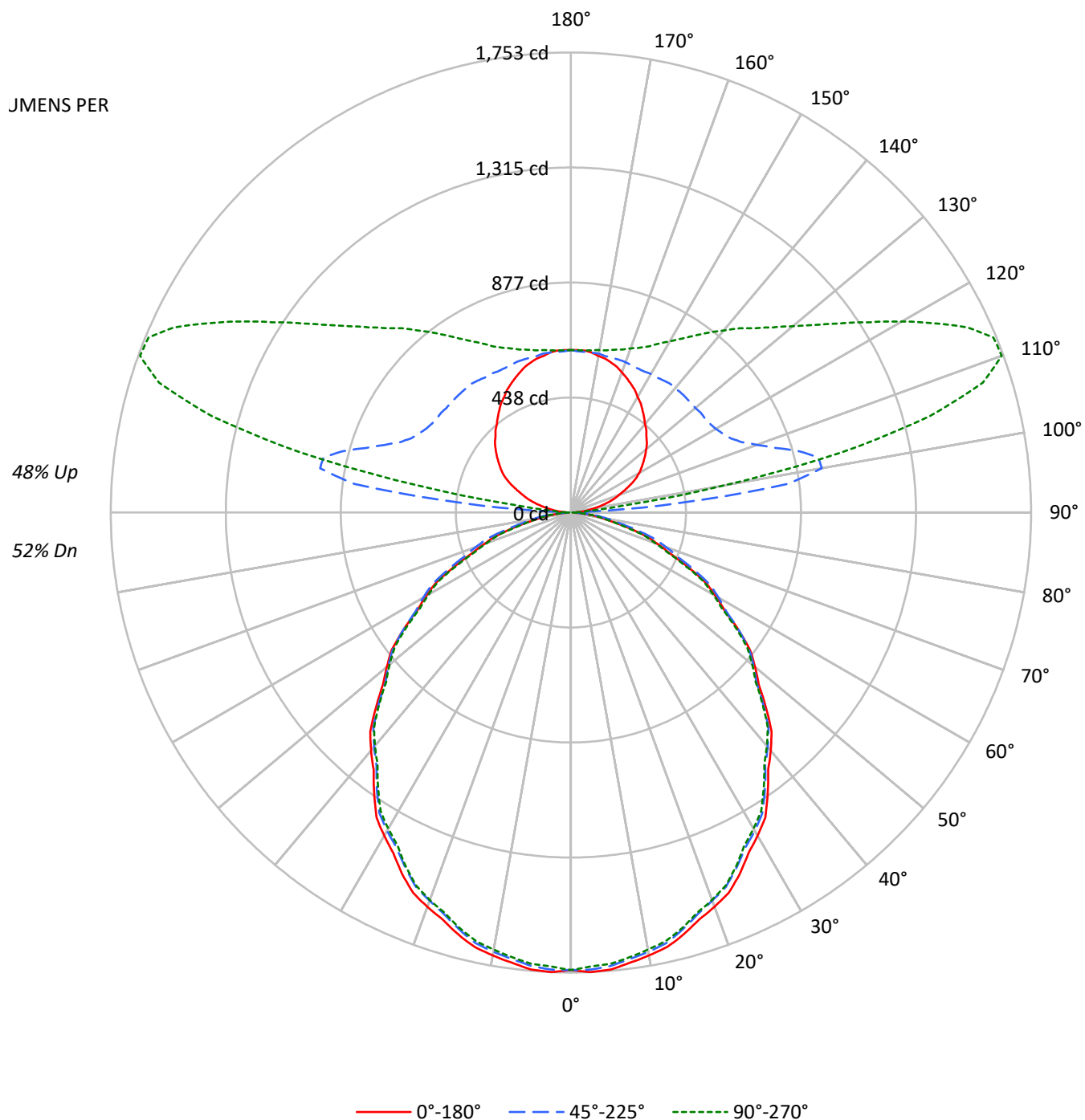
Lumens per Lamp: N/A
Luminaire Lumens: 8455.3 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.8
Input Voltage (V): NR
Input Current (Ain): 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: 24 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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	98	94	90	87	91	87	84	81	74	72	70	63	61	59	52	51	50
2	90	82	76	71	83	76	71	67	65	61	58	55	52	50	46	44	42
3	82	72	65	59	75	67	61	56	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	60	53	47	51	46	42	44	39	36	36	33	31
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	41	35	41	36	31	35	31	27	30	26	24
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21
8	54	42	34	29	50	39	32	28	34	29	25	29	25	22	25	21	19
9	51	38	31	26	47	36	29	25	31	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16084	16084	16084
5°	16189	16061	15990
10°	16059	15929	15843
15°	15889	15712	15654
20°	15699	15457	15429
25°	15480	15199	15150
30°	15152	14924	14825
35°	14722	14514	14427
40°	14264	14041	13987
45°	13708	13529	13467
50°	13142	13031	12941
55°	12526	12526	12329
60°	11765	11990	11564
65°	10763	11300	10496
70°	9485	10399	9242
75°	8106	9304	7882
80°	6285	7837	6376
85°	4065	6023	5356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13708 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	1.9
10°-20°	463.5	5.5
20°-30°	687.5	8.1
30°-40°	804.4	9.5
40°-50°	800.9	9.5
50°-60°	691.6	8.2
60°-70°	497.8	5.9
70°-80°	261.0	3.1
80°-90°	66.2	0.8
90°-100°	246.4	2.9
100°-110°	857.4	10.1
110°-120°	830.6	9.8
120°-130°	651.5	7.7
130°-140°	515.7	6.1
140°-150°	398.0	4.7
150°-160°	285.3	3.4
160°-170°	174.5	2.1
170°-180°	59.0	0.7
0°-30°	1315.1	15.6
0°-40°	2119.5	25.1
0°-60°	3611.9	42.7
0°-90°	4437.0	52.5
90°-120°	1934.4	22.9
90°-150°	3499.5	41.4
90°-180°	4018.0	47.5
0°-180°	8455.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1748	1728	1734	1729	1726	166
15°	1664	1642	1645	1642	1639	469
25°	1521	1495	1493	1484	1488	699
35°	1307	1289	1289	1276	1281	817
45°	1051	1042	1037	1034	1032	811
55°	779	777	779	768	766	695
65°	493	508	518	497	481	489
75°	227	248	261	244	221	244
85°	38	50	57	54	51	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°	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1753.2	1738.7	1743.3	1739.5	1731.1
5°	1748.0	1728.4	1734.2	1729.4	1726.5
7.5°	1730.2	1712.2	1716.2	1711.5	1709.6
10°	1714.1	1696.0	1700.3	1694.2	1691.1
12.5°	1695.8	1676.5	1680.7	1674.3	1672.8
15°	1663.5	1642.3	1645.0	1641.8	1638.9
17.5°	1626.0	1604.7	1605.0	1600.3	1599.4
20°	1598.9	1576.4	1574.3	1568.2	1571.4
22.5°	1569.5	1545.7	1543.6	1535.1	1539.3
25°	1520.6	1495.2	1493.0	1483.7	1488.2
27.5°	1464.1	1439.0	1439.0	1426.0	1430.8
30°	1422.3	1398.2	1400.9	1385.5	1391.6
32.5°	1378.1	1356.3	1357.7	1342.6	1348.7
35°	1307.1	1289.1	1288.6	1276.5	1280.9
37.5°	1234.6	1218.7	1216.0	1209.2	1210.2
40°	1184.3	1170.8	1165.8	1161.3	1161.3
42.5°	1131.3	1119.2	1114.2	1110.7	1109.6
45°	1050.6	1041.6	1036.9	1033.6	1032.1
47.5°	970.6	962.4	958.2	956.0	954.5
50°	915.6	909.5	907.9	903.1	901.6
52.5°	860.2	856.5	854.9	849.1	847.5
55°	778.7	777.3	778.7	768.1	766.5
57.5°	693.9	696.3	701.4	686.8	683.1
60°	637.6	643.4	649.8	632.8	626.7
62.5°	579.6	589.4	598.1	578.5	570.1
65°	493.0	508.1	517.6	497.2	480.8
67.5°	409.6	428.1	439.5	417.8	399.0
70°	351.6	372.8	385.5	363.5	342.6
72.5°	301.3	324.8	335.2	314.3	293.3
75°	227.4	248.4	261.0	243.6	221.1
77.5°	161.3	181.1	191.6	176.6	157.8
80°	118.3	139.3	147.5	134.8	120.0
82.5°	84.0	101.4	107.0	99.3	88.9
85°	38.4	50.3	56.9	53.8	50.6
87.5°	9.8	18.3	23.3	23.3	24.7
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
107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6

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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

(END OF REPORT)