

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1036355

Luminaire Tested: SQ4R-PW1-125D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564826)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

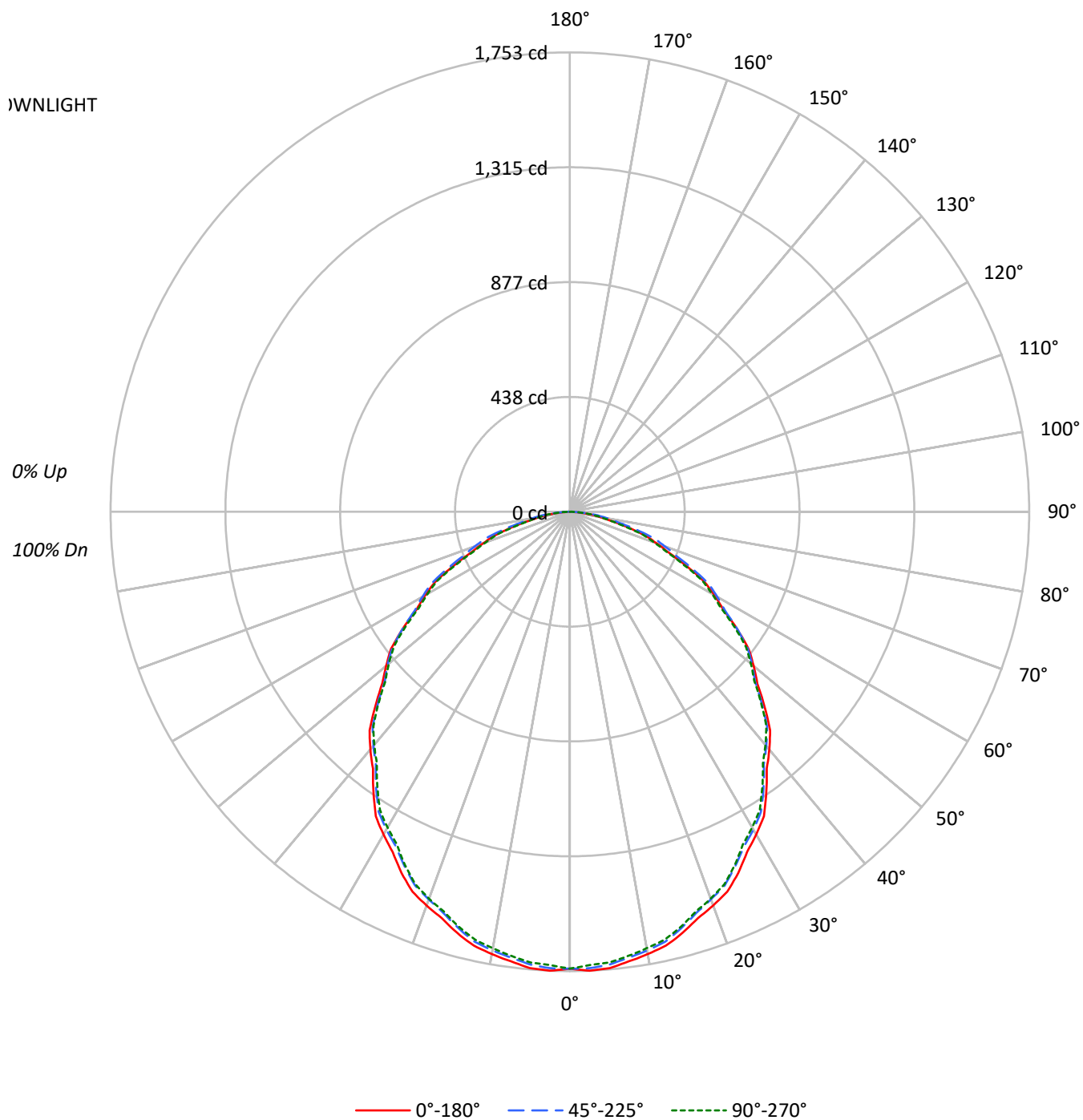
Lumens per Lamp: N/A
Luminaire Lumens: 4435.5 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 45.8
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	102	99	95	98	95	92		94	92	89		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44
9	58	44	36	31	56	44	36	31	43	35	31		42	35	30		41
10	54	41	33	28	53	40	33	28	39	33	28		39	32	28		38

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	3.7
10°-20°	463.5	10.4
20°-30°	687.5	15.5
30°-40°	804.4	18.1
40°-50°	800.9	18.1
50°-60°	691.6	15.6
60°-70°	497.8	11.2
70°-80°	261.0	5.9
80°-90°	64.7	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1315.1	29.6
0°-40°	2119.5	47.8
0°-60°	3611.9	81.4
0°-90°	4435.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4435.5	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	52
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	20.66	22.26	21.03	22.58	22.89	20.56	22.16	20.93	22.48	22.79
	3H	22.22	23.66	22.60	23.99	24.35	22.09	23.53	22.47	23.86	24.22
	4H	22.77	24.13	23.17	24.47	24.85	22.63	23.99	23.03	24.34	24.71
	6H	23.06	24.32	23.48	24.69	25.08	22.93	24.19	23.34	24.55	24.94
	8H	23.16	24.35	23.58	24.74	25.14	23.03	24.23	23.46	24.62	25.02
	12H	23.19	24.34	23.62	24.72	25.15	23.10	24.24	23.53	24.63	25.05
4H	2H	21.30	22.66	21.70	23.01	23.38	21.23	22.58	21.62	22.93	23.31
	3H	23.10	24.24	23.51	24.63	25.03	22.99	24.13	23.40	24.52	24.92
	4H	23.76	24.79	24.20	25.20	25.64	23.64	24.67	24.07	25.08	25.52
	6H	24.17	25.06	24.62	25.50	25.96	24.05	24.94	24.50	25.38	25.84
	8H	24.30	25.13	24.76	25.58	26.04	24.19	25.02	24.65	25.46	25.93
	12H	24.37	25.11	24.85	25.59	26.06	24.28	25.03	24.77	25.51	25.98
8H	4H	24.04	24.87	24.50	25.32	25.78	23.93	24.77	24.39	25.21	25.68
	6H	24.56	25.25	25.05	25.74	26.22	24.45	25.14	24.94	25.63	26.11
	8H	24.76	25.38	25.27	25.89	26.37	24.66	25.28	25.17	25.79	26.27
	12H	24.88	25.43	25.39	25.92	26.48	24.82	25.36	25.32	25.85	26.42
12H	4H	24.06	24.81	24.54	25.28	25.75	23.95	24.70	24.44	25.18	25.65
	6H	24.60	25.23	25.12	25.73	26.22	24.50	25.12	25.01	25.63	26.11
	8H	24.86	25.41	25.37	25.90	26.46	24.77	25.31	25.27	25.80	26.37