

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: P1036190

Luminaire Tested: SQ4R-BB-125D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-BB-125D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

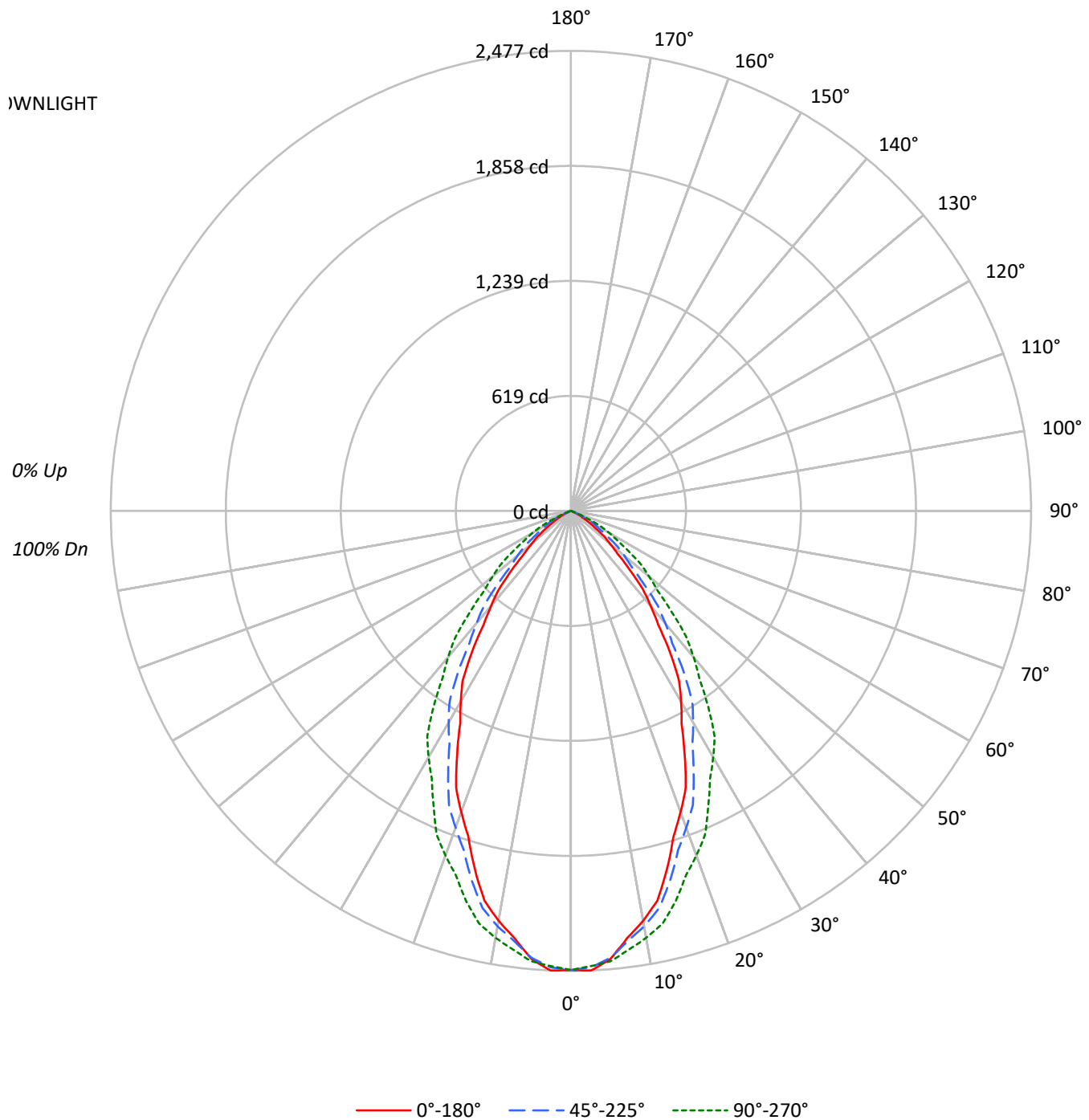
Lumens per Lamp: N/A
Luminaire Lumens: 2948.4 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	93	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	84	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	76	76	74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	69	69	67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	63	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	58	58	56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	53	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	49	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	45	45	44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22804	22804	22804
5°	22437	22382	22548
10°	20992	21274	21868
15°	19085	19691	20787
20°	16942	17821	19382
25°	14753	15920	17809
30°	12638	14025	16318
35°	10477	11906	14517
40°	8050	9521	12370
45°	5821	7209	9954
50°	3964	5370	7896
55°	2578	3885	6135
60°	1478	2738	4436
65°	391	1672	2244
70°	197	518	642
75°	86	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9954 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.6	7.7
10°-20°	576.8	19.6
20°-30°	722.1	24.5
30°-40°	667.0	22.6
40°-50°	448.2	15.2
50°-60°	231.5	7.9
60°-70°	72.5	2.5
70°-80°	4.6	0.2
80°-90°	0.1	0.0
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°	1524.5	51.7
0°-40°	2191.6	74.3
0°-60°	2871.3	97.4
0°-90°	2948.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2472	2472	2472	2472	2472	
5°	2423	2398	2417	2425	2435	225
15°	1998	1991	2062	2130	2176	557
25°	1449	1461	1564	1671	1749	664
35°	930	954	1057	1181	1289	576
45°	446	473	552	660	763	350
55°	160	187	242	310	381	150
65°	18	34	77	92	103	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2471.7	2471.7	2471.7	2471.7	2471.7
2.5°	2477.3	2454.0	2460.0	2460.0	2453.6
5°	2422.6	2398.1	2416.7	2425.1	2434.6
7.5°	2320.4	2301.1	2336.8	2363.3	2382.9
10°	2240.7	2224.5	2270.8	2307.1	2334.2
12.5°	2148.9	2136.2	2192.3	2242.4	2276.7
15°	1998.1	1991.2	2061.5	2130.5	2176.3
17.5°	1836.6	1836.3	1916.4	2002.5	2057.4
20°	1725.6	1729.1	1815.1	1910.0	1974.1
22.5°	1614.5	1622.7	1714.7	1813.6	1887.2
25°	1449.2	1460.8	1563.9	1671.2	1749.4
27.5°	1290.5	1307.6	1416.2	1527.2	1622.7
30°	1186.3	1206.1	1316.5	1433.5	1531.7
32.5°	1083.7	1107.5	1215.0	1339.0	1438.9
35°	930.2	953.7	1057.1	1181.4	1288.9
37.5°	771.8	794.6	895.6	1018.2	1134.4
40°	668.4	694.1	790.5	909.1	1027.1
42.5°	574.7	600.4	690.9	807.5	919.1
45°	446.1	472.9	552.5	660.0	762.9
47.5°	339.5	368.4	438.3	535.8	629.4
50°	276.2	305.4	374.1	459.9	550.1
52.5°	225.5	253.9	315.9	396.6	479.2
55°	160.3	187.1	241.5	310.2	381.4
57.5°	110.7	134.0	182.7	239.8	295.9
60°	80.1	102.4	148.4	194.6	240.4
62.5°	53.3	73.6	118.6	154.3	184.9
65°	17.9	34.3	76.6	92.3	102.8
67.5°	9.2	10.9	40.0	42.5	46.0
70°	7.3	7.3	19.2	20.3	23.8
72.5°	5.2	5.2	7.5	9.8	10.6
75°	2.4	2.4	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	10.79	12.02	11.16	12.34	12.65	15.38	16.61	15.74	16.92	17.24
	3H	10.67	11.75	11.05	12.08	12.45	15.35	16.43	15.73	16.76	17.13
	4H	10.59	11.60	11.00	11.95	12.33	15.27	16.27	15.67	16.62	17.01
	6H	10.51	11.42	10.92	11.80	12.19	15.18	16.10	15.60	16.47	16.87
	8H	10.46	11.33	10.89	11.72	12.12	15.14	16.00	15.57	16.39	16.80
	12H	10.41	11.24	10.85	11.62	12.05	15.09	15.91	15.52	16.30	16.73
4H	2H	11.16	12.16	11.56	12.51	12.90	15.31	16.31	15.72	16.67	17.05
	3H	11.05	11.85	11.46	12.26	12.66	15.29	16.10	15.70	16.51	16.91
	4H	10.95	11.67	11.39	12.09	12.54	15.19	15.91	15.63	16.33	16.78
	6H	10.86	11.48	11.33	11.93	12.40	15.10	15.72	15.57	16.17	16.64
	8H	10.80	11.38	11.27	11.82	12.30	15.04	15.61	15.51	16.06	16.54
	12H	10.75	11.25	11.24	11.74	12.21	14.99	15.49	15.48	15.98	16.45
8H	4H	10.81	11.38	11.28	11.83	12.30	15.04	15.62	15.51	16.06	16.54
	6H	10.70	11.17	11.21	11.66	12.15	14.93	15.40	15.44	15.89	16.38
	8H	10.63	11.05	11.16	11.57	12.06	14.86	15.28	15.39	15.80	16.29
	12H	10.58	10.95	11.10	11.45	12.02	14.81	15.18	15.33	15.68	16.25
12H	4H	10.76	11.26	11.24	11.74	12.22	14.99	15.49	15.48	15.98	16.45
	6H	10.63	11.05	11.16	11.57	12.06	14.86	15.28	15.39	15.80	16.29
	8H	10.58	10.95	11.10	11.45	12.02	14.81	15.18	15.33	15.68	16.25

END OF REPORT