

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: P1036390

Luminaire Tested: SQ4R-WB-125D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P519276)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-WB-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

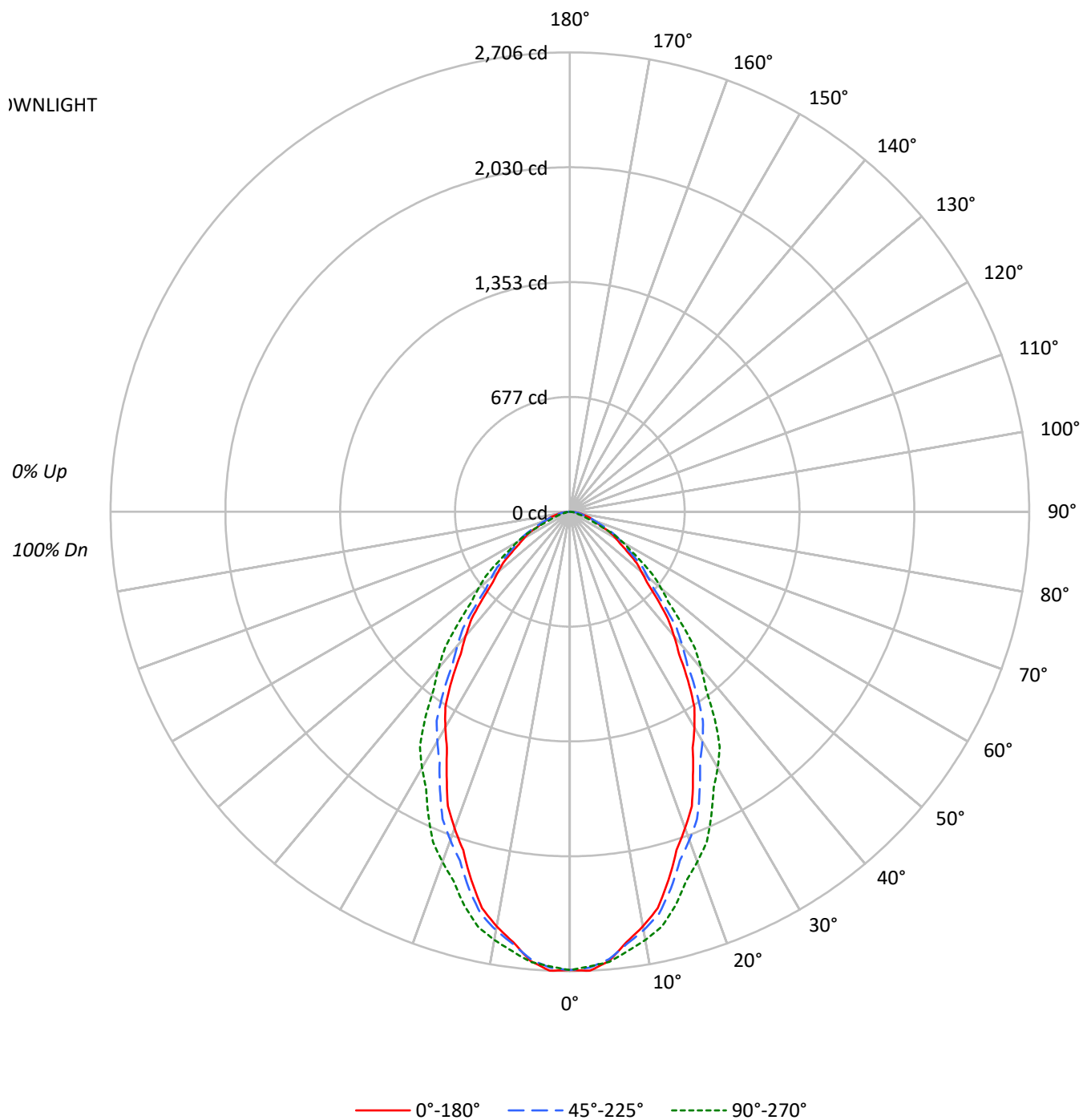
Lumens per Lamp: N/A
Luminaire Lumens: 3933.4 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94
2	103	97	91	87	101	95	90	86	92	87	84		88	85	82		85
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	56	52		61
7	73	61	53	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24904	24904	24904
5°	24595	24505	24649
10°	23236	23448	23990
15°	21449	21949	22933
20°	19480	20211	21547
25°	17472	18425	20076
30°	15622	16642	18548
35°	13660	14648	16743
40°	11496	12410	14494
45°	9488	10306	12102
50°	7920	8636	10080
55°	6725	7411	8324
60°	5750	6427	6645
65°	4578	5403	4290
70°	4057	4216	2619
75°	3754	3422	1608
80°	3459	3145	1381
85°	3123	2890	1143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12102 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.6	6.3
10°-20°	644.0	16.4
20°-30°	834.2	21.2
30°-40°	816.9	20.8
40°-50°	625.2	15.9
50°-60°	416.6	10.6
60°-70°	227.4	5.8
70°-80°	94.7	2.4
80°-90°	26.8	0.7
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°	1725.8	43.9
0°-40°	2542.6	64.6
0°-60°	3584.5	91.1
0°-90°	3933.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3933.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2699	2699	2699	2699	2699	
5°	2656	2629	2646	2652	2662	247
15°	2246	2238	2298	2360	2401	627
25°	1716	1721	1810	1889	1972	789
35°	1213	1219	1300	1388	1486	754
45°	727	741	790	850	928	567
55°	418	436	461	478	518	379
65°	210	227	248	216	196	218
75°	105	105	96	66	45	113
85°	30	30	27	18	11	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2699.3	2699.3	2699.3	2699.3	2699.3
2.5°	2706.0	2681.9	2688.1	2687.8	2680.2
5°	2655.6	2628.8	2645.9	2652.1	2661.5
7.5°	2557.0	2536.8	2568.2	2591.3	2610.0
10°	2480.2	2462.8	2502.8	2536.5	2560.7
12.5°	2391.3	2376.4	2426.0	2471.1	2503.0
15°	2245.6	2237.6	2297.9	2360.3	2400.9
17.5°	2090.1	2086.1	2155.3	2228.2	2279.9
20°	1984.0	1982.9	2058.5	2134.7	2194.6
22.5°	1877.0	1879.3	1959.0	2038.1	2106.7
25°	1716.3	1720.9	1809.9	1888.7	1972.1
27.5°	1567.8	1569.9	1661.7	1745.0	1834.0
30°	1466.4	1472.1	1562.1	1648.5	1741.0
32.5°	1365.0	1371.8	1460.0	1549.0	1643.4
35°	1212.8	1218.7	1300.5	1388.1	1486.5
37.5°	1055.9	1063.9	1136.6	1219.2	1316.3
40°	954.5	966.3	1030.4	1108.5	1203.4
42.5°	856.9	871.5	931.0	1004.9	1090.5
45°	727.2	741.1	789.9	849.7	927.5
47.5°	615.4	631.4	669.0	720.5	786.7
50°	551.8	567.1	601.7	639.8	702.3
52.5°	496.1	511.1	541.9	571.4	624.8
55°	418.1	435.5	460.7	478.3	517.5
57.5°	354.2	370.9	390.9	398.7	422.6
60°	311.6	330.1	348.3	347.2	360.1
62.5°	272.7	288.5	306.5	293.9	294.7
65°	209.7	227.1	247.5	216.4	196.5
67.5°	169.5	173.0	194.1	151.0	127.3
70°	150.4	150.4	156.3	116.9	97.1
72.5°	132.5	132.5	127.1	94.9	74.2
75°	105.3	105.3	96.0	66.0	45.1
77.5°	81.2	80.4	73.5	49.0	32.8
80°	65.1	65.1	59.2	38.9	26.0
82.5°	51.0	51.0	45.8	30.3	19.3
85°	29.5	29.5	27.3	17.7	10.8
87.5°	10.5	10.5	9.4	5.6	4.8
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	16.92	18.29	17.29	18.61	18.92	17.54	18.92	17.91	19.23	19.55
	3H	17.89	19.12	18.27	19.45	19.81	18.00	19.22	18.38	19.55	19.92
	4H	18.33	19.47	18.73	19.82	20.21	18.08	19.22	18.48	19.57	19.95
	6H	18.64	19.69	19.06	20.06	20.45	18.09	19.14	18.51	19.51	19.90
	8H	18.77	19.77	19.20	20.16	20.56	18.09	19.08	18.52	19.47	19.88
	12H	18.85	19.81	19.29	20.19	20.62	18.07	19.02	18.50	19.40	19.83
4H	2H	17.41	18.55	17.81	18.90	19.28	17.93	19.07	18.33	19.42	19.80
	3H	18.58	19.51	18.99	19.91	20.32	18.56	19.50	18.97	19.90	20.30
	4H	19.11	19.95	19.54	20.37	20.81	18.69	19.53	19.13	19.95	20.39
	6H	19.53	20.25	19.99	20.70	21.16	18.76	19.49	19.23	19.93	20.40
	8H	19.71	20.38	20.18	20.83	21.30	18.77	19.45	19.24	19.90	20.37
	12H	19.83	20.43	20.32	20.91	21.39	18.77	19.37	19.26	19.85	20.33
8H	4H	19.22	19.89	19.69	20.34	20.81	18.84	19.52	19.31	19.96	20.43
	6H	19.76	20.31	20.26	20.80	21.28	18.99	19.54	19.49	20.04	20.52
	8H	20.02	20.51	20.54	21.03	21.52	19.04	19.54	19.56	20.05	20.54
	12H	20.22	20.66	20.74	21.16	21.73	19.08	19.52	19.59	20.01	20.58
12H	4H	19.20	19.80	19.69	20.28	20.75	18.85	19.44	19.33	19.93	20.40
	6H	19.76	20.26	20.28	20.77	21.26	19.03	19.52	19.55	20.04	20.53
	8H	20.08	20.52	20.59	21.01	21.58	19.13	19.57	19.64	20.06	20.63