

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: P1036392

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036392
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

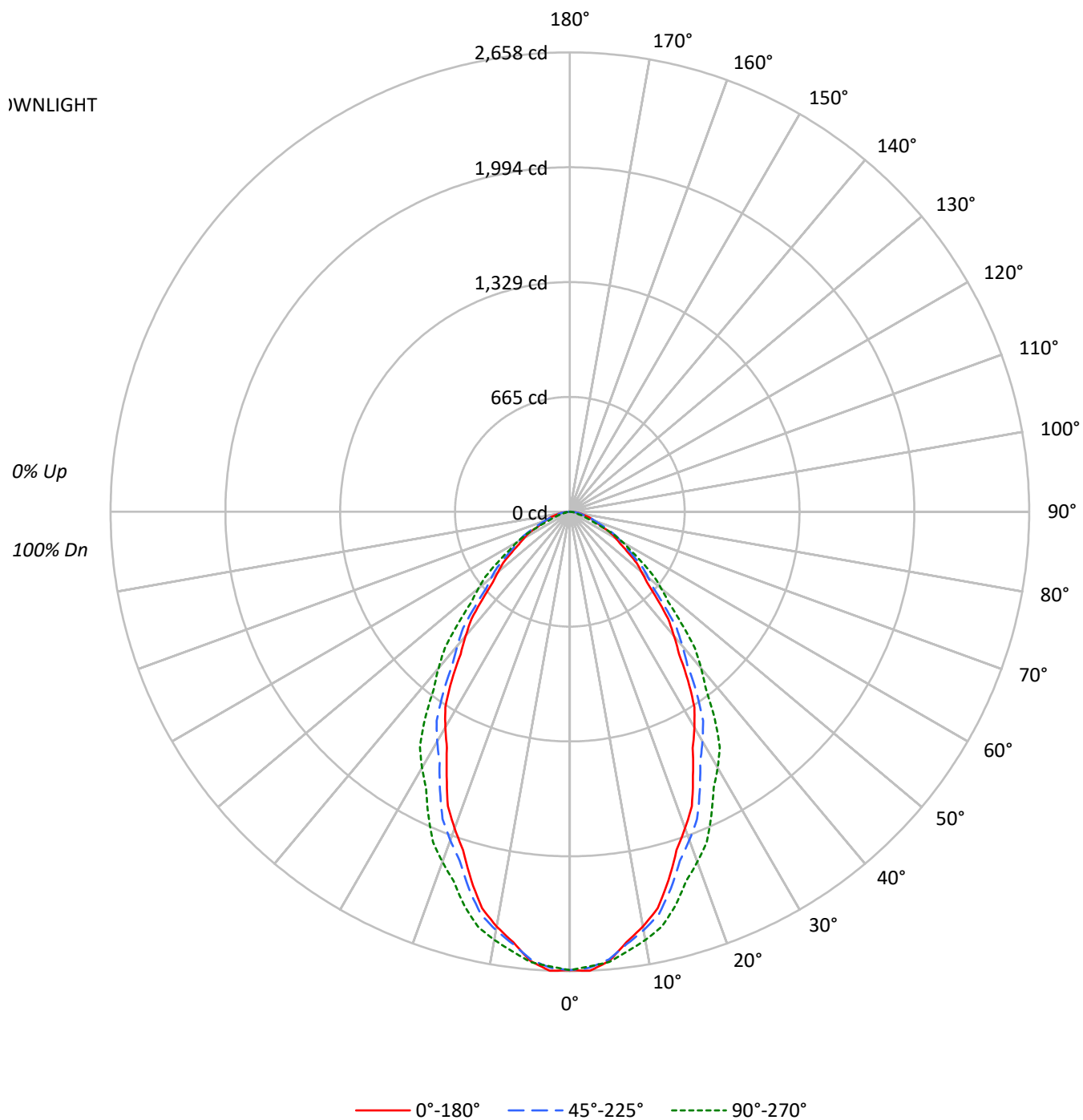
Lumens per Lamp: N/A
Luminaire Lumens: 3864.2 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1036392

CATALOG NUMBER: SQ4R-WB-125D-B50-1D-UNV

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°	24467	24467	24467
5°	24162	24074	24216
10°	22827	23035	23567
15°	21072	21563	22529
20°	19137	19856	21169
25°	17164	18101	19724
30°	15347	16350	18222
35°	13420	14390	16449
40°	11294	12192	14238
45°	9321	10125	11889
50°	7781	8484	9902
55°	6606	7280	8178
60°	5648	6314	6528
65°	4497	5307	4216
70°	3987	4143	2573
75°	3689	3362	1579
80°	3400	3092	1355
85°	3059	2837	1122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 11889 cd/sqm

TEST NUMBER: P1036392

CATALOG NUMBER: SQ4R-WB-125D-B50-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	6.3
10°-20°	632.7	16.4
20°-30°	819.5	21.2
30°-40°	802.5	20.8
40°-50°	614.2	15.9
50°-60°	409.3	10.6
60°-70°	223.4	5.8
70°-80°	93.1	2.4
80°-90°	26.3	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°	1695.4	43.9
0°-40°	2497.9	64.6
0°-60°	3521.5	91.1
0°-90°	3864.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3864.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2652	2652	2652	2652	2652	
5°	2609	2583	2599	2606	2615	243
15°	2206	2198	2258	2319	2359	616
25°	1686	1691	1778	1856	1938	775
35°	1192	1197	1278	1364	1460	741
45°	714	728	776	835	911	557
55°	411	428	453	470	508	372
65°	206	223	243	213	193	214
75°	104	104	94	65	44	111
85°	29	29	27	17	11	33
90°	0	0	0	0	0	

TEST NUMBER: P1036392

CATALOG NUMBER: SQ4R-WB-125D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2651.9	2651.9	2651.9	2651.9	2651.9
2.5°	2658.4	2634.7	2640.8	2640.5	2633.1
5°	2608.9	2582.6	2599.4	2605.5	2614.7
7.5°	2512.0	2492.2	2523.1	2545.7	2564.1
10°	2436.6	2419.5	2458.8	2491.9	2515.6
12.5°	2349.2	2334.7	2383.4	2427.7	2459.0
15°	2206.1	2198.2	2257.5	2318.8	2358.6
17.5°	2053.3	2049.4	2117.4	2189.0	2239.8
20°	1949.1	1948.0	2022.3	2097.1	2156.1
22.5°	1844.0	1846.3	1924.5	2002.3	2069.7
25°	1686.1	1690.6	1778.1	1855.5	1937.5
27.5°	1540.2	1542.3	1632.4	1714.3	1801.8
30°	1440.6	1446.2	1534.7	1619.5	1710.4
32.5°	1341.0	1347.7	1434.3	1521.8	1614.5
35°	1191.5	1197.3	1277.6	1363.7	1460.4
37.5°	1037.3	1045.2	1116.6	1197.7	1293.1
40°	937.7	949.4	1012.3	1089.0	1182.2
42.5°	841.9	856.2	914.6	987.2	1071.3
45°	714.4	728.1	776.0	834.7	911.2
47.5°	604.5	620.3	657.3	707.8	772.9
50°	542.1	557.1	591.1	628.5	689.9
52.5°	487.3	502.1	532.4	561.3	613.8
55°	410.7	427.8	452.6	469.9	508.4
57.5°	348.0	364.3	384.0	391.7	415.2
60°	306.1	324.3	342.2	341.1	353.8
62.5°	267.9	283.4	301.1	288.7	289.5
65°	206.0	223.2	243.1	212.6	193.1
67.5°	166.5	169.9	190.7	148.3	125.1
70°	147.8	147.8	153.6	114.8	95.4
72.5°	130.1	130.1	124.9	93.2	72.9
75°	103.5	103.5	94.3	64.8	44.3
77.5°	79.8	79.0	72.2	48.2	32.2
80°	64.0	64.0	58.2	38.2	25.5
82.5°	50.1	50.1	45.0	29.8	18.9
85°	28.9	28.9	26.8	17.4	10.6
87.5°	10.3	10.3	9.2	5.5	4.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036392

CATALOG NUMBER: SQ4R-WB-125D-B50-1D-UNV

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	16.86	18.23	17.22	18.55	18.86	17.48	18.86	17.85	19.17	19.48
	3H	17.83	19.06	18.21	19.38	19.75	17.94	19.16	18.32	19.49	19.86
	4H	18.27	19.41	18.67	19.76	20.14	18.02	19.16	18.42	19.51	19.89
	6H	18.58	19.63	18.99	20.00	20.39	18.03	19.08	18.44	19.45	19.84
	8H	18.71	19.70	19.14	20.10	20.50	18.02	19.02	18.45	19.41	19.81
	12H	18.79	19.74	19.22	20.13	20.56	18.01	18.96	18.44	19.34	19.77
4H	2H	17.35	18.49	17.75	18.84	19.22	17.86	19.01	18.27	19.36	19.74
	3H	18.51	19.45	18.93	19.85	20.26	18.50	19.43	18.91	19.84	20.24
	4H	19.05	19.89	19.48	20.30	20.75	18.63	19.47	19.07	19.89	20.33
	6H	19.47	20.19	19.93	20.64	21.10	18.70	19.43	19.16	19.87	20.34
	8H	19.65	20.32	20.11	20.77	21.24	18.71	19.39	19.18	19.83	20.30
	12H	19.77	20.37	20.26	20.85	21.33	18.71	19.31	19.20	19.79	20.26
8H	4H	19.16	19.83	19.62	20.28	20.75	18.78	19.45	19.25	19.90	20.37
	6H	19.69	20.25	20.19	20.74	21.22	18.93	19.48	19.43	19.98	20.46
	8H	19.96	20.45	20.48	20.97	21.46	18.98	19.48	19.50	19.99	20.48
	12H	20.16	20.60	20.67	21.09	21.66	19.02	19.45	19.53	19.95	20.52
12H	4H	19.14	19.74	19.62	20.22	20.69	18.78	19.38	19.27	19.86	20.34
	6H	19.70	20.20	20.22	20.71	21.20	18.96	19.46	19.48	19.98	20.47
	8H	20.02	20.46	20.53	20.95	21.52	19.07	19.51	19.58	20.00	20.57