

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: P1036359

Luminaire Tested: SQ4R-WB-050D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036359
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-050D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

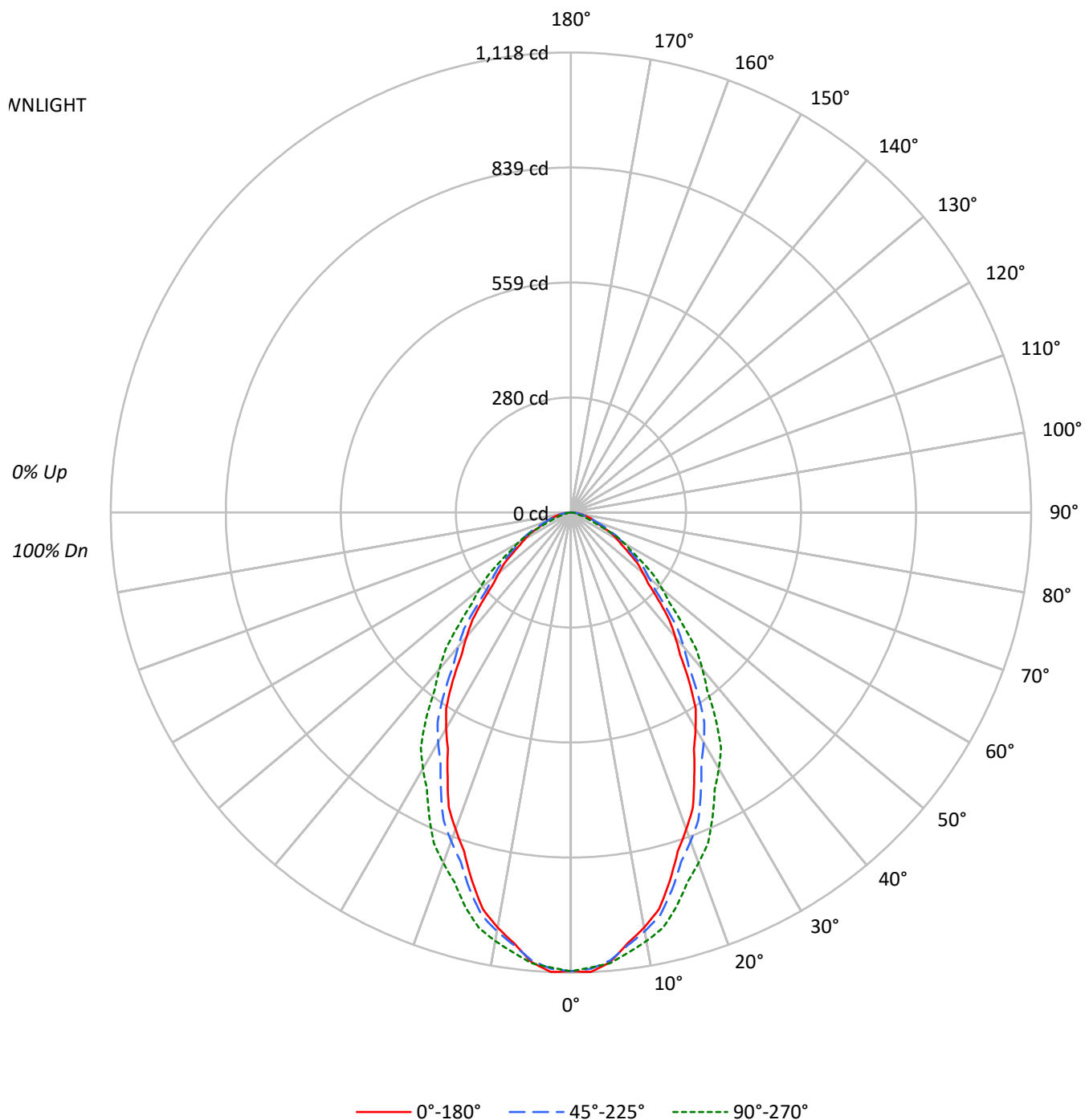
Lumens per Lamp: N/A
Luminaire Lumens: 1624.4 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
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°	10285	10285	10285
5°	10157	10121	10179
10°	9596	9683	9907
15°	8858	9065	9470
20°	8045	8347	8898
25°	7216	7609	8292
30°	6452	6874	7660
35°	5641	6048	6916
40°	4748	5126	5986
45°	3918	4258	4997
50°	3271	3567	4162
55°	2776	3059	3437
60°	2375	2653	2744
65°	1891	2231	1770
70°	1675	1743	1082
75°	1551	1412	663
80°	1429	1302	574
85°	1281	1196	466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	6.3
10°-20°	266.0	16.4
20°-30°	344.5	21.2
30°-40°	337.3	20.8
40°-50°	258.2	15.9
50°-60°	172.1	10.6
60°-70°	93.9	5.8
70°-80°	39.1	2.4
80°-90°	11.1	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°	712.7	43.9
0°-40°	1050.0	64.6
0°-60°	1480.3	91.1
0°-90°	1624.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1624.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1097	1086	1093	1095	1099	102
15°	927	924	949	975	992	259
25°	709	711	747	780	814	326
35°	501	503	537	573	614	311
45°	300	306	326	351	383	234
55°	173	180	190	198	214	157
65°	87	94	102	89	81	90
75°	44	44	40	27	19	46
85°	12	12	11	7	4	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1114.8	1114.8	1114.8	1114.8	1114.8
2.5°	1117.5	1107.5	1110.1	1110.0	1106.9
5°	1096.7	1085.6	1092.8	1095.3	1099.1
7.5°	1056.0	1047.7	1060.6	1070.2	1077.9
10°	1024.3	1017.1	1033.6	1047.6	1057.5
12.5°	987.6	981.4	1002.0	1020.5	1033.7
15°	927.4	924.1	949.0	974.7	991.5
17.5°	863.2	861.5	890.1	920.2	941.6
20°	819.4	818.9	850.1	881.6	906.3
22.5°	775.1	776.1	809.0	841.7	870.0
25°	708.8	710.7	747.4	780.0	814.5
27.5°	647.4	648.3	686.2	720.6	757.4
30°	605.6	607.9	645.2	680.8	719.0
32.5°	563.8	566.5	603.0	639.7	678.7
35°	500.8	503.3	537.0	573.2	614.0
37.5°	436.0	439.4	469.4	503.5	543.6
40°	394.2	399.1	425.6	457.8	497.0
42.5°	353.9	359.9	384.5	415.0	450.3
45°	300.3	306.1	326.3	350.9	383.0
47.5°	254.1	260.8	276.2	297.6	324.9
50°	227.9	234.2	248.5	264.2	290.0
52.5°	204.8	211.1	223.8	235.9	258.0
55°	172.6	179.9	190.2	197.6	213.7
57.5°	146.3	153.1	161.5	164.7	174.5
60°	128.7	136.3	143.8	143.4	148.7
62.5°	112.6	119.2	126.5	121.3	121.7
65°	86.6	93.7	102.2	89.3	81.1
67.5°	70.0	71.4	80.1	62.3	52.6
70°	62.1	62.1	64.6	48.2	40.1
72.5°	54.7	54.7	52.5	39.2	30.6
75°	43.5	43.5	39.6	27.2	18.6
77.5°	33.6	33.2	30.3	20.3	13.5
80°	26.9	26.9	24.5	16.0	10.8
82.5°	21.0	21.0	19.0	12.5	7.9
85°	12.1	12.1	11.3	7.3	4.4
87.5°	4.3	4.3	3.9	2.3	2.0
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	13.85	15.22	14.21	15.53	15.85	14.47	15.85	14.84	16.16	16.47
	3H	14.82	16.04	15.20	16.37	16.74	14.93	16.15	15.31	16.48	16.85
	4H	15.26	16.40	15.66	16.75	17.13	15.01	16.15	15.41	16.50	16.88
	6H	15.57	16.62	15.98	16.99	17.38	15.02	16.07	15.43	16.44	16.83
	8H	15.70	16.69	16.13	17.08	17.49	15.01	16.01	15.44	16.40	16.80
	12H	15.78	16.73	16.21	17.11	17.54	15.00	15.95	15.43	16.33	16.76
4H	2H	14.34	15.48	14.74	15.83	16.21	14.85	16.00	15.26	16.35	16.73
	3H	15.50	16.44	15.91	16.84	17.24	15.49	16.42	15.90	16.83	17.23
	4H	16.04	16.87	16.47	17.29	17.73	15.62	16.46	16.05	16.88	17.32
	6H	16.46	17.18	16.92	17.63	18.09	15.69	16.42	16.15	16.86	17.33
	8H	16.63	17.31	17.10	17.76	18.23	15.70	16.38	16.17	16.82	17.29
	12H	16.76	17.36	17.24	17.84	18.31	15.70	16.30	16.18	16.78	17.25
8H	4H	16.14	16.82	16.61	17.27	17.74	15.77	16.44	16.23	16.89	17.36
	6H	16.68	17.24	17.18	17.73	18.21	15.91	16.47	16.42	16.96	17.44
	8H	16.94	17.44	17.46	17.95	18.45	15.97	16.46	16.49	16.98	17.47
	12H	17.15	17.59	17.66	18.08	18.65	16.00	16.44	16.52	16.94	17.51
12H	4H	16.13	16.73	16.61	17.21	17.68	15.77	16.37	16.26	16.85	17.33
	6H	16.69	17.18	17.21	17.70	18.19	15.95	16.45	16.47	16.96	17.46
	8H	17.00	17.44	17.52	17.94	18.51	16.06	16.50	16.57	16.99	17.56

END OF REPORT