

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: P1036358

Luminaire Tested: SQ4R-WB-050D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036358
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_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

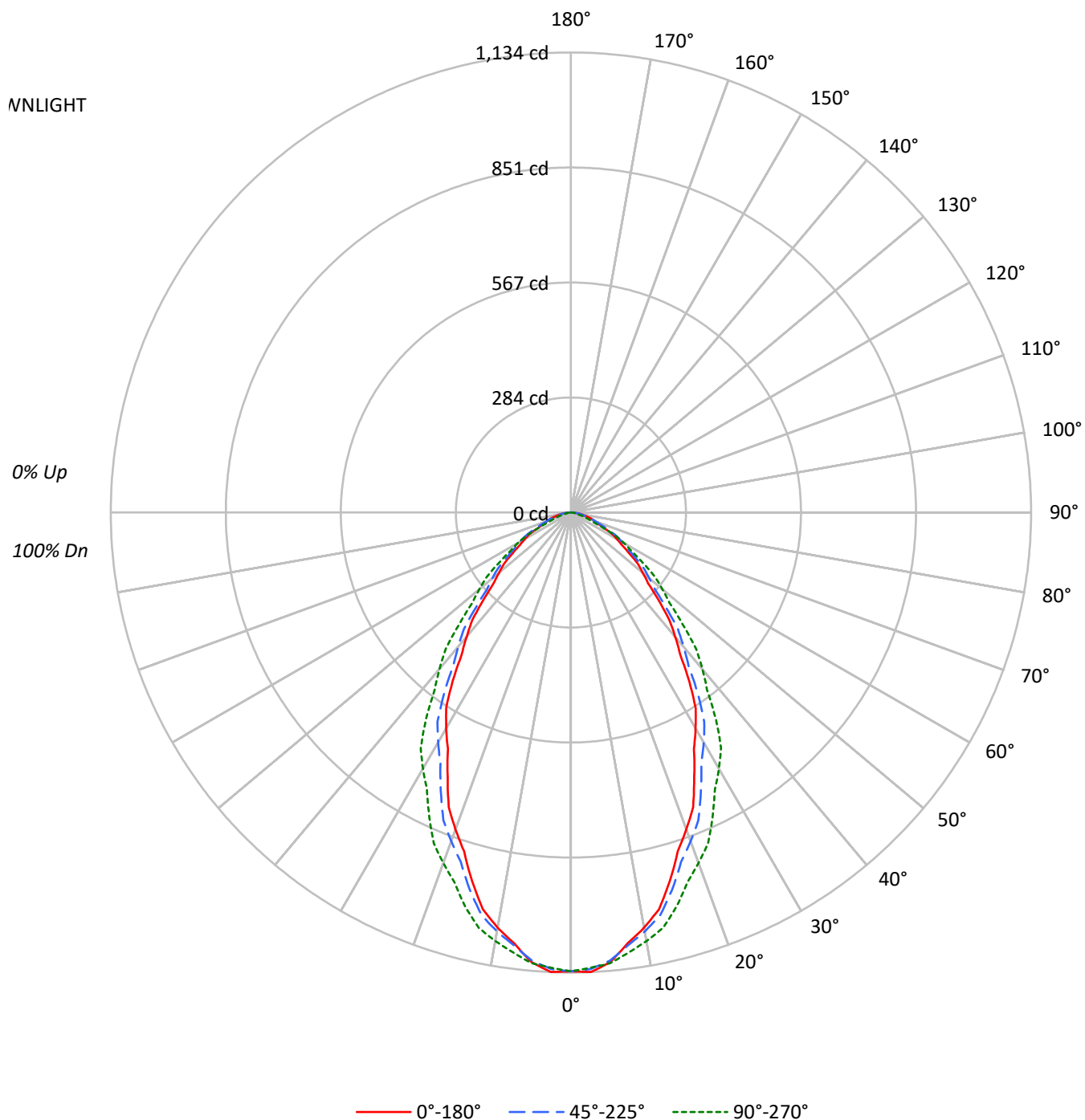
Lumens per Lamp: N/A
Luminaire Lumens: 1648.1 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	10435	10435	10435
5°	10304	10268	10327
10°	9736	9824	10051
15°	8987	9196	9608
20°	8162	8468	9028
25°	7320	7719	8412
30°	6546	6974	7771
35°	5723	6137	7016
40°	4816	5201	6073
45°	3976	4319	5070
50°	3319	3618	4224
55°	2817	3104	3487
60°	2410	2692	2784
65°	1919	2262	1797
70°	1699	1767	1098
75°	1576	1433	674
80°	1450	1318	579
85°	1302	1207	476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	6.3
10°-20°	269.8	16.4
20°-30°	349.5	21.2
30°-40°	342.3	20.8
40°-50°	262.0	15.9
50°-60°	174.6	10.6
60°-70°	95.2	5.8
70°-80°	39.7	2.4
80°-90°	11.2	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°	723.1	43.9
0°-40°	1065.3	64.6
0°-60°	1501.9	91.1
0°-90°	1648.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1648.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1131	1131	1131	1131	1131	
5°	1113	1101	1109	1111	1115	104
15°	941	938	963	989	1006	263
25°	719	721	758	791	826	331
35°	508	511	545	582	623	316
45°	305	311	331	356	389	238
55°	175	182	193	200	217	159
65°	88	95	104	91	82	91
75°	44	44	40	28	19	47
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°	1131.0	1131.0	1131.0	1131.0	1131.0
2.5°	1133.8	1123.7	1126.2	1126.1	1123.0
5°	1112.6	1101.4	1108.7	1111.3	1115.1
7.5°	1071.3	1062.9	1076.0	1085.7	1093.6
10°	1039.2	1031.9	1048.6	1062.8	1072.9
12.5°	1001.9	995.7	1016.5	1035.4	1048.7
15°	940.9	937.5	962.8	988.9	1005.9
17.5°	875.8	874.1	903.1	933.6	955.3
20°	831.3	830.8	862.5	894.4	919.5
22.5°	786.4	787.4	820.8	853.9	882.7
25°	719.1	721.1	758.3	791.4	826.3
27.5°	656.8	657.7	696.2	731.1	768.4
30°	614.4	616.7	654.6	690.7	729.4
32.5°	572.0	574.7	611.8	649.0	688.6
35°	508.1	510.6	544.9	581.6	622.9
37.5°	442.4	445.8	476.3	510.8	551.5
40°	399.9	404.9	431.8	464.4	504.2
42.5°	359.1	365.2	390.1	421.1	456.9
45°	304.7	310.6	331.0	356.0	388.6
47.5°	257.8	264.6	280.3	301.9	329.6
50°	231.2	237.6	252.1	268.1	294.3
52.5°	207.8	214.1	227.1	239.4	261.8
55°	175.1	182.5	193.0	200.4	216.8
57.5°	148.4	155.4	163.8	167.1	177.0
60°	130.6	138.3	145.9	145.4	150.9
62.5°	114.3	120.9	128.4	123.1	123.5
65°	87.9	95.1	103.6	90.6	82.3
67.5°	71.0	72.5	81.3	63.2	53.4
70°	63.0	63.0	65.5	48.9	40.7
72.5°	55.5	55.5	53.2	39.8	31.1
75°	44.2	44.2	40.2	27.6	18.9
77.5°	34.1	33.7	30.8	20.6	13.7
80°	27.3	27.3	24.8	16.3	10.9
82.5°	21.3	21.3	19.3	12.7	8.0
85°	12.3	12.3	11.4	7.4	4.5
87.5°	4.4	4.4	4.0	2.4	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	13.90	15.27	14.26	15.59	15.90	14.52	15.90	14.89	16.21	16.52
	3H	14.87	16.09	15.25	16.42	16.79	14.98	16.20	15.36	16.53	16.90
	4H	15.31	16.45	15.71	16.80	17.18	15.06	16.20	15.46	16.55	16.93
	6H	15.62	16.67	16.03	17.04	17.43	15.07	16.12	15.48	16.49	16.88
	8H	15.75	16.75	16.18	17.14	17.54	15.06	16.06	15.49	16.45	16.85
	12H	15.83	16.78	16.26	17.17	17.60	15.05	16.00	15.48	16.38	16.81
4H	2H	14.39	15.53	14.79	15.88	16.26	14.90	16.04	15.31	16.39	16.78
	3H	15.55	16.49	15.96	16.89	17.29	15.54	16.47	15.95	16.88	17.28
	4H	16.09	16.93	16.52	17.34	17.79	15.67	16.51	16.10	16.93	17.37
	6H	16.51	17.23	16.97	17.68	18.14	15.74	16.47	16.20	16.91	17.38
	8H	16.69	17.36	17.15	17.81	18.28	15.75	16.43	16.22	16.87	17.34
	12H	16.81	17.41	17.29	17.89	18.36	15.75	16.35	16.23	16.83	17.30
8H	4H	16.20	16.87	16.66	17.32	17.79	15.82	16.49	16.28	16.94	17.41
	6H	16.73	17.29	17.23	17.78	18.26	15.96	16.52	16.47	17.01	17.49
	8H	17.00	17.49	17.52	18.01	18.50	16.02	16.51	16.54	17.03	17.52
	12H	17.20	17.64	17.71	18.13	18.70	16.05	16.49	16.57	16.99	17.56
12H	4H	16.18	16.78	16.66	17.26	17.73	15.82	16.42	16.31	16.90	17.38
	6H	16.74	17.24	17.26	17.75	18.24	16.00	16.50	16.52	17.01	17.51
	8H	17.06	17.49	17.57	17.99	18.56	16.11	16.55	16.62	17.04	17.61

END OF REPORT