

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: P1036165

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036165
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-050D-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

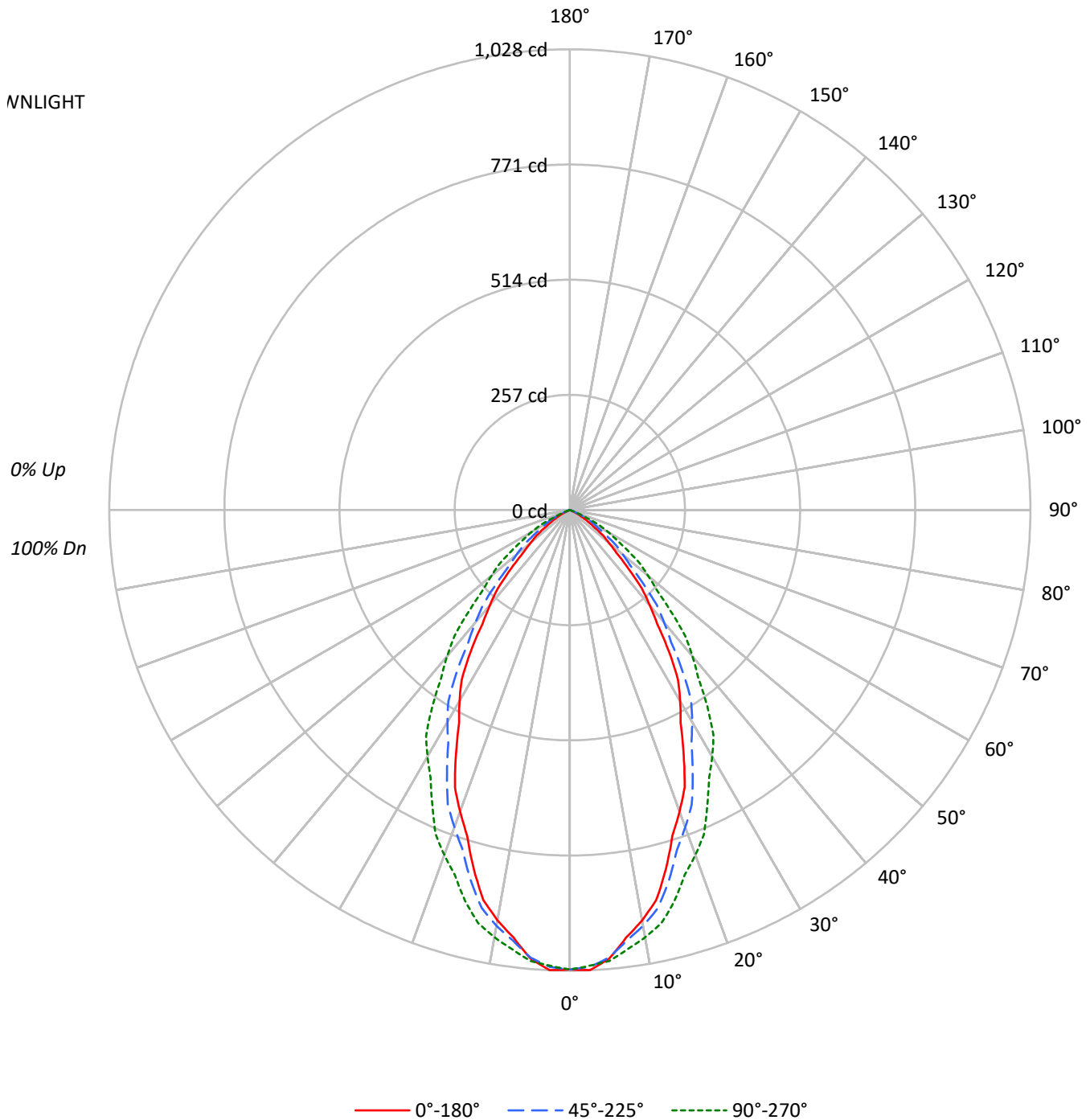
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1223.2 lumens
Efficiency: N/A
Efficacy: 72.8 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): 16.8
Input Voltage (V): NR
Input Current (A_{in}): 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		0	
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	100		
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91		
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82		
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74		
4	93	84	77	72	91	82	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51		
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44		
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9461	9461	9461
5°	9308	9285	9354
10°	8709	8826	9072
15°	7917	8169	8624
20°	7028	7393	8041
25°	6119	6605	7388
30°	5243	5818	6769
35°	4346	4939	6022
40°	3340	3949	5132
45°	2415	2991	4130
50°	1645	2228	3275
55°	1070	1612	2546
60°	614	1137	1842
65°	162	694	932
70°	84	213	267
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4130 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	7.7
10°-20°	239.3	19.6
20°-30°	299.6	24.5
30°-40°	276.7	22.6
40°-50°	185.9	15.2
50°-60°	96.0	7.9
60°-70°	30.1	2.5
70°-80°	1.9	0.2
80°-90°	0.0	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°	632.4	51.7
0°-40°	909.2	74.3
0°-60°	1191.1	97.4
0°-90°	1223.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1025	1025	1025	1025	1025	
5°	1005	995	1002	1006	1010	93
15°	829	826	855	884	903	231
25°	601	606	649	693	726	276
35°	386	396	438	490	535	239
45°	185	196	229	274	316	145
55°	66	78	100	129	158	62
65°	7	14	32	38	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.4	1025.4	1025.4	1025.4	1025.4
2.5°	1027.8	1018.0	1020.5	1020.5	1017.8
5°	1005.0	994.8	1002.5	1006.0	1010.0
7.5°	962.6	954.6	969.5	980.4	988.5
10°	929.6	922.8	942.1	957.1	968.3
12.5°	891.4	886.2	909.4	930.3	944.5
15°	828.9	826.0	855.2	883.9	902.9
17.5°	761.9	761.8	795.0	830.8	853.5
20°	715.8	717.3	753.0	792.4	819.0
22.5°	669.7	673.1	711.3	752.4	782.9
25°	601.1	606.0	648.8	693.3	725.7
27.5°	535.3	542.5	587.4	633.5	673.1
30°	492.1	500.4	546.1	594.7	635.4
32.5°	449.5	459.5	504.0	555.5	596.9
35°	385.9	395.6	438.5	490.2	534.7
37.5°	320.2	329.6	371.5	422.3	470.6
40°	277.3	287.9	327.9	377.2	426.1
42.5°	238.5	249.1	286.6	335.0	381.2
45°	185.1	196.2	229.2	273.8	316.5
47.5°	140.9	152.9	181.8	222.3	261.1
50°	114.6	126.7	155.2	190.8	228.2
52.5°	93.5	105.3	131.1	164.5	198.8
55°	66.5	77.6	100.2	128.7	158.3
57.5°	46.0	55.6	75.9	99.5	122.7
60°	33.3	42.5	61.6	80.7	99.8
62.5°	22.1	30.6	49.1	64.0	76.7
65°	7.4	14.3	31.8	38.3	42.7
67.5°	3.8	4.5	16.6	17.7	19.1
70°	3.1	3.1	7.9	8.4	9.9
72.5°	2.1	2.1	3.2	4.1	4.4
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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	7.74	8.97	8.11	9.28	9.60	12.32	13.55	12.69	13.86	14.18
	3H	7.62	8.70	8.00	9.03	9.40	12.30	13.38	12.68	13.71	14.07
	4H	7.54	8.54	7.94	8.89	9.28	12.21	13.22	12.62	13.57	13.95
	6H	7.45	8.37	7.87	8.74	9.14	12.13	13.04	12.54	13.42	13.81
	8H	7.41	8.27	7.84	8.66	9.07	12.08	12.94	12.51	13.34	13.74
	12H	7.36	8.19	7.79	8.57	9.00	12.03	12.86	12.46	13.24	13.67
4H	2H	8.10	9.11	8.51	9.46	9.84	12.25	13.26	12.66	13.61	13.99
	3H	7.99	8.80	8.41	9.21	9.61	12.23	13.04	12.65	13.45	13.85
	4H	7.90	8.62	8.33	9.04	9.48	12.14	12.85	12.57	13.28	13.72
	6H	7.81	8.43	8.28	8.87	9.34	12.05	12.66	12.51	13.11	13.58
	8H	7.75	8.32	8.22	8.77	9.24	11.98	12.56	12.46	13.01	13.48
	12H	7.69	8.20	8.18	8.68	9.16	11.93	12.43	12.42	12.92	13.39
8H	4H	7.76	8.33	8.23	8.78	9.25	11.99	12.56	12.46	13.01	13.48
	6H	7.65	8.11	8.15	8.61	9.09	11.87	12.34	12.38	12.84	13.32
	8H	7.58	8.00	8.10	8.51	9.01	11.81	12.22	12.33	12.74	13.24
	12H	7.53	7.90	8.05	8.39	8.97	11.75	12.12	12.27	12.62	13.19
12H	4H	7.70	8.21	8.19	8.69	9.17	11.93	12.44	12.42	12.92	13.40
	6H	7.58	8.00	8.10	8.51	9.01	11.81	12.22	12.33	12.74	13.24
	8H	7.53	7.90	8.05	8.39	8.97	11.75	12.12	12.27	12.62	13.19