

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: P1036294

Luminaire Tested: SQ4R-PR1-050D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

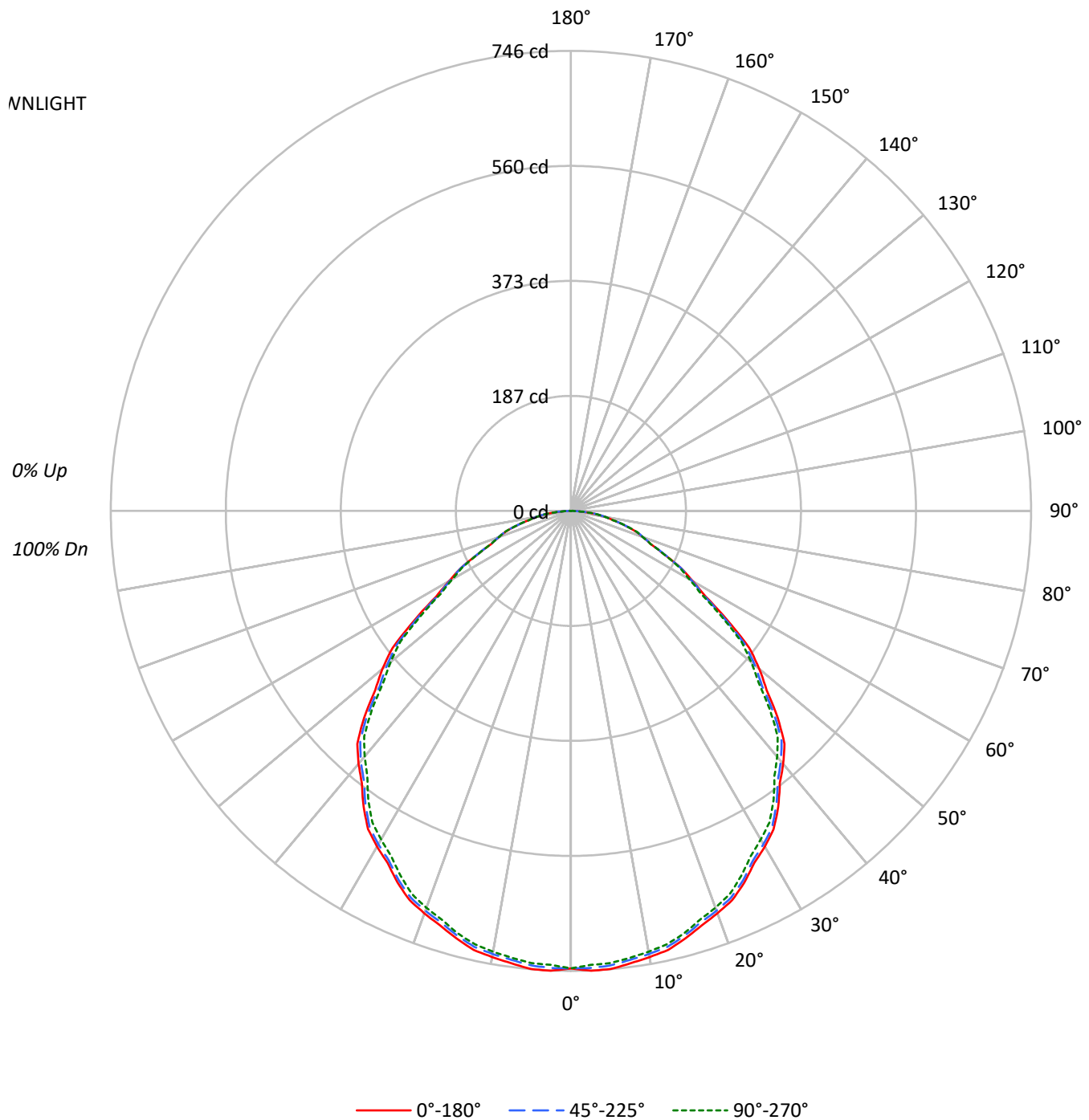
Lumens per Lamp: N/A
Luminaire Lumens: 1854.4 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	64	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	56	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	49	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	43	43	41
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6844	6844	6844
5°	6906	6853	6817
10°	6883	6835	6800
15°	6854	6810	6774
20°	6819	6775	6725
25°	6771	6726	6648
30°	6697	6650	6555
35°	6600	6542	6448
40°	6448	6378	6264
45°	6186	6078	5952
50°	5723	5585	5474
55°	4995	4884	4781
60°	4209	4174	4091
65°	3639	3655	3626
70°	3342	3361	3361
75°	3212	3212	3233
80°	3023	3055	3023
85°	2435	2699	2699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6186 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	3.8
10°-20°	200.7	10.8
20°-30°	302.7	16.3
30°-40°	360.7	19.5
40°-50°	355.6	19.2
50°-60°	271.8	14.7
60°-70°	168.2	9.1
70°-80°	95.5	5.2
80°-90°	29.0	1.6
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°	573.6	30.9
0°-40°	934.3	50.4
0°-60°	1561.6	84.2
0°-90°	1854.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1854.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	746	737	740	737	736	71
15°	718	710	713	710	709	202
25°	665	657	661	654	653	306
35°	586	579	581	573	572	366
45°	474	468	466	457	456	363
55°	310	306	304	298	297	278
65°	167	166	167	166	166	169
75°	90	90	90	91	91	95
85°	23	24	26	26	26	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.8	741.8	741.8	741.8	741.8
2.5°	746.4	739.9	741.8	740.2	736.7
5°	745.7	737.4	739.9	737.3	736.1
7.5°	739.9	731.9	734.3	731.7	731.0
10°	734.7	727.3	729.6	727.1	725.8
12.5°	729.1	721.2	724.0	720.9	719.7
15°	717.6	710.0	713.0	710.4	709.2
17.5°	704.8	696.7	699.8	696.8	695.2
20°	694.5	687.1	690.0	685.6	684.9
22.5°	683.2	675.8	678.7	672.9	672.7
25°	665.1	656.9	660.7	653.7	653.0
27.5°	643.5	636.1	639.0	631.9	631.2
30°	628.6	621.2	624.2	616.5	615.3
32.5°	611.8	604.9	607.4	599.7	598.9
35°	586.0	579.0	580.8	573.1	572.5
37.5°	556.4	550.1	551.1	542.6	542.1
40°	535.4	529.2	529.6	520.7	520.1
42.5°	512.5	506.2	505.6	496.7	496.0
45°	474.1	467.9	465.8	457.4	456.2
47.5°	430.4	424.1	420.3	413.4	412.6
50°	398.7	392.4	389.1	383.3	381.4
52.5°	364.4	358.2	355.4	350.1	348.3
55°	310.5	305.5	303.6	298.4	297.2
57.5°	259.2	256.0	255.3	250.3	249.8
60°	228.1	226.2	226.2	221.7	221.7
62.5°	201.6	200.1	201.1	198.2	197.7
65°	166.7	165.6	167.4	166.1	166.1
67.5°	139.3	139.3	140.4	139.8	139.8
70°	123.9	123.9	124.6	124.6	124.6
72.5°	110.1	109.7	111.4	111.3	110.8
75°	90.1	90.1	90.1	90.7	90.7
77.5°	70.2	70.3	70.8	70.8	70.2
80°	56.9	57.5	57.5	56.9	56.9
82.5°	43.6	44.1	44.1	44.0	43.6
85°	23.0	24.3	25.5	25.5	25.5
87.5°	6.7	8.6	10.3	10.3	9.7
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	16.79	18.35	17.15	18.66	18.98	16.61	18.18	16.98	18.49	18.80
	3H	18.12	19.52	18.50	19.85	20.21	18.02	19.42	18.39	19.75	20.11
	4H	18.72	20.04	19.12	20.39	20.77	18.65	19.97	19.05	20.31	20.69
	6H	19.17	20.39	19.58	20.75	21.15	19.11	20.33	19.52	20.69	21.08
	8H	19.35	20.51	19.78	20.90	21.30	19.29	20.45	19.72	20.84	21.24
	12H	19.46	20.57	19.89	20.96	21.39	19.42	20.53	19.85	20.91	21.34
4H	2H	17.26	18.58	17.66	18.93	19.30	17.12	18.44	17.52	18.78	19.16
	3H	18.86	19.96	19.27	20.35	20.76	18.79	19.88	19.20	20.28	20.68
	4H	19.60	20.58	20.03	21.00	21.44	19.55	20.54	19.98	20.95	21.39
	6H	20.19	21.05	20.64	21.49	21.95	20.15	21.01	20.60	21.45	21.91
	8H	20.43	21.23	20.89	21.68	22.14	20.39	21.20	20.85	21.64	22.11
	12H	20.59	21.31	21.07	21.79	22.26	20.57	21.29	21.05	21.77	22.24
8H	4H	19.87	20.68	20.33	21.12	21.59	19.83	20.64	20.29	21.08	21.55
	6H	20.60	21.27	21.09	21.76	22.24	20.56	21.23	21.06	21.72	22.20
	8H	20.93	21.54	21.44	22.04	22.53	20.90	21.50	21.41	22.01	22.50
	12H	21.17	21.70	21.67	22.19	22.76	21.16	21.69	21.67	22.18	22.75
12H	4H	19.90	20.62	20.38	21.10	21.57	19.86	20.58	20.34	21.06	21.53
	6H	20.66	21.27	21.17	21.77	22.26	20.63	21.23	21.14	21.74	22.23
	8H	21.06	21.59	21.57	22.09	22.65	21.03	21.56	21.54	22.05	22.62