

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: P1036330

Luminaire Tested: SQ4R-PW1-050D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564826)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

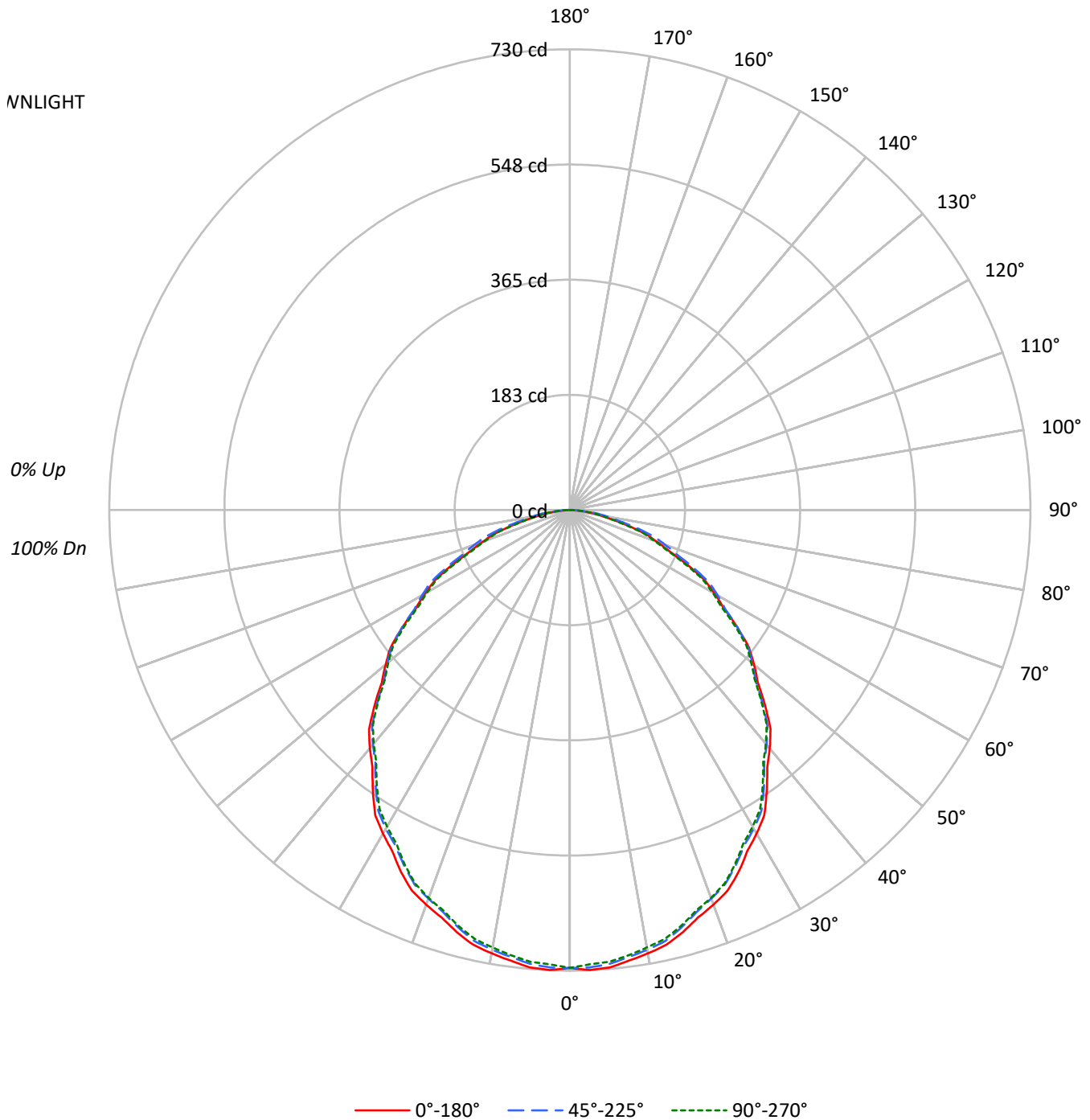
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1846.1 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	87	87	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	73	73	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	63	63	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	54	54	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	47	47	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	42	42	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	37	37	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	33	33	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	30	30	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6694	6694	6694
5°	6738	6685	6655
10°	6684	6630	6594
15°	6614	6539	6515
20°	6534	6433	6421
25°	6443	6326	6305
30°	6307	6212	6171
35°	6127	6040	6004
40°	5936	5844	5821
45°	5705	5630	5605
50°	5469	5423	5385
55°	5213	5213	5131
60°	4895	4991	4814
65°	4480	4702	4368
70°	3947	4330	3844
75°	3376	3871	3283
80°	2614	3257	2651
85°	1694	2498	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5705 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.7
10°-20°	192.9	10.4
20°-30°	286.1	15.5
30°-40°	334.8	18.1
40°-50°	333.3	18.1
50°-60°	287.8	15.6
60°-70°	207.2	11.2
70°-80°	108.6	5.9
80°-90°	26.9	1.5
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°	547.4	29.7
0°-40°	882.2	47.8
0°-60°	1503.3	81.4
0°-90°	1846.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	728	719	722	720	719	69
15°	692	684	685	683	682	195
25°	633	622	621	618	619	291
35°	544	537	536	531	533	340
45°	437	434	432	430	430	337
55°	324	324	324	320	319	289
65°	205	211	215	207	200	203
75°	95	103	109	101	92	101
85°	16	21	24	22	21	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	725.5	725.5	725.5	725.5	725.5
2.5°	729.7	723.7	725.5	724.0	720.5
5°	727.5	719.3	721.8	719.8	718.6
7.5°	720.1	712.6	714.3	712.3	711.6
10°	713.4	706.0	707.7	705.2	703.8
12.5°	705.8	697.7	699.6	696.9	696.2
15°	692.4	683.6	684.6	683.3	682.1
17.5°	676.7	667.9	668.0	666.0	665.6
20°	665.5	656.2	655.2	652.7	654.0
22.5°	653.2	643.4	642.5	638.9	640.6
25°	632.9	622.2	621.4	617.6	619.4
27.5°	609.3	598.9	598.9	593.6	595.5
30°	592.0	581.9	583.1	576.7	579.2
32.5°	573.6	564.6	565.1	558.8	561.4
35°	544.0	536.6	536.3	531.2	533.1
37.5°	513.8	507.2	506.1	503.2	503.7
40°	492.9	487.2	485.2	483.3	483.3
42.5°	470.9	465.8	463.7	462.2	461.9
45°	437.2	433.6	431.5	430.2	429.6
47.5°	404.0	400.5	398.8	397.9	397.2
50°	381.0	378.5	377.8	375.9	375.2
52.5°	358.1	356.5	355.8	353.4	352.7
55°	324.1	323.6	324.1	319.7	319.0
57.5°	288.8	289.8	291.9	285.9	284.3
60°	265.3	267.8	270.5	263.4	260.9
62.5°	241.2	245.3	249.0	240.8	237.2
65°	205.2	211.4	215.4	207.0	200.1
67.5°	170.5	178.2	183.0	173.8	166.1
70°	146.3	155.1	160.5	151.3	142.5
72.5°	125.4	135.2	139.5	130.8	122.1
75°	94.7	103.4	108.6	101.4	92.1
77.5°	67.2	75.4	79.8	73.5	65.7
80°	49.2	57.9	61.3	56.1	49.9
82.5°	34.9	42.3	44.5	41.3	37.0
85°	16.0	20.9	23.6	22.4	21.0
87.5°	4.1	7.6	9.7	9.7	10.3
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	17.62	19.22	17.98	19.53	19.84	17.52	19.12	17.88	19.43	19.75
	3H	19.17	20.62	19.55	20.94	21.30	19.05	20.49	19.42	20.82	21.18
	4H	19.72	21.08	20.12	21.43	21.81	19.59	20.94	19.99	21.29	21.67
	6H	20.02	21.28	20.43	21.64	22.03	19.88	21.14	20.30	21.51	21.90
	8H	20.11	21.31	20.53	21.70	22.10	19.99	21.19	20.41	21.58	21.97
	12H	20.15	21.30	20.58	21.68	22.11	20.05	21.20	20.48	21.58	22.01
4H	2H	18.26	19.61	18.66	19.96	20.34	18.18	19.54	18.58	19.89	20.26
	3H	20.06	21.19	20.47	21.59	21.99	19.95	21.08	20.36	21.48	21.88
	4H	20.72	21.74	21.15	22.16	22.59	20.60	21.62	21.03	22.03	22.47
	6H	21.12	22.01	21.58	22.46	22.91	21.00	21.89	21.46	22.33	22.79
	8H	21.25	22.09	21.71	22.53	23.00	21.14	21.98	21.60	22.42	22.89
	12H	21.32	22.07	21.80	22.54	23.01	21.24	21.99	21.72	22.46	22.93
8H	4H	20.99	21.83	21.46	22.27	22.74	20.89	21.72	21.35	22.16	22.63
	6H	21.51	22.21	22.01	22.69	23.17	21.40	22.10	21.90	22.58	23.06
	8H	21.72	22.34	22.23	22.84	23.33	21.61	22.23	22.13	22.74	23.23
	12H	21.84	22.38	22.34	22.87	23.44	21.77	22.32	22.28	22.81	23.37
12H	4H	21.01	21.76	21.49	22.24	22.71	20.91	21.66	21.39	22.13	22.60
	6H	21.56	22.18	22.07	22.69	23.17	21.45	22.07	21.96	22.58	23.07
	8H	21.82	22.36	22.32	22.85	23.42	21.72	22.27	22.23	22.76	23.32