

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: P1036202

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P520092)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

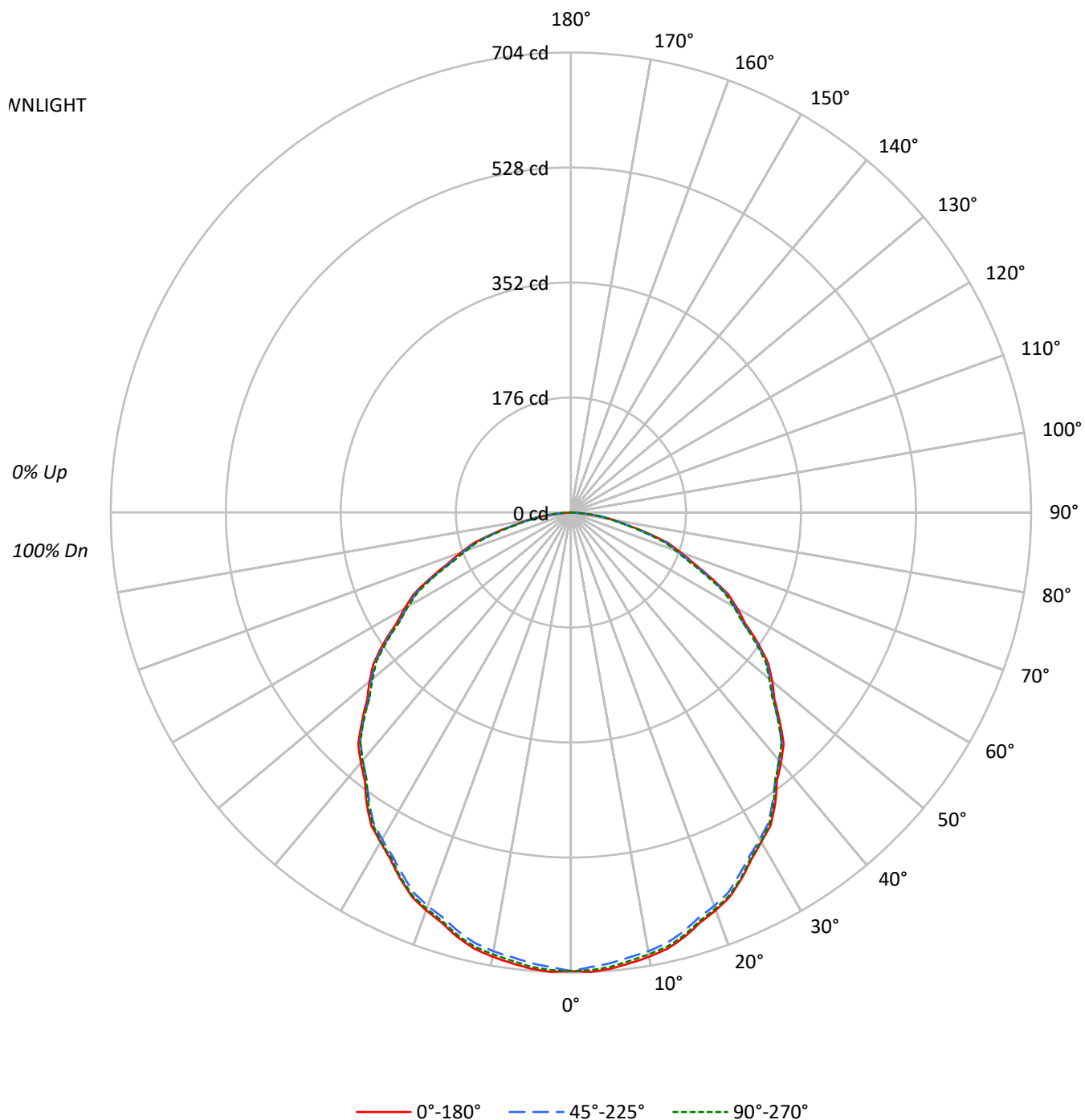
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1914.9 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 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			0
RW	70	50	30	10	70	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	100
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6473	6473	6473
5°	6489	6412	6463
10°	6467	6387	6432
15°	6423	6342	6397
20°	6362	6290	6335
25°	6291	6215	6273
30°	6204	6153	6193
35°	6136	6062	6093
40°	6018	5961	5974
45°	5895	5845	5845
50°	5770	5717	5688
55°	5635	5561	5529
60°	5425	5338	5303
65°	5165	5065	5001
70°	4815	4710	4610
75°	4317	4189	4082
80°	3496	3448	3342
85°	2075	2392	2488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5907 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	3.5
10°-20°	188.5	9.8
20°-30°	283.1	14.8
30°-40°	338.0	17.7
40°-50°	346.3	18.1
50°-60°	308.9	16.1
60°-70°	230.0	12.0
70°-80°	124.9	6.5
80°-90°	28.9	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°	537.8	28.1
0°-40°	875.8	45.7
0°-60°	1531.1	80.0
0°-90°	1914.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1914.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	701	700	692	699	698	67
15°	672	671	664	670	670	189
25°	618	616	610	614	616	285
35°	545	543	538	538	541	340
45°	452	453	448	447	448	349
55°	350	350	346	343	344	312
65°	237	236	232	229	229	234
75°	121	120	118	116	114	128
85°	20	22	23	24	24	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.6	701.6	701.6	701.6	701.6
2.5°	703.7	702.4	696.3	701.6	700.9
5°	700.7	699.8	692.3	698.7	697.8
7.5°	695.6	693.8	686.4	692.8	691.8
10°	690.3	688.4	681.8	687.5	686.6
12.5°	683.6	682.5	675.1	680.8	680.6
15°	672.4	670.6	664.0	669.7	669.7
17.5°	657.8	656.7	650.2	655.7	655.1
20°	648.0	646.3	640.6	645.2	645.2
22.5°	636.0	634.9	629.3	633.2	634.0
25°	618.0	616.2	610.5	614.3	616.2
27.5°	598.1	596.7	592.0	594.3	595.7
30°	582.3	582.3	577.6	578.6	581.3
32.5°	568.1	568.1	562.5	563.6	564.9
35°	544.8	543.0	538.2	538.2	541.0
37.5°	517.7	516.8	513.8	513.2	514.0
40°	499.7	498.8	494.9	496.0	496.0
42.5°	481.7	480.7	476.9	475.6	477.1
45°	451.8	452.7	448.0	447.0	448.0
47.5°	422.4	422.4	418.5	415.9	417.4
50°	402.0	402.0	398.3	396.3	396.3
52.5°	380.9	381.7	377.1	374.5	375.3
55°	350.3	350.3	345.7	342.9	343.7
57.5°	316.5	316.5	311.8	309.0	310.7
60°	294.0	294.0	289.3	286.5	287.4
62.5°	271.4	271.4	266.8	264.0	264.1
65°	236.6	235.8	232.0	229.1	229.1
67.5°	203.2	200.8	198.0	194.3	194.3
70°	178.5	177.4	174.6	170.9	170.9
72.5°	155.9	154.3	151.4	148.5	148.5
75°	121.1	120.2	117.5	115.5	114.5
77.5°	86.8	86.1	85.9	83.2	84.0
80°	65.8	65.8	64.9	62.9	62.9
82.5°	46.9	47.7	46.0	45.6	44.9
85°	19.6	21.5	22.6	23.5	23.5
87.5°	3.9	5.9	5.2	6.0	6.0
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	18.07	19.70	18.44	20.01	20.33	17.91	19.54	18.28	19.85	20.17
	3H	19.82	21.28	20.19	21.61	21.97	19.61	21.08	19.98	21.40	21.76
	4H	20.47	21.85	20.87	22.20	22.58	20.24	21.62	20.64	21.97	22.35
	6H	20.84	22.12	21.25	22.49	22.88	20.61	21.89	21.02	22.25	22.64
	8H	20.97	22.19	21.39	22.58	22.98	20.73	21.95	21.15	22.34	22.74
	12H	21.02	22.19	21.45	22.57	23.00	20.79	21.97	21.22	22.35	22.78
4H	2H	18.69	20.08	19.09	20.43	20.80	18.57	19.95	18.97	20.30	20.67
	3H	20.67	21.83	21.08	22.22	22.62	20.49	21.65	20.90	22.05	22.45
	4H	21.43	22.47	21.86	22.89	23.32	21.22	22.27	21.65	22.68	23.12
	6H	21.91	22.82	22.36	23.26	23.71	21.69	22.61	22.15	23.05	23.50
	8H	22.07	22.93	22.53	23.37	23.83	21.85	22.71	22.31	23.15	23.61
	12H	22.15	22.92	22.63	23.40	23.87	21.95	22.72	22.43	23.20	23.66
8H	4H	21.69	22.54	22.15	22.98	23.45	21.51	22.36	21.97	22.80	23.27
	6H	22.27	22.98	22.76	23.46	23.94	22.07	22.78	22.57	23.27	23.75
	8H	22.50	23.14	23.01	23.64	24.13	22.30	22.94	22.81	23.44	23.93
	12H	22.63	23.19	23.14	23.68	24.24	22.45	23.02	22.96	23.51	24.07
12H	4H	21.71	22.47	22.19	22.95	23.42	21.53	22.30	22.01	22.77	23.24
	6H	22.30	22.94	22.81	23.45	23.93	22.12	22.75	22.63	23.26	23.75
	8H	22.59	23.15	23.09	23.64	24.20	22.39	22.96	22.90	23.45	24.01