

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: P1036235

Luminaire Tested: SQ4R-PC3-050D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P562810)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

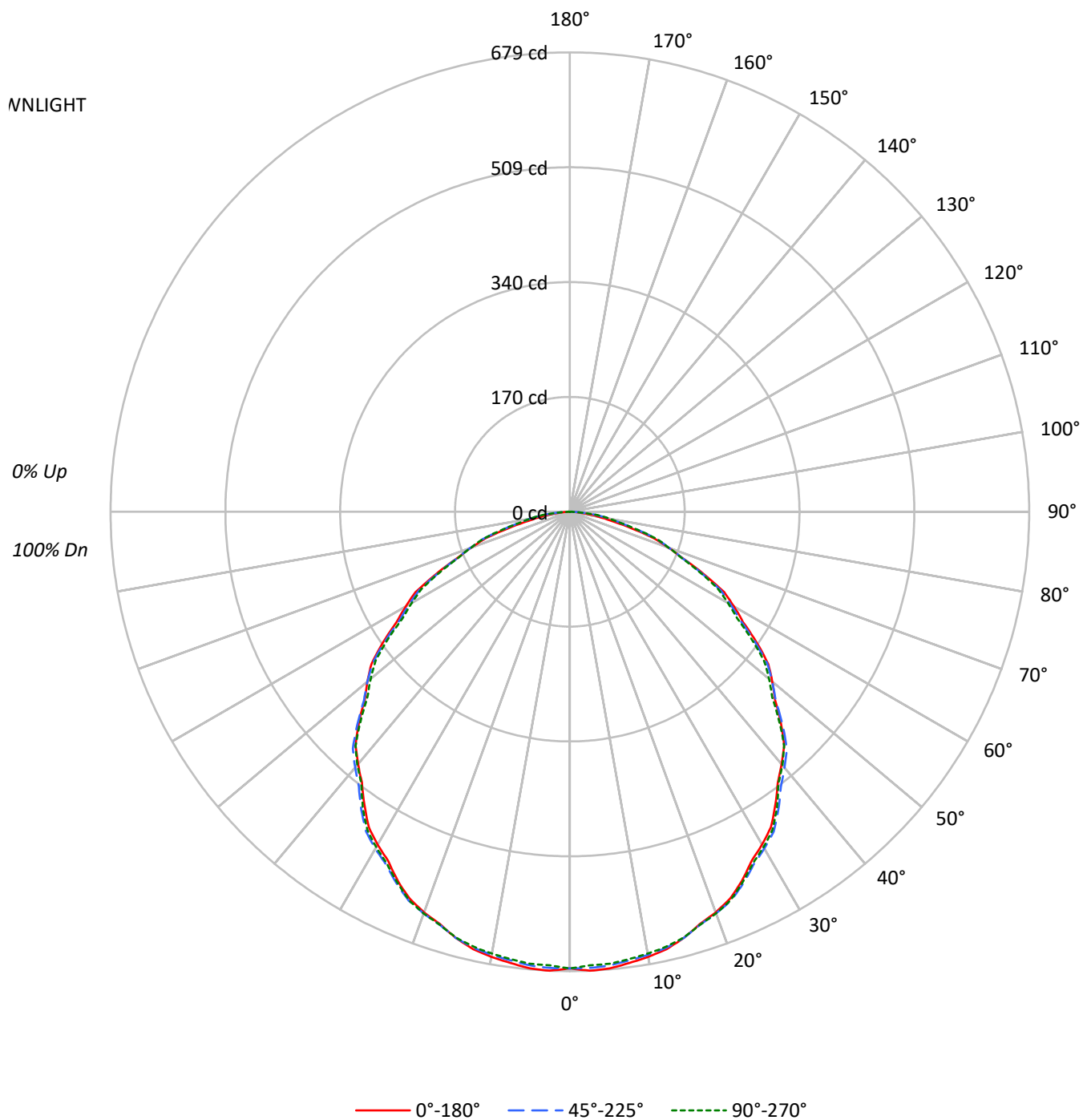
Lumens per Lamp: N/A
Luminaire Lumens: 1842.2 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	109	105	100	97	106	102	98	95	98	95	92		94	92	89		91
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80
3	91	80	72	66	88	79	71	65	76	70	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	46	41		52
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6227	6227	6227
5°	6276	6234	6211
10°	6259	6230	6212
15°	6227	6227	6221
20°	6187	6204	6204
25°	6127	6171	6152
30°	6052	6125	6099
35°	5963	6054	6011
40°	5864	5946	5887
45°	5758	5798	5708
50°	5606	5606	5517
55°	5429	5358	5279
60°	5167	5063	4982
65°	4774	4681	4639
70°	4181	4214	4200
75°	3362	3722	3743
80°	2391	3156	3188
85°	1461	2646	2646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 5798 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	3.5
10°-20°	183.3	10.0
20°-30°	277.6	15.1
30°-40°	332.8	18.1
40°-50°	339.4	18.4
50°-60°	296.3	16.1
60°-70°	212.1	11.5
70°-80°	109.2	5.9
80°-90°	27.6	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°	524.8	28.5
0°-40°	857.6	46.6
0°-60°	1493.2	81.1
0°-90°	1842.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1842.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	678	671	673	671	671	64
15°	652	646	652	652	651	184
25°	602	598	606	604	604	277
35°	529	528	538	534	534	331
45°	441	440	444	439	438	340
55°	338	333	333	328	328	301
65°	219	214	214	212	212	216
75°	94	99	104	105	105	102
85°	14	21	25	26	25	19
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.9	674.9	674.9	674.9	674.9
2.5°	679.0	673.1	674.9	673.5	671.0
5°	677.6	670.7	673.1	671.2	670.6
7.5°	672.6	665.8	669.0	667.8	667.1
10°	668.1	661.4	665.0	663.8	663.1
12.5°	662.1	655.8	659.9	658.8	658.5
15°	651.9	646.4	651.9	651.9	651.3
17.5°	639.0	634.0	639.9	640.2	639.9
20°	630.1	624.5	631.9	631.2	631.9
22.5°	619.0	614.5	622.3	620.7	621.4
25°	601.9	597.6	606.2	604.3	604.3
27.5°	581.7	578.5	588.0	586.0	586.0
30°	568.1	565.0	574.9	572.5	572.5
32.5°	553.1	551.0	560.6	557.5	557.5
35°	529.4	528.1	537.5	533.7	533.7
37.5°	504.9	503.7	512.3	507.7	506.2
40°	486.9	486.3	493.7	488.8	488.8
42.5°	468.9	468.2	474.8	468.8	468.8
45°	441.3	439.9	444.4	438.7	437.5
47.5°	411.1	409.9	412.6	406.5	405.8
50°	390.6	389.4	390.6	384.9	384.4
52.5°	369.7	367.4	367.6	362.0	361.9
55°	337.5	333.2	333.1	328.2	328.2
57.5°	303.5	297.9	298.5	294.1	293.4
60°	280.0	273.9	274.4	270.7	270.0
62.5°	257.0	249.9	251.3	247.1	247.1
65°	218.7	213.8	214.4	212.5	212.5
67.5°	181.9	177.5	180.8	179.3	179.2
70°	155.0	151.9	156.2	156.2	155.7
72.5°	130.0	130.0	135.2	135.2	135.7
75°	94.3	98.7	104.4	105.0	105.0
77.5°	63.0	70.5	76.9	77.1	77.0
80°	45.0	53.5	59.4	60.6	60.0
82.5°	30.5	39.5	44.4	45.6	45.0
85°	13.8	21.1	25.0	25.6	25.0
87.5°	4.0	8.4	10.0	10.0	9.0
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	17.82	19.44	18.19	19.75	20.07	17.71	19.32	18.07	19.64	19.95
	3H	19.37	20.82	19.74	21.15	21.51	19.31	20.76	19.69	21.09	21.45
	4H	19.88	21.25	20.27	21.59	21.97	19.91	21.28	20.31	21.63	22.00
	6H	20.11	21.38	20.52	21.74	22.14	20.27	21.54	20.69	21.91	22.30
	8H	20.18	21.39	20.60	21.78	22.17	20.41	21.62	20.84	22.01	22.41
	12H	20.20	21.36	20.63	21.74	22.17	20.50	21.66	20.93	22.04	22.47
4H	2H	18.42	19.79	18.82	20.13	20.51	18.32	19.69	18.72	20.04	20.42
	3H	20.17	21.32	20.58	21.71	22.11	20.15	21.29	20.56	21.69	22.09
	4H	20.78	21.81	21.21	22.23	22.66	20.85	21.88	21.28	22.30	22.73
	6H	21.12	22.02	21.57	22.46	22.92	21.33	22.23	21.78	22.67	23.13
	8H	21.22	22.06	21.68	22.51	22.97	21.51	22.36	21.97	22.80	23.26
	12H	21.27	22.03	21.75	22.50	22.97	21.64	22.40	22.12	22.87	23.34
8H	4H	21.04	21.88	21.50	22.32	22.79	21.10	21.94	21.56	22.38	22.85
	6H	21.48	22.18	21.97	22.67	23.14	21.69	22.39	22.18	22.87	23.35
	8H	21.65	22.27	22.16	22.78	23.27	21.95	22.57	22.46	23.08	23.57
	12H	21.75	22.30	22.26	22.79	23.36	22.14	22.70	22.65	23.19	23.75
12H	4H	21.06	21.81	21.54	22.29	22.76	21.11	21.87	21.59	22.35	22.82
	6H	21.53	22.16	22.04	22.66	23.15	21.72	22.35	22.23	22.86	23.35
	8H	21.75	22.30	22.26	22.79	23.36	22.04	22.60	22.55	23.09	23.65