

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: P1036234

Luminaire Tested: SQ4R-PC3-050D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036234
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

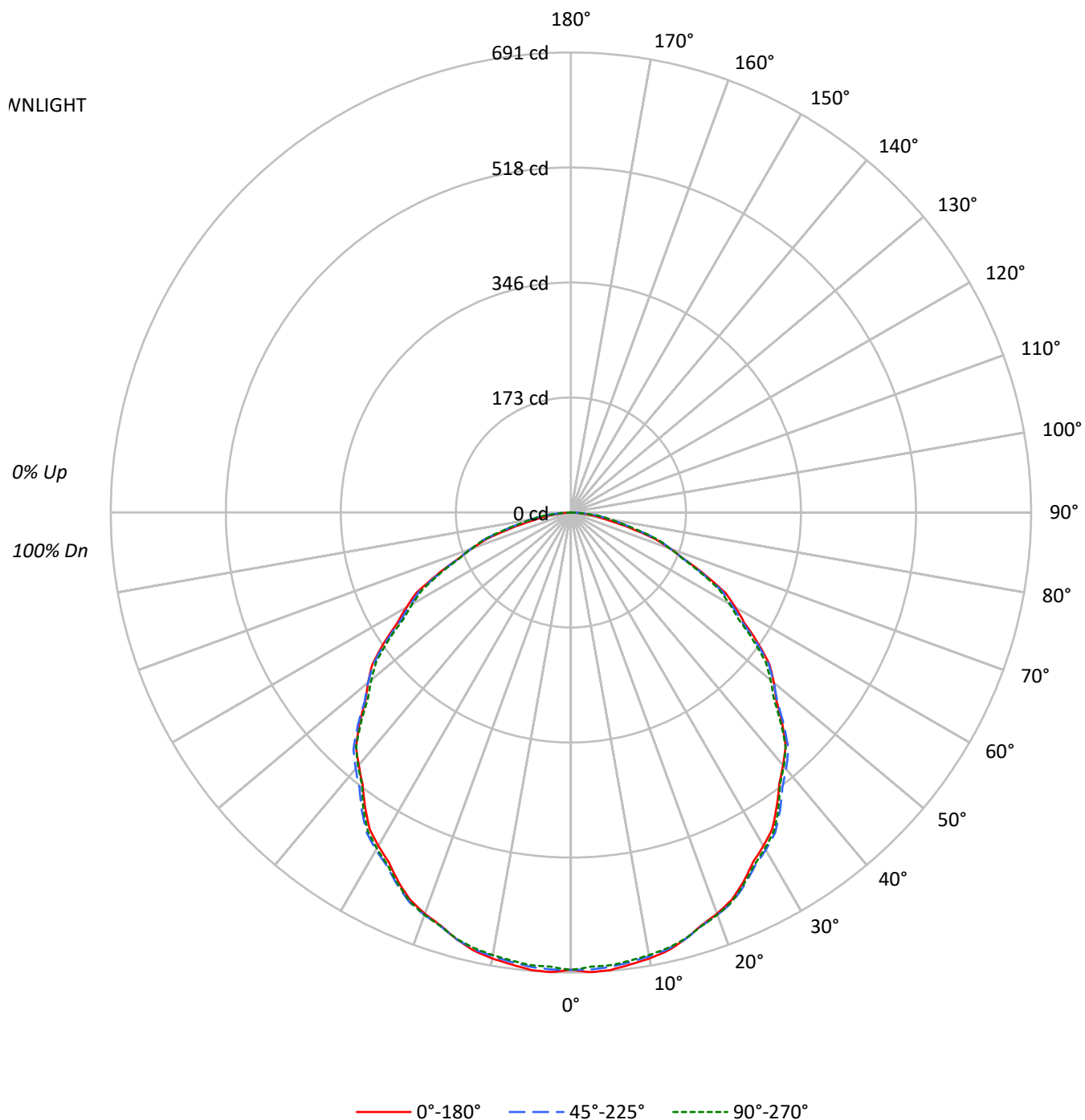
Lumens per Lamp: N/A
Luminaire Lumens: 1875.2 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	6338	6338	6338
5°	6388	6345	6322
10°	6372	6342	6324
15°	6338	6338	6332
20°	6296	6315	6315
25°	6236	6282	6263
30°	6160	6234	6208
35°	6070	6162	6119
40°	5969	6053	5992
45°	5861	5903	5810
50°	5707	5707	5616
55°	5525	5455	5373
60°	5259	5154	5071
65°	4860	4764	4722
70°	4257	4289	4273
75°	3422	3789	3811
80°	2433	3214	3246
85°	1493	2699	2699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 5903 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	3.5
10°-20°	186.6	10.0
20°-30°	282.6	15.1
30°-40°	338.8	18.1
40°-50°	345.4	18.4
50°-60°	301.5	16.1
60°-70°	215.9	11.5
70°-80°	111.2	5.9
80°-90°	28.1	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°	534.2	28.5
0°-40°	873.0	46.6
0°-60°	1520.0	81.1
0°-90°	1875.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1875.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	690	683	685	683	683	65
15°	664	658	664	664	663	187
25°	613	608	617	615	615	282
35°	539	538	547	543	543	337
45°	449	448	452	446	445	346
55°	344	339	339	334	334	306
65°	223	218	218	216	216	220
75°	96	100	106	107	107	104
85°	14	22	26	26	26	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	687.0	687.0	687.0	687.0	687.0
2.5°	691.1	685.1	687.0	685.5	683.0
5°	689.7	682.7	685.1	683.2	682.6
7.5°	684.6	677.8	681.0	679.7	679.0
10°	680.1	673.2	676.9	675.6	675.0
12.5°	674.0	667.6	671.8	670.6	670.3
15°	663.5	658.0	663.5	663.5	662.9
17.5°	650.4	645.3	651.3	651.7	651.3
20°	641.3	635.7	643.2	642.5	643.2
22.5°	630.1	625.5	633.5	631.8	632.5
25°	612.6	608.3	617.1	615.2	615.2
27.5°	592.1	588.9	598.5	596.5	596.5
30°	578.2	575.1	585.2	582.7	582.7
32.5°	563.0	560.9	570.6	567.5	567.5
35°	538.9	537.5	547.1	543.3	543.3
37.5°	513.9	512.7	521.5	516.8	515.3
40°	495.6	495.0	502.6	497.5	497.5
42.5°	477.3	476.6	483.3	477.2	477.2
45°	449.2	447.8	452.4	446.5	445.3
47.5°	418.4	417.3	420.0	413.8	413.1
50°	397.6	396.3	397.6	391.8	391.3
52.5°	376.3	374.0	374.2	368.4	368.3
55°	343.5	339.2	339.1	334.0	334.0
57.5°	308.9	303.2	303.8	299.3	298.7
60°	285.0	278.8	279.3	275.5	274.8
62.5°	261.6	254.4	255.8	251.6	251.5
65°	222.6	217.7	218.2	216.3	216.3
67.5°	185.2	180.6	184.0	182.5	182.4
70°	157.8	154.7	159.0	159.0	158.4
72.5°	132.4	132.3	137.6	137.6	138.1
75°	96.0	100.5	106.3	106.9	106.9
77.5°	64.2	71.8	78.3	78.5	78.4
80°	45.8	54.5	60.5	61.7	61.1
82.5°	31.0	40.2	45.2	46.4	45.8
85°	14.1	21.5	25.5	26.1	25.5
87.5°	4.1	8.5	10.2	10.2	9.2
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	17.88	19.50	18.25	19.81	20.13	17.77	19.38	18.13	19.70	20.01
	3H	19.43	20.88	19.80	21.21	21.57	19.37	20.83	19.75	21.15	21.51
	4H	19.94	21.31	20.34	21.65	22.03	19.97	21.34	20.37	21.69	22.06
	6H	20.17	21.44	20.58	21.81	22.20	20.34	21.60	20.75	21.97	22.36
	8H	20.24	21.45	20.66	21.84	22.24	20.47	21.68	20.90	22.07	22.47
	12H	20.26	21.42	20.69	21.80	22.23	20.56	21.72	20.99	22.10	22.53
4H	2H	18.48	19.85	18.88	20.20	20.57	18.39	19.76	18.78	20.10	20.48
	3H	20.23	21.38	20.64	21.78	22.18	20.21	21.35	20.62	21.75	22.15
	4H	20.84	21.88	21.27	22.29	22.73	20.91	21.95	21.34	22.36	22.80
	6H	21.18	22.08	21.64	22.52	22.98	21.39	22.29	21.84	22.73	23.19
	8H	21.28	22.13	21.74	22.57	23.03	21.57	22.42	22.03	22.86	23.32
	12H	21.33	22.09	21.82	22.57	23.04	21.70	22.46	22.18	22.93	23.40
8H	4H	21.10	21.94	21.56	22.38	22.85	21.16	22.00	21.62	22.44	22.91
	6H	21.54	22.24	22.04	22.73	23.21	21.75	22.45	22.24	22.94	23.41
	8H	21.71	22.34	22.22	22.84	23.33	22.01	22.64	22.52	23.14	23.63
	12H	21.81	22.37	22.32	22.86	23.42	22.20	22.76	22.71	23.25	23.81
12H	4H	21.12	21.88	21.60	22.35	22.82	21.18	21.93	21.66	22.41	22.88
	6H	21.59	22.22	22.10	22.72	23.21	21.79	22.41	22.30	22.92	23.41
	8H	21.81	22.37	22.32	22.86	23.42	22.10	22.66	22.61	23.15	23.71

END OF REPORT