

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: P1036325

Luminaire Tested: SQ4R-PW1-050D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036325
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-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

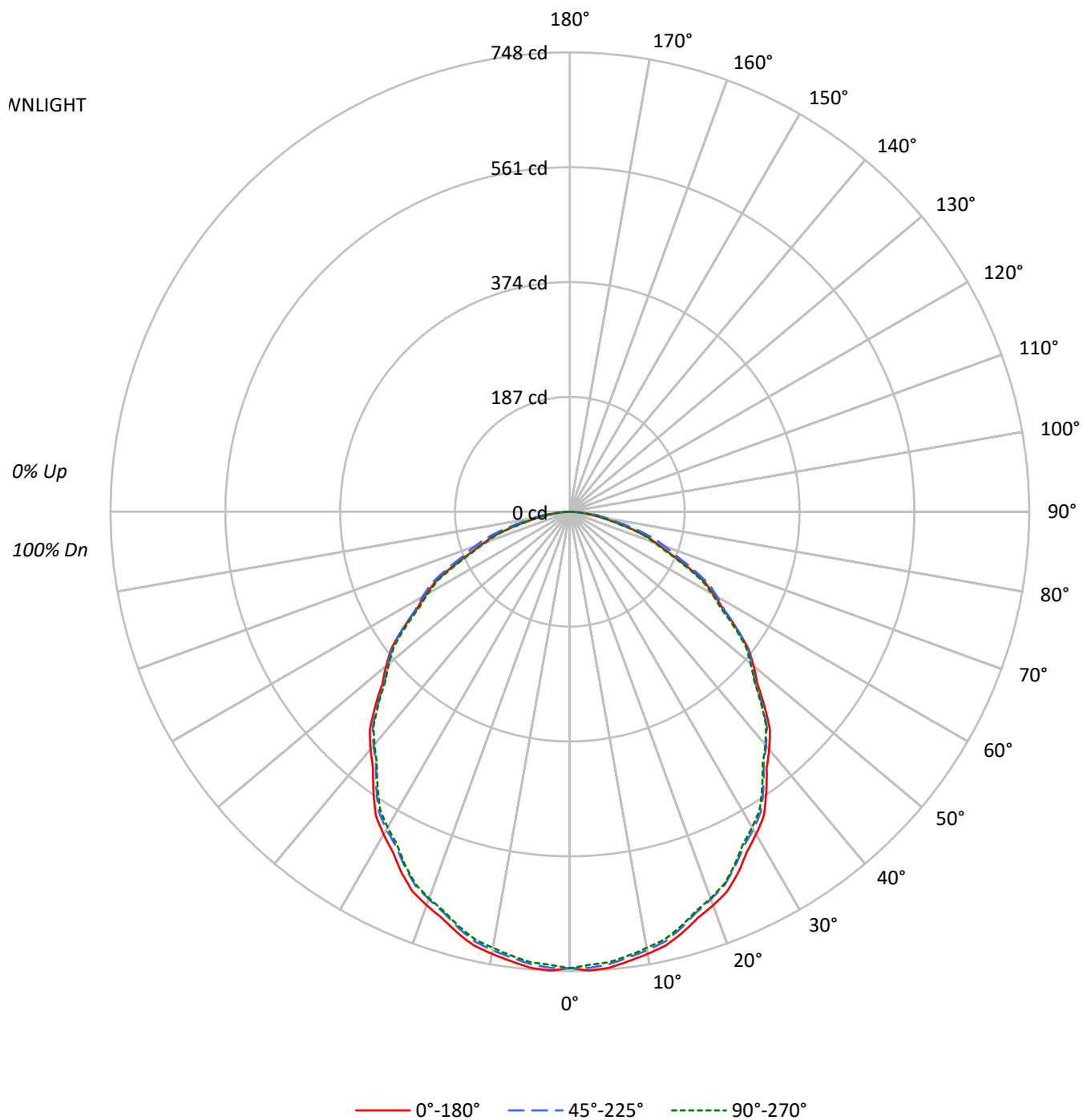
Lumens per Lamp: N/A
Luminaire Lumens: 1891.3 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (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	101	97	107	102	99	95	98	95	92		94	92	89		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44
9	58	44	36	31	56	44	36	31	43	35	31		42	35	30		41
10	54	41	33	28	53	40	33	28	39	33	28		39	32	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6858	6858	6858
5°	6903	6848	6818
10°	6847	6792	6756
15°	6776	6700	6675
20°	6694	6590	6578
25°	6601	6481	6460
30°	6461	6364	6322
35°	6278	6188	6151
40°	6081	5987	5963
45°	5845	5768	5742
50°	5604	5556	5517
55°	5340	5340	5257
60°	5015	5113	4932
65°	4589	4818	4475
70°	4044	4435	3938
75°	3458	3968	3362
80°	2678	3337	2715
85°	1736	2562	2276

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	3.7
10°-20°	197.6	10.4
20°-30°	293.1	15.5
30°-40°	343.0	18.1
40°-50°	341.5	18.1
50°-60°	294.9	15.6
60°-70°	212.3	11.2
70°-80°	111.3	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°	560.8	29.7
0°-40°	903.8	47.8
0°-60°	1540.1	81.4
0°-90°	1891.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1891.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	745	737	739	738	736	71
15°	709	700	701	700	699	200
25°	648	638	637	633	635	298
35°	557	550	549	544	546	348
45°	448	444	442	441	440	346
55°	332	332	332	328	327	296
65°	210	217	221	212	205	208
75°	97	106	111	104	94	104
85°	16	21	24	23	22	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.3	743.3	743.3	743.3	743.3
2.5°	747.6	741.4	743.3	741.7	738.2
5°	745.3	737.0	739.4	737.5	736.2
7.5°	737.8	730.1	731.8	729.7	729.0
10°	730.9	723.3	725.0	722.5	721.1
12.5°	723.1	714.8	716.7	713.9	713.2
15°	709.4	700.3	701.4	700.0	698.8
17.5°	693.3	684.2	684.3	682.4	682.0
20°	681.8	672.2	671.2	668.7	670.0
22.5°	669.3	659.1	658.2	654.6	656.3
25°	648.4	637.5	636.6	632.7	634.6
27.5°	624.3	613.6	613.6	608.1	610.1
30°	606.5	596.2	597.4	590.8	593.4
32.5°	587.6	578.4	578.9	572.5	575.1
35°	557.4	549.7	549.4	544.3	546.1
37.5°	526.4	519.6	518.5	515.6	516.1
40°	504.9	499.2	497.1	495.1	495.1
42.5°	482.4	477.2	475.1	473.6	473.2
45°	448.0	444.2	442.1	440.7	440.1
47.5°	413.9	410.3	408.5	407.6	407.0
50°	390.4	387.8	387.1	385.1	384.4
52.5°	366.8	365.3	364.6	362.1	361.4
55°	332.0	331.5	332.0	327.5	326.8
57.5°	295.9	296.9	299.0	292.9	291.3
60°	271.8	274.3	277.1	269.8	267.3
62.5°	247.1	251.3	255.1	246.7	243.0
65°	210.2	216.6	220.7	212.1	205.0
67.5°	174.6	182.6	187.4	178.1	170.2
70°	149.9	158.9	164.4	155.0	146.0
72.5°	128.5	138.5	143.0	134.0	125.1
75°	97.0	105.9	111.3	103.8	94.3
77.5°	68.8	77.2	81.7	75.3	67.3
80°	50.4	59.4	62.8	57.5	51.1
82.5°	35.7	43.3	45.6	42.3	37.9
85°	16.4	21.4	24.2	22.9	21.5
87.5°	4.2	7.7	9.9	9.9	10.5
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	17.70	19.30	18.06	19.61	19.93	17.60	19.20	17.97	19.52	19.83
	3H	19.26	20.70	19.64	21.03	21.39	19.13	20.57	19.51	20.90	21.26
	4H	19.81	21.17	20.21	21.51	21.89	19.67	21.03	20.07	21.38	21.75
	6H	20.10	21.36	20.51	21.72	22.11	19.97	21.22	20.38	21.59	21.98
	8H	20.19	21.39	20.62	21.78	22.18	20.07	21.27	20.50	21.66	22.06
	12H	20.23	21.38	20.66	21.76	22.19	20.13	21.28	20.56	21.66	22.09
4H	2H	18.34	19.70	18.74	20.05	20.42	18.26	19.62	18.66	19.97	20.35
	3H	20.14	21.28	20.55	21.67	22.07	20.03	21.16	20.44	21.56	21.96
	4H	20.80	21.83	21.23	22.24	22.68	20.68	21.70	21.11	22.12	22.55
	6H	21.21	22.10	21.66	22.54	23.00	21.08	21.98	21.54	22.42	22.87
	8H	21.34	22.17	21.80	22.61	23.08	21.23	22.06	21.69	22.50	22.97
	12H	21.40	22.15	21.88	22.63	23.10	21.32	22.07	21.80	22.55	23.02
8H	4H	21.08	21.91	21.54	22.36	22.82	20.97	21.81	21.43	22.25	22.71
	6H	21.60	22.29	22.09	22.78	23.25	21.49	22.18	21.98	22.67	23.14
	8H	21.80	22.42	22.31	22.93	23.41	21.70	22.32	22.21	22.83	23.31
	12H	21.92	22.47	22.43	22.96	23.52	21.85	22.40	22.36	22.89	23.45
12H	4H	21.10	21.85	21.58	22.32	22.79	20.99	21.74	21.47	22.22	22.69
	6H	21.64	22.26	22.15	22.77	23.26	21.54	22.16	22.05	22.66	23.15
	8H	21.90	22.45	22.41	22.94	23.50	21.80	22.35	22.31	22.84	23.40