

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: P1036293

Luminaire Tested: SQ4R-PR1-050D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036293
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

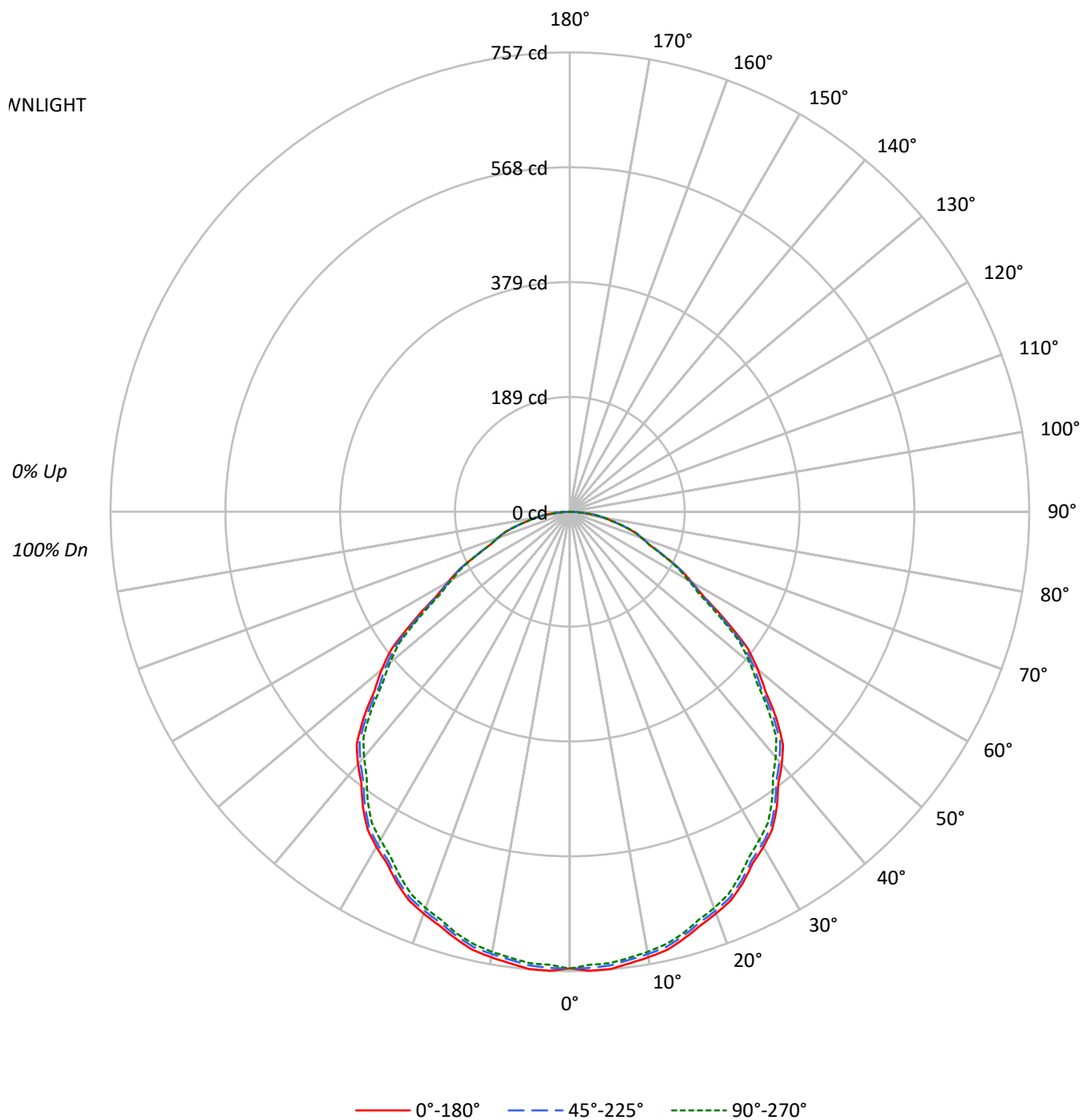
Lumens per Lamp: N/A
Luminaire Lumens: 1881.4 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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				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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87		85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75		72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64		62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56		54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49		47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43		41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39		37
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45	39	35		33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31		30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6943	6943	6943
5°	7006	6953	6916
10°	6983	6935	6899
15°	6954	6910	6872
20°	6918	6873	6823
25°	6869	6824	6744
30°	6795	6747	6651
35°	6696	6636	6542
40°	6542	6471	6356
45°	6276	6166	6039
50°	5806	5665	5555
55°	5067	4954	4850
60°	4270	4235	4152
65°	3694	3709	3679
70°	3391	3410	3410
75°	3258	3258	3280
80°	3066	3103	3066
85°	2467	2742	2742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	3.8
10°-20°	203.6	10.8
20°-30°	307.1	16.3
30°-40°	365.9	19.5
40°-50°	360.8	19.2
50°-60°	275.7	14.7
60°-70°	170.6	9.1
70°-80°	96.9	5.2
80°-90°	29.5	1.6
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°	581.9	30.9
0°-40°	947.9	50.4
0°-60°	1584.4	84.2
0°-90°	1881.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1881.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	756	748	751	748	747	72
15°	728	720	723	721	720	205
25°	675	666	670	663	662	311
35°	594	587	589	582	581	371
45°	481	475	473	464	463	368
55°	315	310	308	303	302	282
65°	169	168	170	168	168	171
75°	91	91	91	92	92	97
85°	23	25	26	26	26	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.5	752.5	752.5	752.5	752.5
2.5°	757.2	750.7	752.5	751.0	747.4
5°	756.5	748.2	750.7	748.0	746.8
7.5°	750.7	742.5	745.0	742.3	741.6
10°	745.4	737.9	740.2	737.7	736.4
12.5°	739.7	731.7	734.6	731.4	730.2
15°	728.0	720.4	723.4	720.8	719.5
17.5°	715.0	706.9	710.0	707.0	705.3
20°	704.6	697.1	700.0	695.6	694.9
22.5°	693.2	685.6	688.6	682.7	682.5
25°	674.8	666.5	670.3	663.2	662.5
27.5°	652.9	645.3	648.3	641.1	640.4
30°	637.8	630.2	633.3	625.5	624.3
32.5°	620.7	613.7	616.2	608.4	607.6
35°	594.5	587.4	589.2	581.5	580.8
37.5°	564.5	558.2	559.2	550.5	550.0
40°	543.2	536.9	537.3	528.3	527.7
42.5°	519.9	513.6	513.0	504.0	503.3
45°	481.0	474.7	472.6	464.0	462.8
47.5°	436.6	430.3	426.4	419.5	418.6
50°	404.5	398.1	394.7	388.9	387.0
52.5°	369.7	363.4	360.6	355.2	353.3
55°	315.0	310.0	308.0	302.7	301.5
57.5°	263.0	259.7	259.0	254.0	253.5
60°	231.4	229.5	229.5	225.0	225.0
62.5°	204.5	203.0	204.0	201.0	200.5
65°	169.2	168.0	169.9	168.5	168.5
67.5°	141.4	141.4	142.5	141.9	141.9
70°	125.7	125.7	126.4	126.4	126.4
72.5°	111.7	111.3	113.0	112.9	112.4
75°	91.4	91.4	91.4	92.0	92.0
77.5°	71.2	71.3	71.9	71.8	71.2
80°	57.7	58.4	58.4	57.7	57.7
82.5°	44.3	44.8	44.8	44.7	44.3
85°	23.3	24.6	25.9	25.9	25.9
87.5°	6.8	8.7	10.4	10.4	9.8
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	16.84	18.40	17.20	18.71	19.03	16.66	18.23	17.03	18.54	18.86
	3H	18.17	19.57	18.55	19.90	20.26	18.07	19.47	18.45	19.80	20.16
	4H	18.77	20.09	19.17	20.44	20.82	18.70	20.02	19.10	20.37	20.74
	6H	19.22	20.44	19.63	20.80	21.20	19.16	20.38	19.57	20.74	21.13
	8H	19.40	20.57	19.83	20.95	21.36	19.34	20.51	19.77	20.90	21.30
	12H	19.51	20.63	19.94	21.01	21.44	19.47	20.58	19.90	20.96	21.39
4H	2H	17.31	18.63	17.71	18.98	19.35	17.17	18.49	17.57	18.84	19.21
	3H	18.91	20.01	19.32	20.41	20.81	18.84	19.94	19.25	20.33	20.73
	4H	19.65	20.64	20.08	21.05	21.49	19.60	20.59	20.03	21.00	21.44
	6H	20.24	21.10	20.69	21.54	22.00	20.20	21.06	20.65	21.50	21.96
	8H	20.48	21.29	20.94	21.73	22.20	20.44	21.25	20.91	21.69	22.16
	12H	20.64	21.36	21.12	21.84	22.31	20.62	21.34	21.10	21.82	22.29
8H	4H	19.92	20.73	20.38	21.17	21.64	19.88	20.69	20.34	21.13	21.60
	6H	20.65	21.32	21.15	21.81	22.29	20.61	21.28	21.11	21.77	22.25
	8H	20.98	21.59	21.50	22.10	22.58	20.95	21.55	21.46	22.06	22.55
	12H	21.22	21.75	21.73	22.24	22.81	21.21	21.75	21.72	22.24	22.80
12H	4H	19.95	20.68	20.43	21.15	21.62	19.91	20.63	20.39	21.11	21.58
	6H	20.71	21.32	21.22	21.82	22.31	20.68	21.28	21.19	21.79	22.28
	8H	21.11	21.65	21.62	22.14	22.70	21.08	21.61	21.59	22.11	22.67