

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: P1036324

Luminaire Tested: SQ4R-PW1-050D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036324
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_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

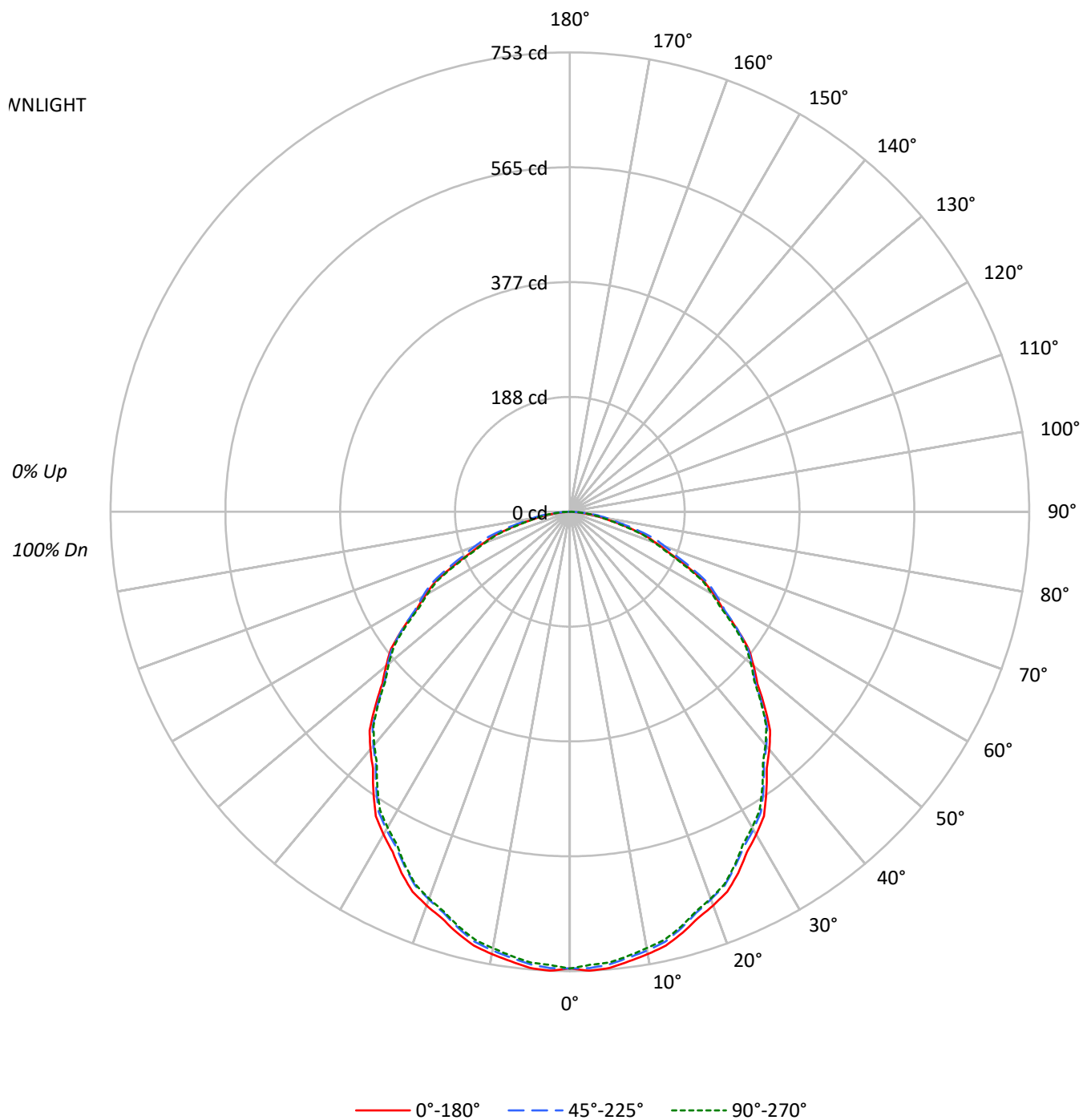
Lumens per Lamp: N/A
Luminaire Lumens: 1905.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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				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	105	101	97	107	102	99	95	98	95	92		94	92	89		91	89	87		85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	76	73		71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	66	63		60
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64	58	54		52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47		45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52	46	42		40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48	42	37		35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33		31
9	58	44	36	31	56	44	36	31	43	35	31		42	35	30		41	35	30		28
10	54	41	33	28	53	40	33	28	39	33	28		39	32	28		38	32	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6908	6908	6908
5°	6953	6898	6867
10°	6897	6842	6804
15°	6825	6748	6723
20°	6742	6638	6626
25°	6649	6527	6507
30°	6508	6410	6368
35°	6323	6233	6196
40°	6126	6030	6006
45°	5887	5810	5784
50°	5644	5596	5558
55°	5379	5379	5295
60°	5052	5150	4967
65°	4622	4853	4508
70°	4073	4467	3968
75°	3483	3996	3386
80°	2699	3363	2736
85°	1747	2583	2297

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5887 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	3.7
10°-20°	199.1	10.4
20°-30°	295.3	15.5
30°-40°	345.5	18.1
40°-50°	343.9	18.1
50°-60°	297.0	15.6
60°-70°	213.8	11.2
70°-80°	112.1	5.9
80°-90°	27.8	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°	564.8	29.6
0°-40°	910.3	47.8
0°-60°	1551.3	81.4
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	751	742	745	743	742	71
15°	714	705	706	705	704	201
25°	653	642	641	637	639	300
35°	561	554	553	548	550	351
45°	451	447	445	444	443	348
55°	334	334	334	330	329	298
65°	212	218	222	214	206	210
75°	98	107	112	105	95	105
85°	16	22	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°	748.7	748.7	748.7	748.7	748.7
2.5°	753.0	746.8	748.7	747.1	743.5
5°	750.7	742.3	744.8	742.8	741.5
7.5°	743.1	735.4	737.1	735.0	734.3
10°	736.2	728.5	730.3	727.7	726.3
12.5°	728.3	720.0	721.9	719.1	718.4
15°	714.5	705.4	706.5	705.1	703.9
17.5°	698.3	689.2	689.3	687.3	686.9
20°	686.7	677.1	676.1	673.5	674.9
22.5°	674.1	663.9	663.0	659.3	661.1
25°	653.1	642.1	641.2	637.3	639.2
27.5°	628.8	618.0	618.0	612.5	614.5
30°	610.9	600.5	601.7	595.1	597.7
32.5°	591.9	582.6	583.1	576.6	579.3
35°	561.4	553.7	553.4	548.2	550.1
37.5°	530.2	523.4	522.3	519.3	519.8
40°	508.6	502.8	500.7	498.7	498.7
42.5°	485.9	480.7	478.5	477.0	476.6
45°	451.2	447.4	445.3	443.9	443.3
47.5°	416.9	413.3	411.5	410.6	409.9
50°	393.2	390.6	389.9	387.9	387.2
52.5°	369.5	367.9	367.2	364.7	364.0
55°	334.4	333.9	334.4	329.9	329.2
57.5°	298.0	299.1	301.2	295.0	293.4
60°	273.8	276.3	279.1	271.8	269.2
62.5°	248.9	253.1	256.9	248.5	244.8
65°	211.7	218.2	222.3	213.6	206.5
67.5°	175.9	183.9	188.8	179.4	171.4
70°	151.0	160.1	165.6	156.1	147.1
72.5°	129.4	139.5	144.0	135.0	126.0
75°	97.7	106.7	112.1	104.6	95.0
77.5°	69.3	77.8	82.3	75.8	67.8
80°	50.8	59.8	63.3	57.9	51.5
82.5°	36.0	43.6	45.9	42.6	38.2
85°	16.5	21.6	24.4	23.1	21.7
87.5°	4.2	7.8	10.0	10.0	10.6
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	17.73	19.33	18.09	19.64	19.95	17.63	19.23	17.99	19.54	19.85
	3H	19.28	20.73	19.66	21.05	21.41	19.15	20.60	19.53	20.92	21.29
	4H	19.83	21.19	20.23	21.54	21.92	19.70	21.05	20.09	21.40	21.78
	6H	20.13	21.38	20.54	21.75	22.14	19.99	21.25	20.40	21.61	22.01
	8H	20.22	21.42	20.64	21.81	22.21	20.10	21.30	20.52	21.68	22.08
	12H	20.26	21.41	20.69	21.79	22.22	20.16	21.31	20.59	21.69	22.12
4H	2H	18.37	19.72	18.77	20.07	20.45	18.29	19.65	18.69	19.99	20.37
	3H	20.17	21.30	20.58	21.70	22.10	20.06	21.19	20.47	21.59	21.99
	4H	20.83	21.85	21.26	22.26	22.70	20.71	21.73	21.14	22.14	22.58
	6H	21.23	22.12	21.69	22.57	23.02	21.11	22.00	21.56	22.44	22.90
	8H	21.36	22.20	21.82	22.64	23.10	21.25	22.09	21.71	22.53	22.99
	12H	21.43	22.18	21.91	22.65	23.12	21.35	22.10	21.83	22.57	23.04
8H	4H	21.10	21.94	21.57	22.38	22.85	21.00	21.83	21.46	22.27	22.74
	6H	21.62	22.32	22.12	22.80	23.28	21.51	22.20	22.01	22.69	23.17
	8H	21.82	22.44	22.34	22.95	23.44	21.72	22.34	22.23	22.85	23.34
	12H	21.95	22.49	22.45	22.98	23.55	21.88	22.43	22.39	22.92	23.48
12H	4H	21.12	21.87	21.60	22.35	22.82	21.02	21.77	21.50	22.24	22.71
	6H	21.67	22.29	22.18	22.80	23.28	21.56	22.18	22.07	22.69	23.18
	8H	21.93	22.47	22.43	22.96	23.53	21.83	22.38	22.34	22.87	23.43