

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: P1036339

Luminaire Tested: SQ4R-PW1-075D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036339
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-PW1-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

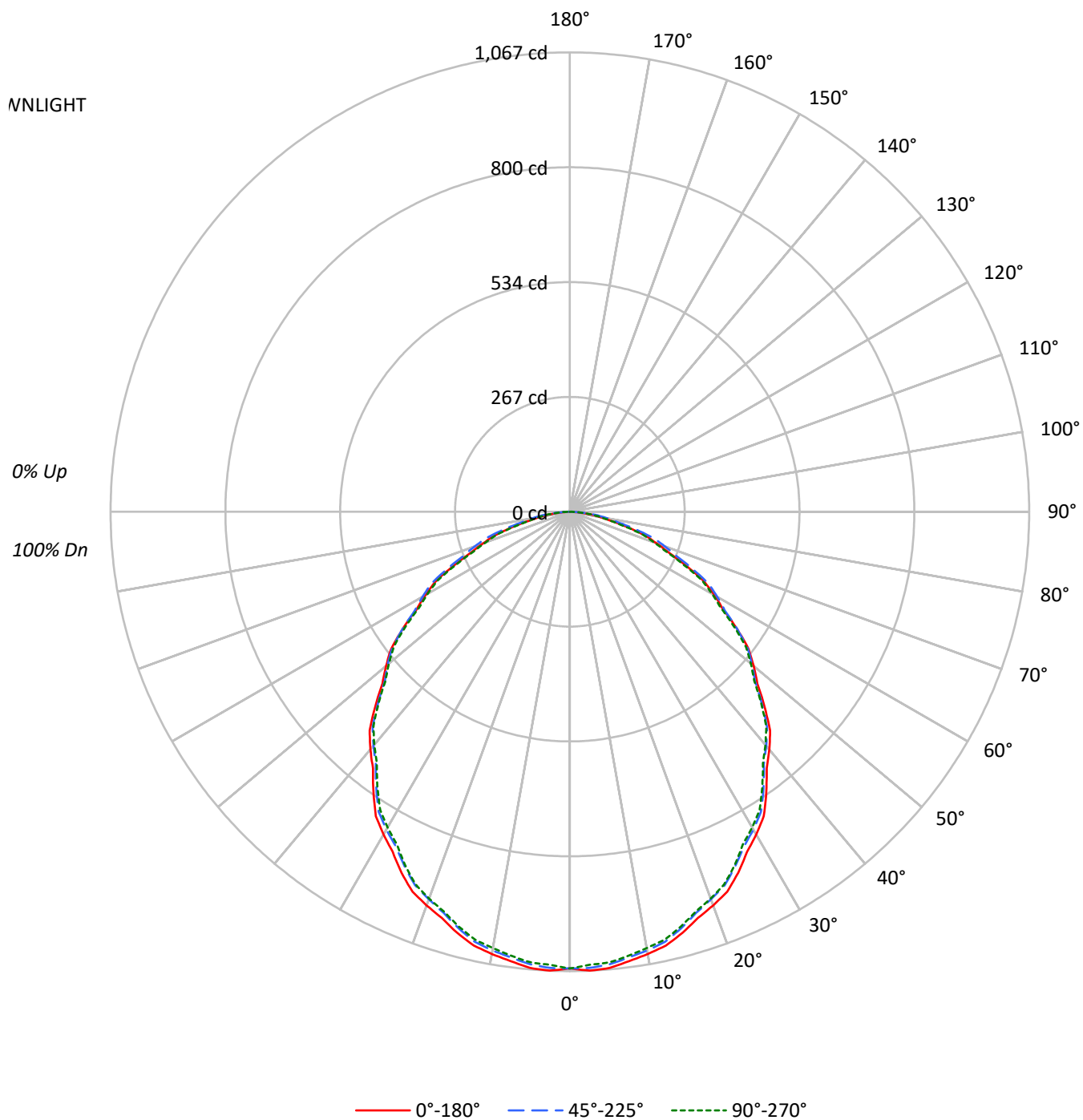
Lumens per Lamp: N/A
Luminaire Lumens: 2699.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
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°	9786	9786	9786
5°	9850	9773	9730
10°	9771	9694	9640
15°	9669	9561	9525
20°	9553	9405	9388
25°	9420	9249	9219
30°	9221	9081	9021
35°	8959	8831	8778
40°	8680	8544	8510
45°	8341	8232	8194
50°	7996	7930	7874
55°	7621	7621	7502
60°	7160	7296	7038
65°	6549	6875	6388
70°	5770	6328	5624
75°	4934	5664	4795
80°	3825	4771	3879
85°	2467	3673	3260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8341 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	3.7
10°-20°	282.0	10.4
20°-30°	418.3	15.5
30°-40°	489.5	18.1
40°-50°	487.3	18.1
50°-60°	420.8	15.6
60°-70°	302.9	11.2
70°-80°	158.8	5.9
80°-90°	39.4	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°	800.3	29.6
0°-40°	1289.7	47.8
0°-60°	2197.9	81.4
0°-90°	2699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1064	1052	1055	1052	1051	101
15°	1012	999	1001	999	997	285
25°	925	910	908	903	906	425
35°	795	784	784	777	779	497
45°	639	634	631	629	628	493
55°	474	473	474	467	466	423
65°	300	309	315	303	293	297
75°	138	151	159	148	134	148
85°	23	31	35	33	31	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.7	1060.7	1060.7	1060.7	1060.7
2.5°	1066.8	1058.0	1060.7	1058.5	1053.3
5°	1063.6	1051.7	1055.2	1052.4	1050.6
7.5°	1052.8	1041.9	1044.3	1041.4	1040.3
10°	1043.0	1032.1	1034.7	1030.9	1029.0
12.5°	1031.9	1020.1	1022.8	1018.9	1017.9
15°	1012.3	999.3	1001.0	999.1	997.2
17.5°	989.3	976.5	976.7	973.7	973.3
20°	973.0	959.3	957.9	954.2	956.2
22.5°	955.1	940.6	939.3	934.1	936.7
25°	925.3	909.8	908.5	902.9	905.6
27.5°	890.9	875.7	875.7	867.8	870.6
30°	865.5	850.8	852.4	843.1	846.8
32.5°	838.5	825.4	826.2	817.0	820.6
35°	795.4	784.5	784.1	776.7	779.4
37.5°	751.2	741.6	740.0	735.8	736.4
40°	720.7	712.4	709.4	706.6	706.6
42.5°	688.4	681.0	677.9	675.8	675.2
45°	639.3	633.8	630.9	629.0	628.0
47.5°	590.6	585.6	583.0	581.8	580.8
50°	557.1	553.4	552.5	549.5	548.6
52.5°	523.4	521.2	520.2	516.7	515.7
55°	473.8	473.1	473.8	467.3	466.4
57.5°	422.2	423.7	426.8	417.9	415.7
60°	388.0	391.5	395.4	385.1	381.4
62.5°	352.6	358.6	364.0	352.1	346.8
65°	300.0	309.1	314.9	302.6	292.6
67.5°	249.2	260.5	267.4	254.2	242.8
70°	213.9	226.9	234.6	221.2	208.5
72.5°	183.4	197.6	203.9	191.3	178.5
75°	138.4	151.1	158.9	148.2	134.5
77.5°	98.2	110.2	116.6	107.5	96.1
80°	72.0	84.7	89.8	82.0	73.0
82.5°	51.0	61.7	65.1	60.5	54.2
85°	23.3	30.7	34.7	32.7	30.8
87.5°	6.0	11.1	14.2	14.2	14.9
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	18.94	20.54	19.30	20.85	21.16	18.84	20.44	19.20	20.75	21.06
	3H	20.49	21.94	20.87	22.26	22.62	20.37	21.81	20.74	22.13	22.50
	4H	21.04	22.40	21.44	22.75	23.12	20.91	22.26	21.30	22.61	22.99
	6H	21.34	22.59	21.75	22.96	23.35	21.20	22.46	21.62	22.83	23.22
	8H	21.43	22.63	21.85	23.02	23.42	21.31	22.51	21.73	22.90	23.29
	12H	21.47	22.62	21.90	23.00	23.43	21.37	22.52	21.80	22.90	23.33
4H	2H	19.58	20.93	19.98	21.28	21.66	19.50	20.86	19.90	21.20	21.58
	3H	21.38	22.51	21.79	22.91	23.31	21.27	22.40	21.68	22.80	23.20
	4H	22.04	23.06	22.47	23.47	23.91	21.92	22.94	22.35	23.35	23.79
	6H	22.44	23.33	22.90	23.77	24.23	22.32	23.21	22.78	23.65	24.11
	8H	22.57	23.41	23.03	23.85	24.31	22.46	23.30	22.92	23.74	24.21
	12H	22.64	23.39	23.12	23.86	24.33	22.56	23.31	23.04	23.78	24.25
8H	4H	22.31	23.15	22.77	23.59	24.06	22.21	23.04	22.67	23.48	23.95
	6H	22.83	23.53	23.33	24.01	24.49	22.72	23.41	23.22	23.90	24.38
	8H	23.03	23.65	23.55	24.16	24.65	22.93	23.55	23.45	24.06	24.55
	12H	23.15	23.70	23.66	24.19	24.76	23.09	23.64	23.60	24.13	24.69
12H	4H	22.33	23.08	22.81	23.56	24.03	22.23	22.98	22.71	23.45	23.92
	6H	22.88	23.50	23.39	24.01	24.49	22.77	23.39	23.28	23.90	24.39
	8H	23.14	23.68	23.64	24.17	24.74	23.04	23.59	23.55	24.08	24.64