

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: P1036164

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-BB-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

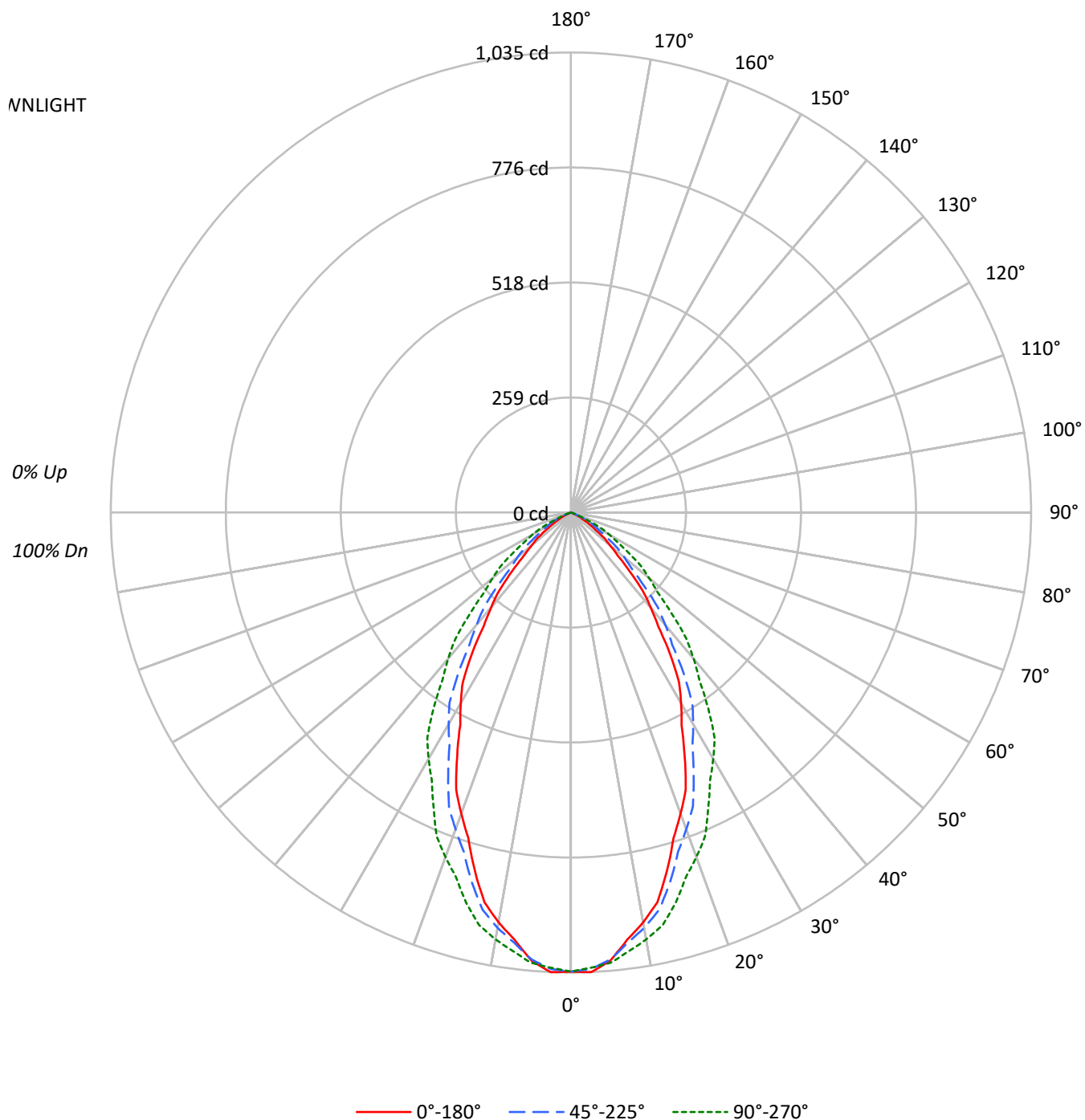
Lumens per Lamp: N/A
Luminaire Lumens: 1232.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	104	110	107	104	102	103	101	99		99	98	96		96
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89
3	99	91	85	81	97	90	84	80	87	82	79		85	81	77		82
4	93	84	77	72	91	83	76	72	80	75	71		78	74	70		76
5	87	77	70	65	85	76	70	65	74	68	64		72	67	64		71
6	82	71	64	59	80	70	64	59	69	63	58		67	62	58		66
7	77	66	59	54	75	65	59	54	64	58	53		62	57	53		61
8	72	61	54	50	71	61	54	49	59	53	49		58	53	49		57
9	68	57	50	46	67	57	50	46	56	50	46		55	49	45		54
10	65	54	47	42	63	53	47	42	52	46	42		51	46	42		51

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9529	9529	9529
5°	9375	9352	9422
10°	8772	8890	9137
15°	7975	8228	8686
20°	7079	7447	8099
25°	6164	6653	7442
30°	5281	5860	6818
35°	4378	4975	6066
40°	3364	3978	5169
45°	2432	3013	4160
50°	1656	2243	3300
55°	1078	1623	2564
60°	618	1144	1854
65°	164	699	939
70°	84	216	270
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4160 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.3	7.7
10°-20°	241.0	19.6
20°-30°	301.7	24.5
30°-40°	278.7	22.6
40°-50°	187.3	15.2
50°-60°	96.7	7.9
60°-70°	30.3	2.5
70°-80°	1.9	0.2
80°-90°	0.0	0.0
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°	637.0	51.7
0°-40°	915.7	74.3
0°-60°	1199.8	97.4
0°-90°	1232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1012	1002	1010	1013	1017	94
15°	835	832	861	890	909	233
25°	606	610	654	698	731	278
35°	389	398	442	494	539	241
45°	186	198	231	276	319	146
55°	67	78	101	130	159	62
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1032.8	1032.8	1032.8	1032.8	1032.8
2.5°	1035.2	1025.4	1027.9	1027.9	1025.2
5°	1012.3	1002.0	1009.8	1013.3	1017.3
7.5°	969.6	961.5	976.5	987.5	995.7
10°	936.3	929.5	948.9	964.0	975.3
12.5°	897.9	892.6	916.0	937.0	951.3
15°	834.9	832.0	861.4	890.3	909.4
17.5°	767.4	767.3	800.8	836.8	859.7
20°	721.0	722.5	758.5	798.1	824.9
22.5°	674.6	678.0	716.5	757.8	788.6
25°	605.5	610.4	653.5	698.3	731.0
27.5°	539.2	546.4	591.7	638.1	678.0
30°	495.7	504.0	550.1	599.0	640.0
32.5°	452.8	462.8	507.7	559.5	601.2
35°	388.7	398.5	441.7	493.7	538.6
37.5°	322.5	332.0	374.2	425.4	474.0
40°	279.3	290.0	330.3	379.9	429.2
42.5°	240.2	250.9	288.7	337.4	384.0
45°	186.4	197.6	230.9	275.8	318.8
47.5°	141.9	154.0	183.1	223.9	263.0
50°	115.4	127.6	156.3	192.2	229.9
52.5°	94.2	106.1	132.0	165.7	200.2
55°	67.0	78.2	100.9	129.6	159.4
57.5°	46.3	56.0	76.4	100.2	123.6
60°	33.5	42.8	62.0	81.3	100.5
62.5°	22.3	30.8	49.5	64.5	77.3
65°	7.5	14.4	32.0	38.6	43.0
67.5°	3.8	4.5	16.7	17.8	19.2
70°	3.1	3.1	8.0	8.5	10.0
72.5°	2.1	2.1	3.2	4.1	4.4
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	7.76	8.99	8.13	9.31	9.62	12.34	13.58	12.71	13.89	14.20
	3H	7.64	8.72	8.02	9.05	9.42	12.32	13.40	12.70	13.73	14.10
	4H	7.56	8.57	7.97	8.92	9.30	12.24	13.24	12.64	13.59	13.98
	6H	7.48	8.39	7.89	8.77	9.16	12.15	13.07	12.57	13.44	13.83
	8H	7.43	8.30	7.86	8.69	9.09	12.10	12.97	12.54	13.36	13.77
	12H	7.38	8.21	7.82	8.59	9.02	12.06	12.88	12.49	13.27	13.70
4H	2H	8.13	9.13	8.53	9.48	9.87	12.28	13.28	12.68	13.63	14.02
	3H	8.01	8.82	8.43	9.23	9.63	12.26	13.07	12.67	13.47	13.88
	4H	7.92	8.64	8.36	9.06	9.51	12.16	12.88	12.60	13.30	13.75
	6H	7.83	8.45	8.30	8.90	9.37	12.07	12.69	12.54	13.13	13.60
	8H	7.77	8.34	8.24	8.79	9.27	12.01	12.58	12.48	13.03	13.50
	12H	7.72	8.22	8.21	8.71	9.18	11.95	12.46	12.44	12.94	13.42
8H	4H	7.78	8.35	8.25	8.80	9.27	12.01	12.58	12.48	13.03	13.50
	6H	7.67	8.13	8.18	8.63	9.12	11.90	12.36	12.40	12.86	13.35
	8H	7.60	8.02	8.13	8.54	9.03	11.83	12.25	12.36	12.77	13.26
	12H	7.55	7.92	8.07	8.42	8.99	11.78	12.15	12.30	12.64	13.22
12H	4H	7.73	8.23	8.21	8.71	9.19	11.96	12.46	12.44	12.94	13.42
	6H	7.60	8.02	8.13	8.54	9.03	11.83	12.25	12.36	12.77	13.26
	8H	7.55	7.92	8.07	8.42	8.99	11.78	12.15	12.30	12.64	13.22