

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: P1036357

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036357
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P519276)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-WB-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

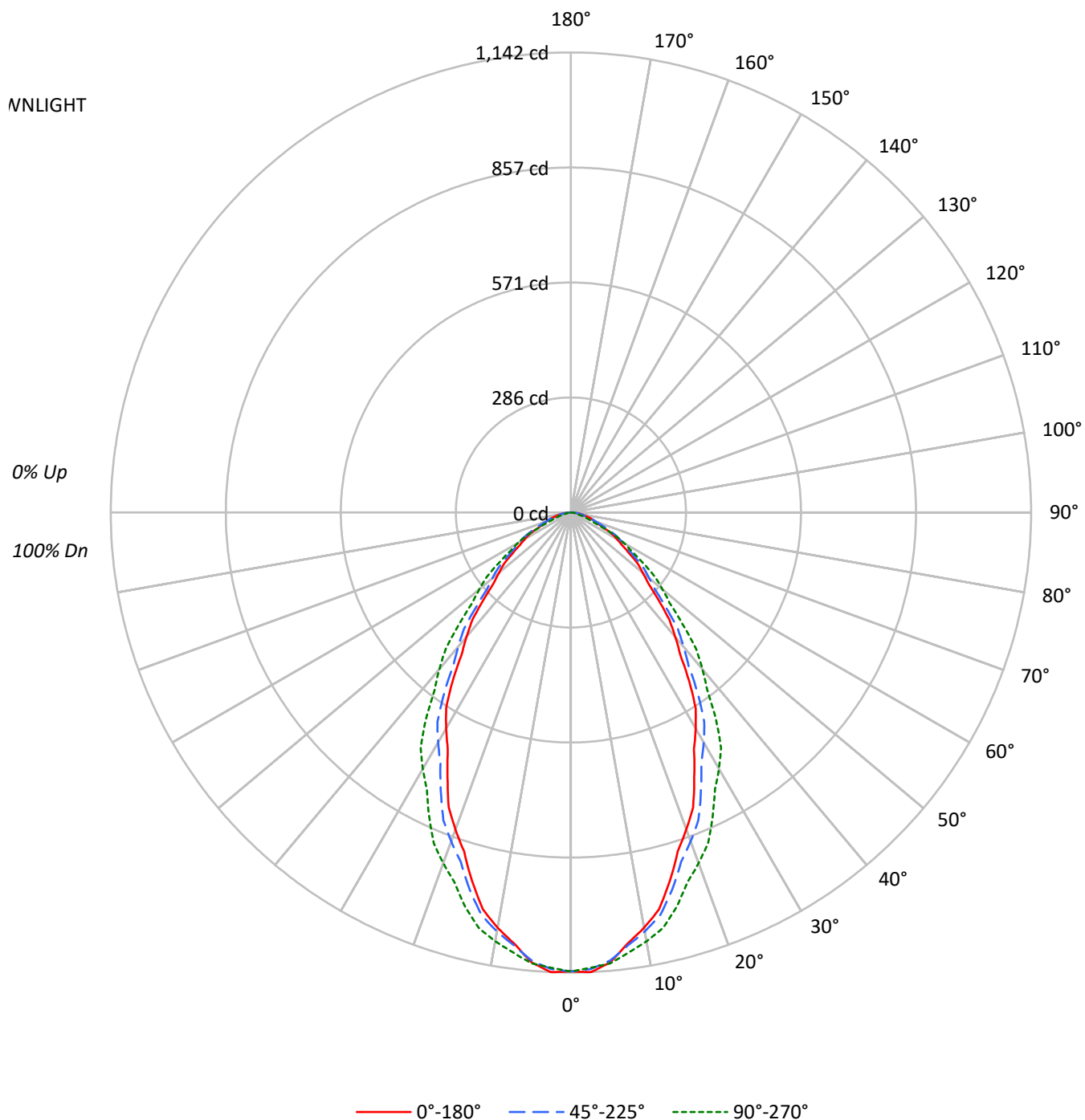
Lumens per Lamp: N/A
Luminaire Lumens: 1660.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94
2	103	97	91	87	101	95	90	86	92	87	84		88	85	82		85
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	56	52		61
7	73	61	53	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10510	10510	10510
5°	10379	10342	10402
10°	9806	9895	10125
15°	9052	9263	9678
20°	8221	8529	9094
25°	7373	7775	8473
30°	6593	7024	7827
35°	5764	6181	7066
40°	4851	5238	6117
45°	4004	4350	5107
50°	3343	3644	4254
55°	2837	3127	3513
60°	2426	2713	2805
65°	1932	2279	1810
70°	1713	1780	1106
75°	1586	1444	677
80°	1461	1328	584
85°	1313	1217	476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5107 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	6.3
10°-20°	271.8	16.4
20°-30°	352.0	21.2
30°-40°	344.7	20.8
40°-50°	263.9	15.9
50°-60°	175.8	10.6
60°-70°	95.9	5.8
70°-80°	40.0	2.4
80°-90°	11.3	0.7
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°	728.3	43.9
0°-40°	1073.0	64.6
0°-60°	1512.7	91.1
0°-90°	1660.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1660.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1139	1139	1139	1139	1139	
5°	1121	1109	1117	1119	1123	104
15°	948	944	970	996	1013	265
25°	724	726	764	797	832	333
35°	512	514	549	586	627	318
45°	307	313	333	359	391	239
55°	176	184	194	202	218	160
65°	88	96	104	91	83	92
75°	44	44	40	28	19	48
85°	12	12	12	8	4	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1142.0	1131.8	1134.4	1134.3	1131.1
5°	1120.7	1109.4	1116.7	1119.3	1123.2
7.5°	1079.1	1070.6	1083.8	1093.6	1101.5
10°	1046.7	1039.4	1056.2	1070.5	1080.7
12.5°	1009.2	1002.9	1023.9	1042.9	1056.3
15°	947.7	944.3	969.8	996.1	1013.2
17.5°	882.1	880.4	909.6	940.4	962.2
20°	837.3	836.8	868.7	900.9	926.2
22.5°	792.1	793.1	826.7	860.1	889.1
25°	724.3	726.3	763.8	797.1	832.3
27.5°	661.6	662.5	701.2	736.4	774.0
30°	618.9	621.2	659.3	695.7	734.7
32.5°	576.1	578.9	616.2	653.7	693.6
35°	511.8	514.3	548.8	585.8	627.4
37.5°	445.6	449.0	479.7	514.5	555.5
40°	402.8	407.8	434.9	467.8	507.9
42.5°	361.7	367.8	392.9	424.1	460.2
45°	306.9	312.8	333.4	358.6	391.4
47.5°	259.7	266.5	282.3	304.1	332.0
50°	232.9	239.3	253.9	270.0	296.4
52.5°	209.3	215.7	228.7	241.1	263.7
55°	176.4	183.8	194.4	201.9	218.4
57.5°	149.5	156.5	165.0	168.3	178.3
60°	131.5	139.3	147.0	146.5	152.0
62.5°	115.1	121.8	129.3	124.0	124.4
65°	88.5	95.8	104.4	91.3	82.9
67.5°	71.5	73.0	81.9	63.7	53.8
70°	63.5	63.5	66.0	49.3	41.0
72.5°	55.9	55.9	53.6	40.1	31.3
75°	44.5	44.5	40.5	27.8	19.0
77.5°	34.3	33.9	31.0	20.7	13.8
80°	27.5	27.5	25.0	16.4	11.0
82.5°	21.5	21.5	19.4	12.8	8.1
85°	12.4	12.4	11.5	7.5	4.5
87.5°	4.4	4.4	4.0	2.4	2.0
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	13.92	15.30	14.29	15.61	15.92	14.55	15.92	14.91	16.23	16.55
	3H	14.90	16.12	15.28	16.45	16.81	15.00	16.23	15.38	16.56	16.92
	4H	15.34	16.48	15.74	16.83	17.21	15.08	16.22	15.48	16.57	16.96
	6H	15.64	16.69	16.06	17.06	17.46	15.09	16.14	15.51	16.51	16.91
	8H	15.77	16.77	16.20	17.16	17.56	15.09	16.08	15.52	16.48	16.88
	12H	15.86	16.81	16.29	17.19	17.62	15.07	16.02	15.51	16.41	16.84
4H	2H	14.41	15.55	14.81	15.90	16.28	14.93	16.07	15.33	16.42	16.80
	3H	15.58	16.51	15.99	16.92	17.32	15.56	16.50	15.97	16.90	17.30
	4H	16.11	16.95	16.55	17.37	17.81	15.70	16.53	16.13	16.95	17.39
	6H	16.53	17.26	17.00	17.70	18.17	15.77	16.49	16.23	16.94	17.40
	8H	16.71	17.39	17.18	17.83	18.30	15.78	16.45	16.24	16.90	17.37
	12H	16.84	17.43	17.32	17.92	18.39	15.77	16.37	16.26	16.86	17.33
8H	4H	16.22	16.90	16.69	17.34	17.81	15.84	16.52	16.31	16.96	17.43
	6H	16.76	17.31	17.26	17.81	18.29	15.99	16.54	16.49	17.04	17.52
	8H	17.02	17.52	17.54	18.03	18.52	16.04	16.54	16.56	17.05	17.55
	12H	17.22	17.66	17.74	18.16	18.73	16.08	16.52	16.59	17.01	17.58
12H	4H	16.20	16.80	16.69	17.28	17.76	15.85	16.45	16.33	16.93	17.40
	6H	16.76	17.26	17.28	17.77	18.27	16.03	16.53	16.55	17.04	17.53
	8H	17.08	17.52	17.59	18.01	18.58	16.13	16.57	16.65	17.07	17.64

END OF REPORT