

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: P1036376

Luminaire Tested: SQ4R-WB-100D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036376
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-100D-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

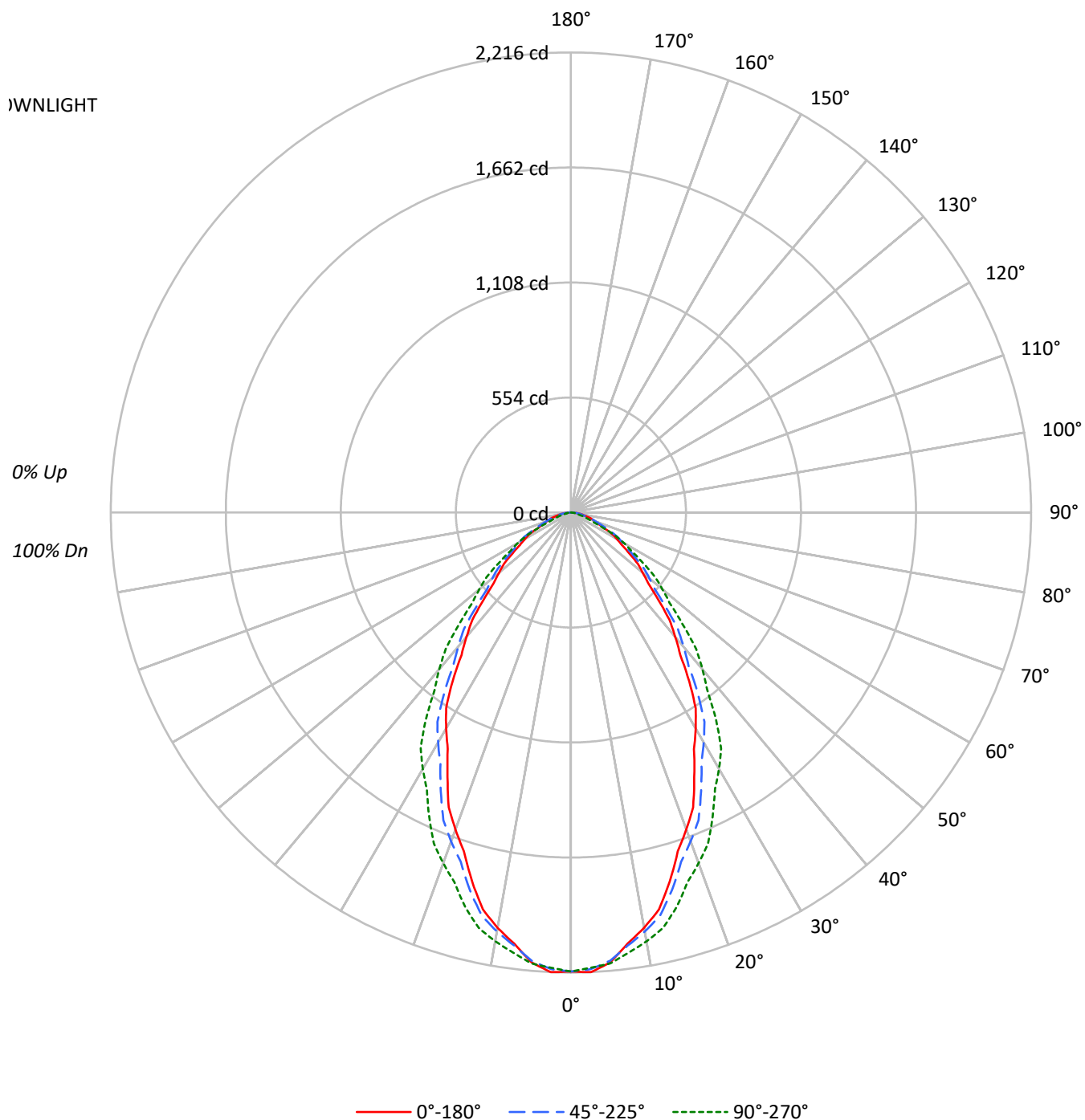
Lumens per Lamp: N/A
Luminaire Lumens: 3221.6 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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°	20398	20398	20398
5°	20144	20071	20189
10°	19031	19205	19649
15°	17568	17977	18783
20°	15954	16554	17649
25°	14310	15091	16444
30°	12796	13630	15192
35°	11188	11996	13714
40°	9416	10165	11872
45°	7771	8442	9911
50°	6486	7073	8255
55°	5508	6069	6817
60°	4709	5263	5443
65°	3751	4425	3513
70°	3323	3456	2145
75°	3076	2802	1315
80°	2837	2577	1132
85°	2551	2371	921

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9911 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.8	6.3
10°-20°	527.5	16.4
20°-30°	683.2	21.2
30°-40°	669.1	20.8
40°-50°	512.1	15.9
50°-60°	341.2	10.6
60°-70°	186.2	5.8
70°-80°	77.6	2.4
80°-90°	21.9	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°	1413.5	43.9
0°-40°	2082.5	64.6
0°-60°	2935.9	91.1
0°-90°	3221.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3221.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2211	2211	2211	2211	2211	
5°	2175	2153	2167	2172	2180	202
15°	1839	1833	1882	1933	1966	514
25°	1406	1410	1482	1547	1615	646
35°	993	998	1065	1137	1218	618
45°	596	607	647	696	760	464
55°	342	357	377	392	424	310
65°	172	186	203	177	161	179
75°	86	86	79	54	37	92
85°	24	24	22	14	9	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2210.9	2210.9	2210.9	2210.9	2210.9
2.5°	2216.3	2196.6	2201.7	2201.5	2195.3
5°	2175.0	2153.1	2167.2	2172.2	2179.9
7.5°	2094.2	2077.8	2103.5	2122.3	2137.7
10°	2031.4	2017.2	2049.9	2077.6	2097.3
12.5°	1958.5	1946.4	1987.1	2023.9	2050.2
15°	1839.3	1832.7	1882.1	1933.3	1966.5
17.5°	1711.9	1708.6	1765.2	1825.0	1867.4
20°	1624.9	1624.0	1686.0	1748.3	1797.6
22.5°	1537.3	1539.3	1604.5	1669.3	1725.5
25°	1405.7	1409.5	1482.4	1547.0	1615.3
27.5°	1284.1	1285.9	1360.9	1429.2	1502.1
30°	1201.1	1205.7	1279.4	1350.2	1426.0
32.5°	1118.1	1123.6	1195.8	1268.7	1346.1
35°	993.3	998.2	1065.1	1137.0	1217.6
37.5°	864.8	871.4	931.0	998.6	1078.1
40°	781.8	791.5	844.0	907.9	985.7
42.5°	701.9	713.7	762.5	823.1	893.1
45°	595.6	607.0	647.0	696.0	759.6
47.5°	504.0	517.2	547.9	590.1	644.3
50°	451.9	464.4	492.8	524.0	575.1
52.5°	406.3	418.6	443.9	468.0	511.7
55°	342.4	356.6	377.3	391.8	423.8
57.5°	290.1	303.7	320.2	326.5	346.1
60°	255.2	270.3	285.2	284.4	295.0
62.5°	223.4	236.3	251.0	240.7	241.4
65°	171.8	186.1	202.7	177.2	160.9
67.5°	138.8	141.7	159.0	123.6	104.3
70°	123.2	123.2	128.1	95.7	79.5
72.5°	108.5	108.5	104.1	77.7	60.9
75°	86.3	86.3	78.6	54.0	36.9
77.5°	66.5	65.9	60.2	40.2	26.8
80°	53.4	53.4	48.5	31.9	21.3
82.5°	41.7	41.7	37.5	24.8	15.8
85°	24.1	24.1	22.4	14.5	8.7
87.5°	8.5	8.5	7.6	4.6	4.0
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	16.23	17.60	16.59	17.91	18.23	16.85	18.22	17.21	18.54	18.85
	3H	17.20	18.42	17.58	18.75	19.12	17.31	18.53	17.69	18.86	19.22
	4H	17.64	18.78	18.04	19.13	19.51	17.39	18.53	17.79	18.88	19.26
	6H	17.95	19.00	18.36	19.37	19.76	17.40	18.45	17.81	18.82	19.21
	8H	18.08	19.07	18.51	19.46	19.87	17.39	18.39	17.82	18.78	19.18
	12H	18.16	19.11	18.59	19.49	19.92	17.38	18.33	17.81	18.71	19.14
4H	2H	16.72	17.86	17.12	18.21	18.59	17.23	18.37	17.63	18.72	19.10
	3H	17.88	18.82	18.29	19.22	19.62	17.86	18.80	18.28	19.20	19.61
	4H	18.42	19.25	18.85	19.67	20.11	18.00	18.84	18.43	19.25	19.70
	6H	18.84	19.56	19.30	20.01	20.47	18.07	18.79	18.53	19.24	19.70
	8H	19.01	19.69	19.48	20.14	20.61	18.08	18.75	18.55	19.20	19.67
	12H	19.14	19.74	19.62	20.22	20.69	18.08	18.68	18.56	19.16	19.63
8H	4H	18.52	19.20	18.99	19.65	20.12	18.14	18.82	18.61	19.27	19.74
	6H	19.06	19.62	19.56	20.11	20.59	18.29	18.85	18.79	19.34	19.82
	8H	19.32	19.82	19.84	20.34	20.83	18.35	18.84	18.87	19.36	19.85
	12H	19.53	19.97	20.04	20.46	21.03	18.38	18.82	18.90	19.32	19.89
12H	4H	18.51	19.11	18.99	19.59	20.06	18.15	18.75	18.64	19.23	19.71
	6H	19.07	19.56	19.59	20.08	20.57	18.33	18.83	18.85	19.34	19.83
	8H	19.38	19.82	19.90	20.32	20.89	18.44	18.88	18.95	19.37	19.94