

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: P1036378

Luminaire Tested: SQ4R-WB-100D-B2750-1D-UNV-W2A_4000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036378
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_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

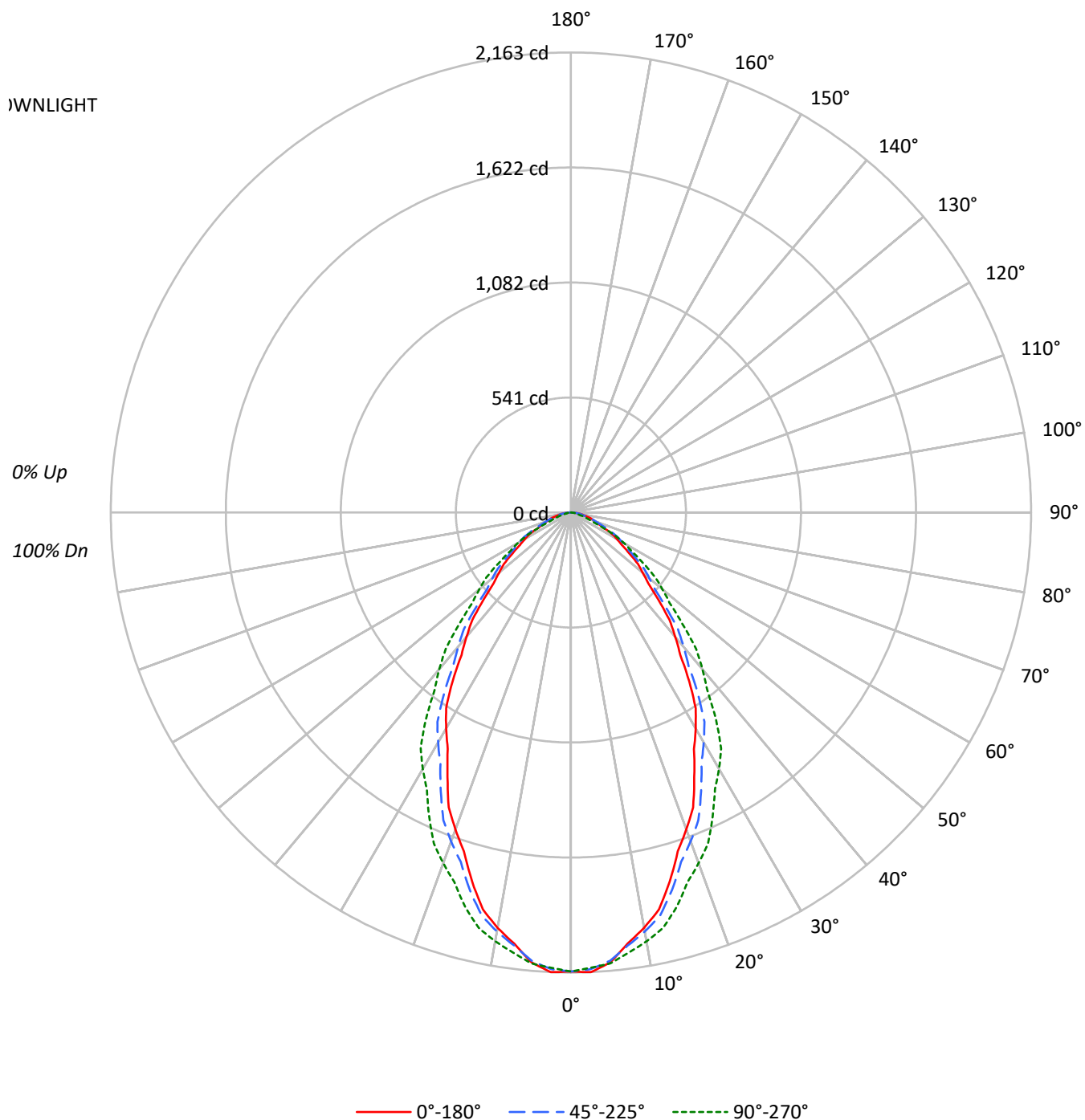
Lumens per Lamp: N/A
Luminaire Lumens: 3144.6 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	19910	19910	19910
5°	19662	19592	19707
10°	18576	18745	19178
15°	17148	17547	18333
20°	15573	16158	17227
25°	13968	14729	16051
30°	12490	13304	14829
35°	10920	11709	13386
40°	9191	9922	11587
45°	7585	8240	9674
50°	6331	6904	8058
55°	5376	5923	6655
60°	4595	5137	5312
65°	3659	4320	3430
70°	3245	3372	2093
75°	3002	2734	1283
80°	2768	2518	1105
85°	2488	2318	900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9674 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.9	6.3
10°-20°	514.9	16.4
20°-30°	666.9	21.2
30°-40°	653.0	20.8
40°-50°	499.8	15.9
50°-60°	333.1	10.6
60°-70°	181.8	5.8
70°-80°	75.8	2.4
80°-90°	21.4	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°	1379.7	43.9
0°-40°	2032.7	64.6
0°-60°	2865.6	91.1
0°-90°	3144.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3144.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2158	2158	2158	2158	2158	
5°	2123	2102	2115	2120	2128	197
15°	1795	1789	1837	1887	1919	501
25°	1372	1376	1447	1510	1577	631
35°	970	974	1040	1110	1188	603
45°	581	592	632	679	741	453
55°	334	348	368	382	414	303
65°	168	182	198	173	157	174
75°	84	84	77	53	36	90
85°	24	24	22	14	8	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2158.0	2158.0	2158.0	2158.0	2158.0
2.5°	2163.3	2144.1	2149.0	2148.8	2142.8
5°	2123.0	2101.6	2115.4	2120.2	2127.8
7.5°	2044.1	2028.1	2053.2	2071.6	2086.6
10°	1982.8	1968.9	2000.8	2027.9	2047.1
12.5°	1911.7	1899.8	1939.6	1975.5	2001.1
15°	1795.3	1788.9	1837.1	1887.1	1919.4
17.5°	1671.0	1667.8	1723.0	1781.3	1822.7
20°	1586.1	1585.2	1645.7	1706.5	1754.6
22.5°	1500.5	1502.4	1566.1	1629.4	1684.2
25°	1372.1	1375.8	1446.9	1510.0	1576.7
27.5°	1253.4	1255.1	1328.4	1395.1	1466.2
30°	1172.4	1176.8	1248.8	1317.9	1391.9
32.5°	1091.4	1096.7	1167.2	1238.4	1313.9
35°	969.5	974.3	1039.6	1109.8	1188.5
37.5°	844.2	850.5	908.7	974.7	1052.3
40°	763.1	772.5	823.8	886.2	962.1
42.5°	685.1	696.7	744.2	803.5	871.8
45°	581.3	592.5	631.5	679.3	741.4
47.5°	492.0	504.8	534.8	576.0	628.9
50°	441.1	453.3	481.0	511.5	561.4
52.5°	396.5	408.6	433.3	456.8	499.5
55°	334.2	348.1	368.2	382.4	413.7
57.5°	283.2	296.4	312.5	318.7	337.8
60°	249.0	263.9	278.4	277.6	287.9
62.5°	218.0	230.6	245.0	234.9	235.6
65°	167.6	181.6	197.9	173.0	157.1
67.5°	135.5	138.3	155.2	120.6	101.8
70°	120.3	120.3	125.0	93.4	77.6
72.5°	105.9	105.9	101.7	75.9	59.4
75°	84.2	84.2	76.7	52.7	36.0
77.5°	64.9	64.3	58.7	39.2	26.2
80°	52.1	52.1	47.4	31.1	20.8
82.5°	40.7	40.7	36.6	24.2	15.4
85°	23.5	23.5	21.9	14.1	8.5
87.5°	8.3	8.3	7.5	4.5	3.9
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	16.14	17.52	16.51	17.83	18.14	16.76	18.14	17.13	18.45	18.77
	3H	17.12	18.34	17.50	18.67	19.03	17.22	18.45	17.60	18.77	19.14
	4H	17.55	18.69	17.96	19.04	19.43	17.30	18.44	17.70	18.79	19.17
	6H	17.86	18.91	18.28	19.28	19.67	17.31	18.36	17.73	18.73	19.12
	8H	17.99	18.99	18.42	19.38	19.78	17.31	18.30	17.74	18.69	19.10
	12H	18.07	19.03	18.51	19.41	19.84	17.29	18.24	17.72	18.63	19.06
4H	2H	16.63	17.77	17.03	18.12	18.50	17.15	18.29	17.55	18.64	19.02
	3H	17.80	18.73	18.21	19.14	19.54	17.78	18.72	18.19	19.12	19.52
	4H	18.33	19.17	18.77	19.59	20.03	17.91	18.75	18.35	19.17	19.61
	6H	18.75	19.48	19.21	19.92	20.39	17.99	18.71	18.45	19.16	19.62
	8H	18.93	19.61	19.40	20.05	20.52	17.99	18.67	18.46	19.12	19.59
	12H	19.05	19.65	19.54	20.14	20.61	17.99	18.59	18.48	19.07	19.55
8H	4H	18.44	19.12	18.91	19.56	20.03	18.06	18.74	18.53	19.18	19.65
	6H	18.98	19.53	19.48	20.03	20.51	18.21	18.76	18.71	19.26	19.74
	8H	19.24	19.74	19.76	20.25	20.74	18.26	18.76	18.78	19.27	19.76
	12H	19.44	19.88	19.96	20.38	20.95	18.30	18.74	18.81	19.23	19.80
12H	4H	18.42	19.02	18.91	19.50	19.98	18.07	18.67	18.55	19.15	19.62
	6H	18.98	19.48	19.50	19.99	20.48	18.25	18.74	18.77	19.26	19.75
	8H	19.30	19.74	19.81	20.23	20.80	18.35	18.79	18.87	19.29	19.86