

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: P1036375

Luminaire Tested: SQ4R-WB-100D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036375
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_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

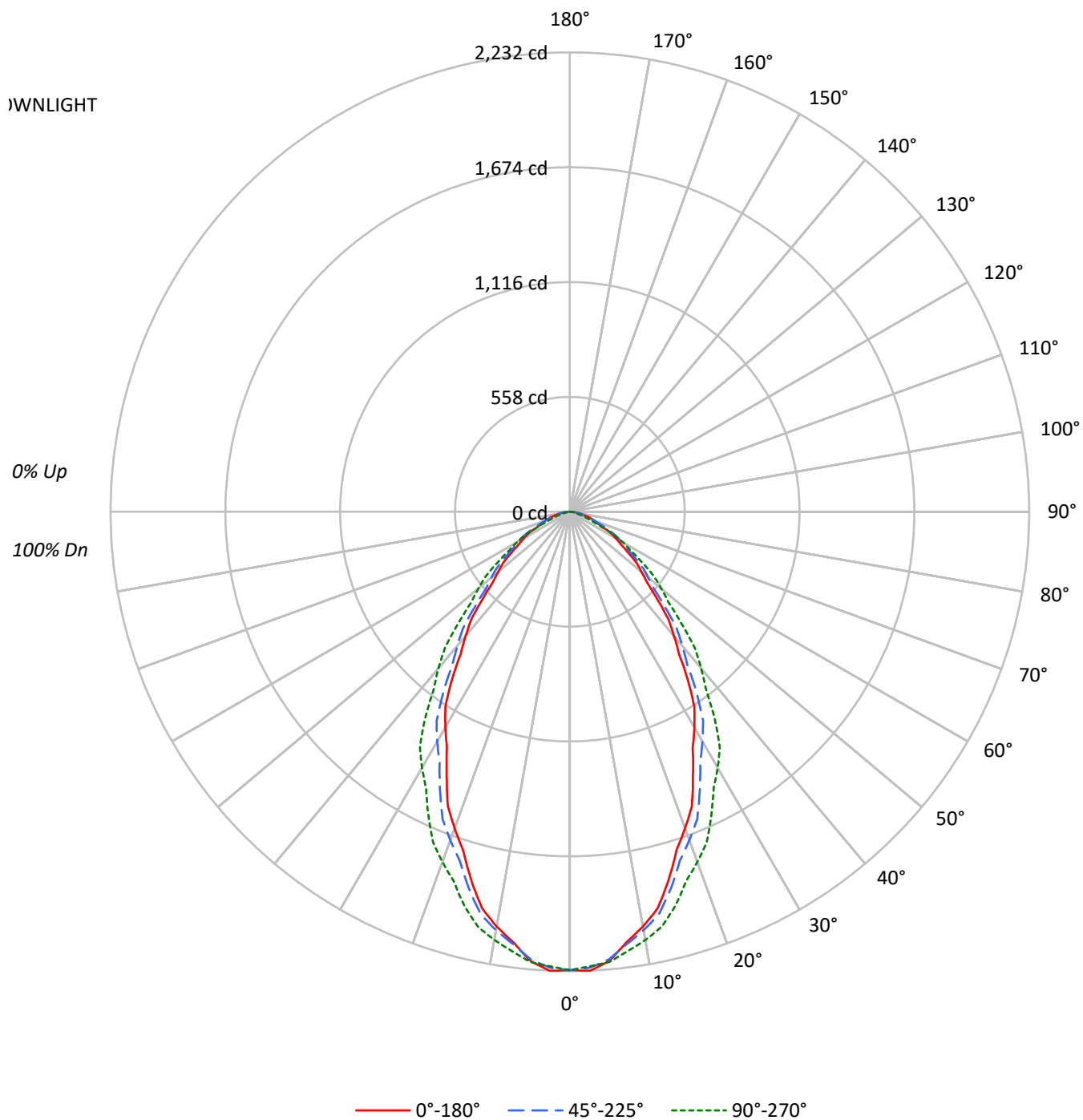
Lumens per Lamp: N/A
Luminaire Lumens: 3245.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	20546	20546	20546
5°	20290	20217	20335
10°	19169	19343	19791
15°	17695	18107	18919
20°	16070	16673	17777
25°	14414	15200	16563
30°	12889	13729	15302
35°	11269	12083	13813
40°	9485	10239	11957
45°	7827	8503	9983
50°	6534	7125	8315
55°	5548	6112	6867
60°	4742	5301	5482
65°	3777	4458	3539
70°	3348	3480	2161
75°	3098	2823	1326
80°	2858	2598	1142
85°	2572	2392	932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9983 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.3	6.3
10°-20°	531.3	16.4
20°-30°	688.2	21.2
30°-40°	673.9	20.8
40°-50°	515.8	15.9
50°-60°	343.7	10.6
60°-70°	187.6	5.8
70°-80°	78.2	2.4
80°-90°	22.1	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°	1423.7	43.9
0°-40°	2097.6	64.6
0°-60°	2957.1	91.1
0°-90°	3245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2227	2227	2227	2227	2227	
5°	2191	2169	2183	2188	2196	204
15°	1853	1846	1896	1947	1981	517
25°	1416	1420	1493	1558	1627	651
35°	1000	1005	1073	1145	1226	622
45°	600	611	652	701	765	468
55°	345	359	380	395	427	313
65°	173	187	204	178	162	180
75°	87	87	79	54	37	93
85°	24	24	23	15	9	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2226.9	2226.9	2226.9	2226.9	2226.9
2.5°	2232.4	2212.5	2217.6	2217.4	2211.2
5°	2190.8	2168.7	2182.9	2187.9	2195.7
7.5°	2109.4	2092.8	2118.7	2137.7	2153.2
10°	2046.1	2031.8	2064.7	2092.6	2112.5
12.5°	1972.7	1960.5	2001.5	2038.6	2065.0
15°	1852.6	1846.0	1895.7	1947.3	1980.7
17.5°	1724.3	1721.0	1778.0	1838.2	1880.9
20°	1636.7	1635.8	1698.2	1761.0	1810.6
22.5°	1548.4	1550.4	1616.1	1681.4	1738.0
25°	1415.9	1419.7	1493.1	1558.2	1627.0
27.5°	1293.4	1295.2	1370.8	1439.6	1513.0
30°	1209.8	1214.4	1288.7	1360.0	1436.3
32.5°	1126.2	1131.7	1204.5	1277.9	1355.8
35°	1000.5	1005.4	1072.8	1145.2	1226.4
37.5°	871.1	877.7	937.7	1005.8	1085.9
40°	787.5	797.2	850.1	914.5	992.8
42.5°	707.0	718.9	768.0	829.1	899.6
45°	599.9	611.4	651.7	701.0	765.1
47.5°	507.7	520.9	551.9	594.4	649.0
50°	455.2	467.8	496.4	527.8	579.3
52.5°	409.2	421.6	447.1	471.4	515.4
55°	344.9	359.2	380.0	394.6	426.9
57.5°	292.2	305.9	322.5	328.9	348.6
60°	257.0	272.3	287.3	286.5	297.1
62.5°	225.0	238.0	252.8	242.4	243.1
65°	173.0	187.4	204.2	178.5	162.1
67.5°	139.8	142.7	160.2	124.5	105.1
70°	124.1	124.1	129.0	96.4	80.1
72.5°	109.3	109.3	104.9	78.3	61.3
75°	86.9	86.9	79.2	54.4	37.2
77.5°	67.0	66.4	60.6	40.5	27.0
80°	53.8	53.8	48.9	32.1	21.5
82.5°	42.0	42.0	37.8	25.0	15.9
85°	24.3	24.3	22.6	14.6	8.8
87.5°	8.6	8.6	7.7	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	16.25	17.62	16.62	17.94	18.25	16.87	18.25	17.24	18.56	18.88
	3H	17.23	18.45	17.60	18.78	19.14	17.33	18.56	17.71	18.88	19.25
	4H	17.66	18.80	18.06	19.15	19.54	17.41	18.55	17.81	18.90	19.28
	6H	17.97	19.02	18.39	19.39	19.78	17.42	18.47	17.84	18.84	19.23
	8H	18.10	19.10	18.53	19.49	19.89	17.42	18.41	17.85	18.80	19.21
	12H	18.18	19.14	18.62	19.52	19.95	17.40	18.35	17.83	18.74	19.17
4H	2H	16.74	17.88	17.14	18.23	18.61	17.26	18.40	17.66	18.75	19.13
	3H	17.91	18.84	18.32	19.25	19.65	17.89	18.83	18.30	19.23	19.63
	4H	18.44	19.28	18.88	19.70	20.14	18.02	18.86	18.46	19.28	19.72
	6H	18.86	19.59	19.32	20.03	20.50	18.10	18.82	18.56	19.27	19.73
	8H	19.04	19.72	19.51	20.16	20.63	18.10	18.78	18.57	19.23	19.70
	12H	19.16	19.76	19.65	20.25	20.72	18.10	18.70	18.59	19.18	19.66
8H	4H	18.55	19.23	19.02	19.67	20.14	18.17	18.85	18.64	19.29	19.76
	6H	19.09	19.64	19.59	20.14	20.62	18.32	18.87	18.82	19.37	19.85
	8H	19.35	19.85	19.87	20.36	20.85	18.37	18.87	18.89	19.38	19.87
	12H	19.55	19.99	20.07	20.49	21.06	18.41	18.85	18.92	19.34	19.91
12H	4H	18.53	19.13	19.02	19.61	20.09	18.18	18.78	18.66	19.26	19.73
	6H	19.09	19.59	19.61	20.10	20.59	18.36	18.85	18.88	19.37	19.86
	8H	19.41	19.85	19.92	20.34	20.91	18.46	18.90	18.98	19.40	19.97