

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: P854448

Luminaire Tested: SQ2-WBN-0U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854448
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-0U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

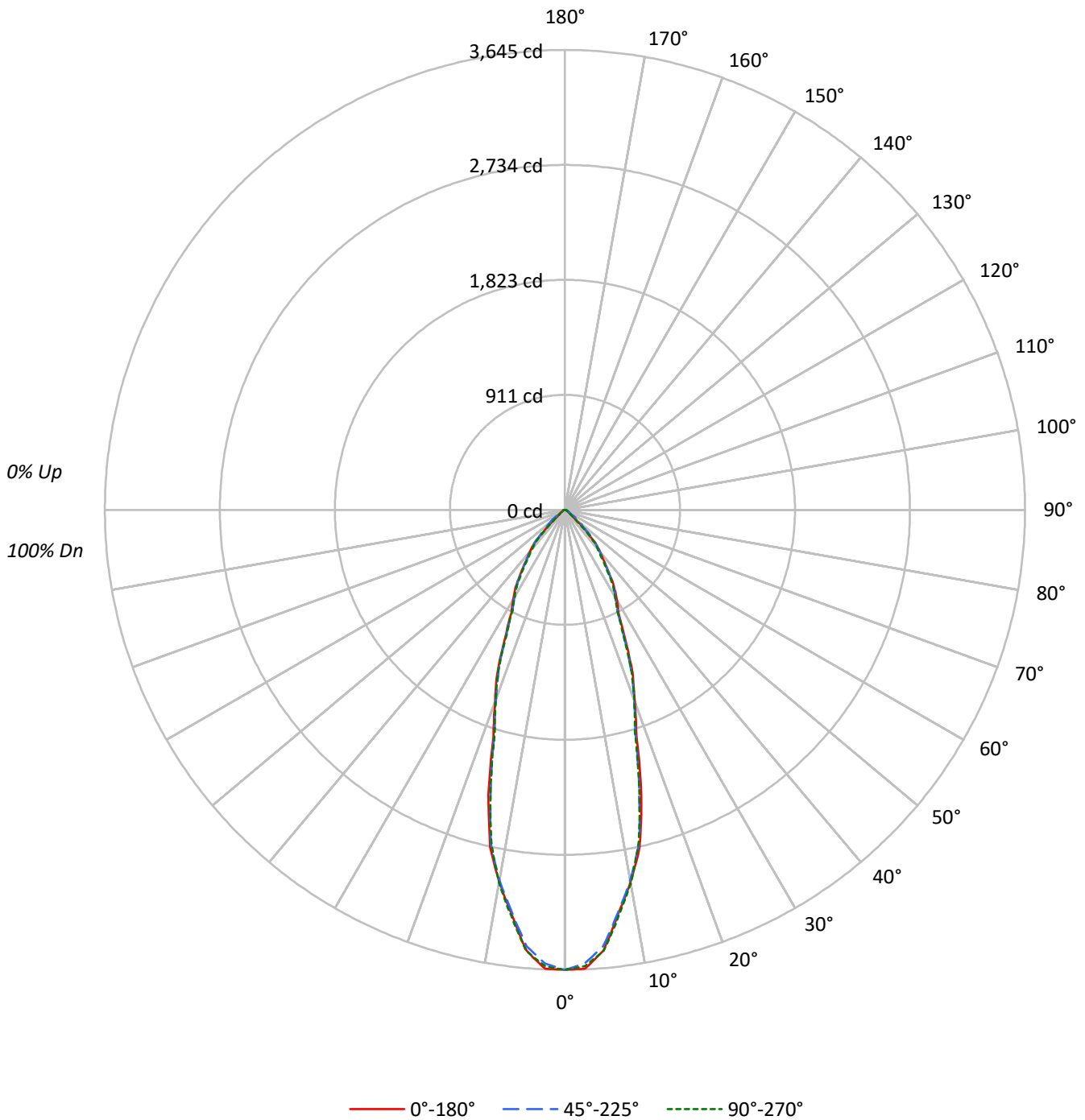
Lumens per Lamp: N/A
Luminaire Lumens: 2116.7 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 18.1
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81
4	97	90	84	80	95	88	83	79	86	82	78	84	81	78	82	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	57	55
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58855	58855	58855
5°	56825	56260	56888
10°	49118	48885	49234
15°	39086	37854	38004
20°	27766	27398	27600
25°	19976	19584	19445
30°	15264	14853	14816
35°	11982	11777	11471
40°	9078	8953	8519
45°	5078	6069	4532
50°	1786	3735	1575
55°	1092	2038	1039
60°	836	1066	772
65°	764	791	718
70°	732	732	670
75°	686	686	643
80°	604	604	604
85°	593	482	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.4	14.9
10°-20°	628.9	29.7
20°-30°	520.8	24.6
30°-40°	374.7	17.7
40°-50°	190.9	9.0
50°-60°	49.7	2.3
60°-70°	20.6	1.0
70°-80°	11.4	0.5
80°-90°	3.4	0.2
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°	1466.0	69.3
0°-40°	1840.7	87.0
0°-60°	2081.2	98.3
0°-90°	2116.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2116.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3645	3645	3645	3645	3645	
5°	3506	3501	3471	3521	3510	316
15°	2338	2312	2265	2281	2274	635
25°	1121	1119	1099	1090	1092	527
35°	608	612	598	588	582	381
45°	222	256	266	247	198	178
55°	39	45	72	42	37	38
65°	20	21	21	19	19	20
75°	11	11	11	10	10	12
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3645.2	3645.2	3645.2	3645.2	3645.2
2.5°	3639.5	3633.4	3598.6	3627.4	3620.3
5°	3506.1	3501.1	3471.2	3521.4	3510.0
7.5°	3230.8	3235.1	3217.6	3261.9	3249.8
10°	2995.9	3007.3	2981.7	3046.0	3003.0
12.5°	2736.8	2729.4	2711.7	2721.6	2697.8
15°	2338.3	2311.7	2264.6	2280.6	2273.6
17.5°	1883.4	1893.7	1852.8	1851.1	1843.2
20°	1616.0	1619.1	1594.6	1607.5	1606.3
22.5°	1400.8	1401.4	1370.1	1389.0	1377.6
25°	1121.3	1119.4	1099.3	1089.6	1091.5
27.5°	919.5	911.7	896.5	902.9	898.2
30°	818.7	812.3	796.7	800.4	794.7
32.5°	728.1	728.4	712.4	710.4	706.3
35°	607.9	611.6	597.5	587.7	582.0
37.5°	500.5	504.0	492.1	477.8	473.0
40°	430.7	433.2	424.8	408.0	404.2
42.5°	354.6	365.2	357.1	341.1	332.8
45°	222.4	256.0	265.8	247.2	198.5
47.5°	112.5	158.9	189.6	140.0	92.2
50°	71.1	103.4	148.7	84.2	62.7
52.5°	54.6	71.1	118.7	62.2	50.3
55°	38.8	45.1	72.4	41.9	36.9
57.5°	30.0	33.5	43.3	31.7	28.6
60°	25.9	28.4	33.0	27.1	23.9
62.5°	23.3	24.8	26.8	23.0	21.9
65°	20.0	20.7	20.7	19.4	18.8
67.5°	17.1	17.7	17.6	16.9	16.3
70°	15.5	16.2	15.5	14.9	14.2
72.5°	13.5	14.1	13.5	13.3	12.7
75°	11.0	11.0	11.0	10.3	10.3
77.5°	8.5	8.7	8.0	8.0	7.5
80°	6.5	7.1	6.5	6.5	6.5
82.5°	5.4	5.6	4.9	4.9	4.9
85°	3.2	3.2	2.6	3.2	2.6
87.5°	1.0	1.0	1.0	1.0	1.0
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	5.35	6.41	5.72	6.73	7.04	4.97	6.03	5.33	6.34	6.66
	3H	6.41	7.34	6.79	7.68	8.05	5.98	6.91	6.36	7.24	7.61
	4H	6.85	7.71	7.26	8.07	8.45	6.41	7.27	6.82	7.63	8.01
	6H	7.17	7.96	7.59	8.34	8.73	6.75	7.54	7.17	7.91	8.31
	8H	7.28	8.02	7.71	8.41	8.82	6.86	7.60	7.30	7.99	8.40
	12H	7.35	8.05	7.78	8.44	8.87	6.91	7.62	7.35	8.01	8.44
4H	2H	5.60	6.46	6.00	6.81	7.20	5.27	6.13	5.67	6.48	6.87
	3H	6.90	7.60	7.32	8.01	8.42	6.52	7.22	6.94	7.63	8.04
	4H	7.47	8.09	7.90	8.51	8.96	7.07	7.70	7.51	8.12	8.57
	6H	7.93	8.46	8.40	8.91	9.38	7.54	8.08	8.01	8.53	9.00
	8H	8.08	8.57	8.55	9.03	9.50	7.69	8.19	8.17	8.64	9.12
	12H	8.19	8.62	8.68	9.11	9.59	7.79	8.22	8.28	8.71	9.19
8H	4H	7.61	8.11	8.08	8.56	9.03	7.26	7.75	7.73	8.20	8.68
	6H	8.19	8.59	8.70	9.09	9.58	7.84	8.24	8.35	8.74	9.23
	8H	8.43	8.78	8.96	9.30	9.80	8.07	8.43	8.61	8.95	9.45
	12H	8.62	8.93	9.14	9.43	10.01	8.25	8.56	8.78	9.06	9.64
12H	4H	7.59	8.03	8.08	8.51	8.99	7.25	7.68	7.74	8.17	8.65
	6H	8.20	8.56	8.74	9.08	9.58	7.87	8.22	8.40	8.74	9.24
	8H	8.49	8.80	9.01	9.30	9.87	8.15	8.46	8.67	8.96	9.54