

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: P854372

Luminaire Tested: SQ2-WBM-0U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854372
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-0U-100D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

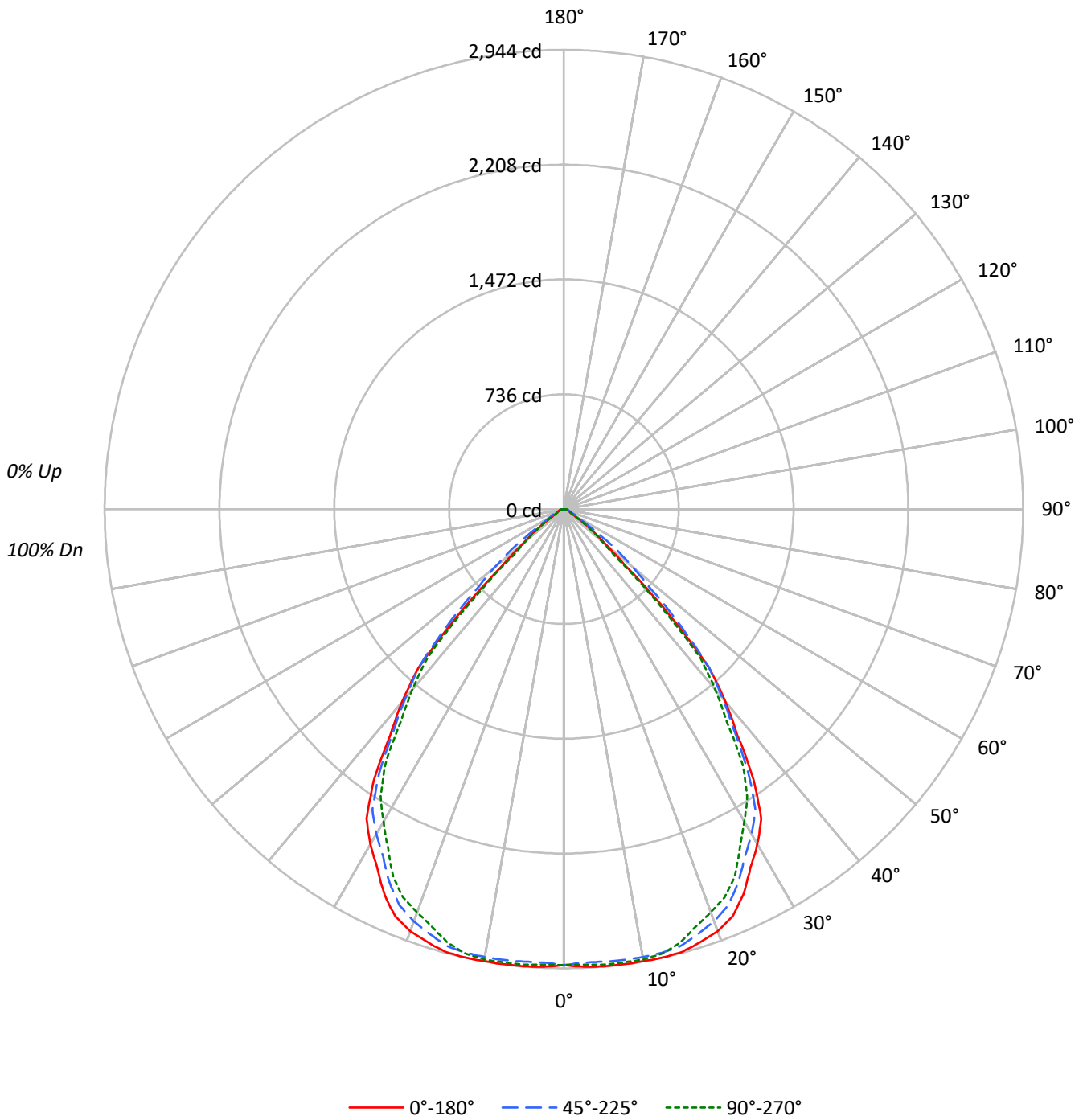
Lumens per Lamp: N/A
Luminaire Lumens: 4612.3 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.1
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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	47188	47188	47188
5°	47694	47196	47506
10°	48245	47812	48072
15°	49100	48463	48092
20°	49471	48326	47254
25°	48524	47110	46205
30°	46245	44845	43128
35°	41843	40635	39364
40°	33976	33285	31813
45°	21760	24176	19564
50°	8528	14320	7679
55°	4020	6550	4020
60°	1912	3178	1741
65°	1738	1819	1616
70°	1648	1699	1548
75°	1647	1647	1516
80°	1571	1571	1478
85°	1371	1371	1371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 24336 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.0	6.1
10°-20°	820.4	17.8
20°-30°	1217.6	26.4
30°-40°	1264.8	27.4
40°-50°	761.1	16.5
50°-60°	182.5	4.0
60°-70°	49.5	1.1
70°-80°	27.8	0.6
80°-90°	8.7	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°	2318.0	50.3
0°-40°	3582.8	77.7
0°-60°	4526.4	98.1
0°-90°	4612.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4612.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2923	2923	2923	2923	2923	
5°	2943	2936	2912	2942	2931	281
15°	2937	2958	2899	2898	2877	828
25°	2724	2742	2644	2609	2594	1246
35°	2123	2103	2062	2020	1997	1300
45°	953	1066	1059	1008	857	728
55°	143	161	233	155	143	147
65°	46	46	48	45	42	45
75°	26	28	26	25	24	27
85°	7	8	7	7	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2922.6	2922.6	2922.6	2922.6	2922.6
2.5°	2937.0	2930.4	2909.1	2932.5	2922.6
5°	2942.7	2935.5	2912.0	2942.5	2931.1
7.5°	2943.6	2944.0	2916.3	2943.1	2930.4
10°	2942.7	2948.9	2916.3	2941.4	2932.1
12.5°	2943.6	2953.9	2912.9	2931.2	2916.9
15°	2937.4	2958.1	2899.3	2897.8	2877.1
17.5°	2910.6	2936.2	2856.6	2832.1	2807.7
20°	2879.2	2904.1	2812.6	2777.1	2750.2
22.5°	2825.1	2850.7	2750.0	2712.1	2692.7
25°	2723.8	2742.4	2644.4	2609.2	2593.6
27.5°	2590.5	2596.5	2511.1	2470.1	2443.7
30°	2480.5	2485.6	2405.4	2358.8	2313.3
32.5°	2354.4	2345.5	2284.4	2233.6	2186.4
35°	2122.9	2103.3	2061.6	2019.8	1997.1
37.5°	1829.5	1824.6	1794.2	1744.1	1716.8
40°	1612.0	1628.6	1579.2	1542.5	1509.4
42.5°	1379.3	1419.9	1377.0	1325.2	1297.0
45°	953.0	1065.8	1058.8	1007.8	856.8
47.5°	529.9	671.8	757.2	593.9	439.4
50°	339.5	436.8	570.1	358.4	305.7
52.5°	238.0	291.4	421.2	254.1	225.3
55°	142.8	161.4	232.7	155.2	142.8
57.5°	86.3	104.3	132.2	104.1	84.4
60°	59.2	74.7	98.4	69.5	53.9
62.5°	51.6	57.2	76.4	54.5	48.9
65°	45.5	46.5	47.6	45.4	42.3
67.5°	39.1	41.2	40.2	39.3	37.0
70°	34.9	37.0	36.0	35.9	32.8
72.5°	31.5	33.6	32.6	31.7	29.4
75°	26.4	27.5	26.4	25.4	24.3
77.5°	20.3	21.3	21.2	20.3	19.3
80°	16.9	18.0	16.9	16.9	15.9
82.5°	13.5	13.7	13.5	12.7	12.5
85°	7.4	8.4	7.4	7.4	7.4
87.5°	2.5	2.5	2.5	2.5	2.5
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	10.47	11.65	10.83	11.96	12.28	10.19	11.37	10.55	11.68	11.99
	3H	11.00	12.04	11.39	12.37	12.74	10.72	11.75	11.10	12.08	12.45
	4H	11.29	12.25	11.69	12.60	12.99	10.98	11.94	11.38	12.29	12.68
	6H	11.53	12.41	11.95	12.79	13.18	11.21	12.09	11.62	12.46	12.86
	8H	11.62	12.45	12.05	12.84	13.24	11.29	12.12	11.72	12.51	12.92
	12H	11.66	12.45	12.09	12.84	13.27	11.33	12.13	11.77	12.51	12.94
4H	2H	10.52	11.48	10.92	11.83	12.22	10.26	11.22	10.67	11.58	11.96
	3H	11.27	12.05	11.69	12.46	12.86	11.01	11.79	11.43	12.20	12.60
	4H	11.69	12.38	12.13	12.80	13.25	11.40	12.09	11.83	12.51	12.96
	6H	12.08	12.67	12.54	13.12	13.59	11.76	12.36	12.23	12.80	13.28
	8H	12.21	12.76	12.68	13.21	13.68	11.89	12.44	12.36	12.89	13.36
	12H	12.30	12.78	12.78	13.27	13.74	11.98	12.46	12.47	12.95	13.42
8H	4H	11.78	12.34	12.26	12.78	13.26	11.51	12.07	11.99	12.51	12.99
	6H	12.29	12.74	12.79	13.24	13.72	11.99	12.44	12.50	12.94	13.43
	8H	12.49	12.90	13.02	13.42	13.91	12.19	12.59	12.72	13.11	13.61
	12H	12.66	13.02	13.18	13.51	14.09	12.35	12.71	12.87	13.20	13.78
12H	4H	11.77	12.25	12.26	12.74	13.21	11.50	11.99	11.99	12.48	12.95
	6H	12.29	12.70	12.82	13.22	13.71	12.01	12.41	12.54	12.93	13.43
	8H	12.55	12.91	13.07	13.41	13.98	12.26	12.62	12.78	13.11	13.69