

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: P854364

Luminaire Tested: SQ2-WBM-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854364
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

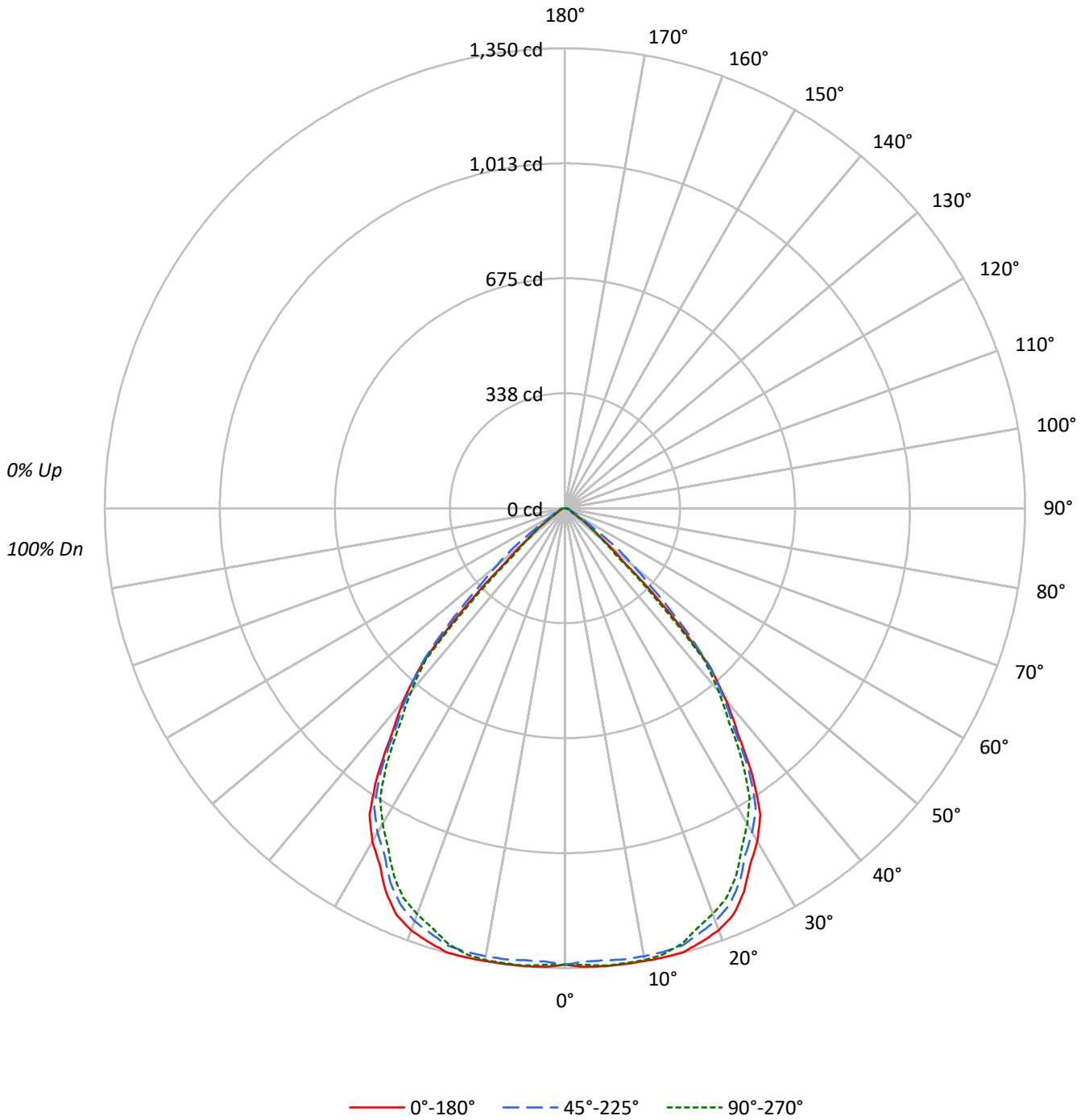
Lumens per Lamp: N/A
Luminaire Lumens: 2108.7 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	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	85	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	65	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	61	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°	21632	21632	21632
5°	21870	21590	21840
10°	22123	21887	22076
15°	22539	22218	22121
20°	22656	22161	21780
25°	22137	21590	21178
30°	21052	20495	19939
35°	18920	18559	17895
40°	15548	15224	14779
45°	9839	11047	8873
50°	3818	6498	3504
55°	1841	2950	1869
60°	869	1460	807
65°	772	844	734
70°	774	774	727
75°	717	780	661
80°	716	716	623
85°	704	704	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11047 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	6.1
10°-20°	376.4	17.9
20°-30°	557.4	26.4
30°-40°	577.4	27.4
40°-50°	347.0	16.5
50°-60°	83.0	3.9
60°-70°	22.6	1.1
70°-80°	12.6	0.6
80°-90°	4.0	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°	1062.1	50.4
0°-40°	1639.5	77.7
0°-60°	2069.5	98.1
0°-90°	2108.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2108.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1349	1345	1332	1349	1348	129
15°	1348	1357	1329	1330	1323	380
25°	1243	1254	1212	1196	1189	568
35°	960	958	942	924	908	590
45°	431	484	484	458	389	329
55°	65	75	105	70	66	67
65°	20	21	22	20	19	21
75°	12	12	12	12	11	13
85°	4	4	4	4	3	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1339.8	1339.8	1339.8	1339.8	1339.8
2.5°	1347.5	1343.0	1332.1	1344.3	1341.3
5°	1349.4	1344.7	1332.1	1349.4	1347.5
7.5°	1349.4	1346.4	1335.7	1350.1	1347.3
10°	1349.4	1349.4	1335.0	1349.3	1346.5
12.5°	1350.2	1353.9	1334.2	1344.7	1340.4
15°	1348.4	1356.9	1329.2	1330.0	1323.4
17.5°	1334.0	1347.2	1309.0	1301.3	1292.3
20°	1318.6	1331.8	1289.8	1275.2	1267.6
22.5°	1291.7	1305.6	1260.5	1246.7	1238.4
25°	1242.6	1253.9	1211.9	1196.3	1188.8
27.5°	1177.6	1182.7	1146.3	1131.7	1123.4
30°	1129.2	1128.2	1099.3	1080.8	1069.5
32.5°	1066.8	1068.1	1041.6	1023.8	1008.7
35°	959.9	958.0	941.6	923.9	907.9
37.5°	832.3	833.7	816.2	797.4	791.2
40°	737.7	740.5	722.3	702.1	701.2
42.5°	622.3	643.2	630.0	608.9	605.0
45°	430.9	483.5	483.8	458.2	388.6
47.5°	239.7	305.5	344.9	272.0	203.3
50°	152.0	195.2	258.7	163.0	139.5
52.5°	108.1	129.5	191.8	116.2	101.8
55°	65.4	74.8	104.8	70.1	66.4
57.5°	40.0	48.3	61.4	47.5	39.6
60°	26.9	34.5	45.2	30.6	25.0
62.5°	23.9	26.1	35.2	24.6	22.7
65°	20.2	21.1	22.1	20.2	19.2
67.5°	17.9	18.8	18.7	17.9	16.9
70°	16.4	17.3	16.4	16.3	15.4
72.5°	14.8	15.0	14.8	14.0	13.8
75°	11.5	12.5	12.5	11.5	10.6
77.5°	9.2	10.0	9.2	9.2	8.3
80°	7.7	7.7	7.7	7.7	6.7
82.5°	6.2	6.2	6.2	6.1	5.2
85°	3.8	3.8	3.8	3.8	2.9
87.5°	1.5	1.5	1.5	0.8	0.8
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	7.80	8.98	8.16	9.29	9.61	7.39	8.57	7.76	8.88	9.20
	3H	8.34	9.38	8.72	9.71	10.07	7.94	8.97	8.32	9.30	9.67
	4H	8.61	9.57	9.01	9.92	10.30	8.19	9.15	8.59	9.50	9.89
	6H	8.83	9.71	9.25	10.08	10.48	8.39	9.27	8.81	9.64	10.04
	8H	8.91	9.74	9.35	10.13	10.54	8.46	9.29	8.89	9.68	10.09
	12H	8.97	9.76	9.40	10.15	10.58	8.49	9.28	8.93	9.67	10.10
4H	2H	7.86	8.82	8.26	9.17	9.55	7.48	8.44	7.89	8.80	9.18
	3H	8.61	9.39	9.03	9.80	10.20	8.25	9.02	8.66	9.43	9.83
	4H	9.01	9.70	9.44	10.12	10.57	8.62	9.31	9.06	9.73	10.18
	6H	9.36	9.96	9.83	10.41	10.88	8.96	9.56	9.43	10.00	10.47
	8H	9.49	10.05	9.97	10.49	10.97	9.07	9.63	9.55	10.08	10.55
	12H	9.59	10.08	10.08	10.57	11.04	9.15	9.63	9.64	10.12	10.59
8H	4H	9.10	9.66	9.58	10.11	10.58	8.75	9.30	9.22	9.75	10.22
	6H	9.57	10.02	10.07	10.52	11.00	9.21	9.66	9.72	10.16	10.64
	8H	9.77	10.17	10.29	10.69	11.18	9.40	9.80	9.92	10.32	10.81
	12H	9.95	10.31	10.47	10.80	11.38	9.55	9.91	10.07	10.40	10.98
12H	4H	9.09	9.57	9.58	10.06	10.53	8.74	9.22	9.23	9.71	10.19
	6H	9.58	9.98	10.10	10.50	10.99	9.23	9.63	9.75	10.15	10.64
	8H	9.83	10.19	10.35	10.68	11.26	9.47	9.83	9.99	10.33	10.90