

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: P853530

Luminaire Tested: SQ2-BBM-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853530
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

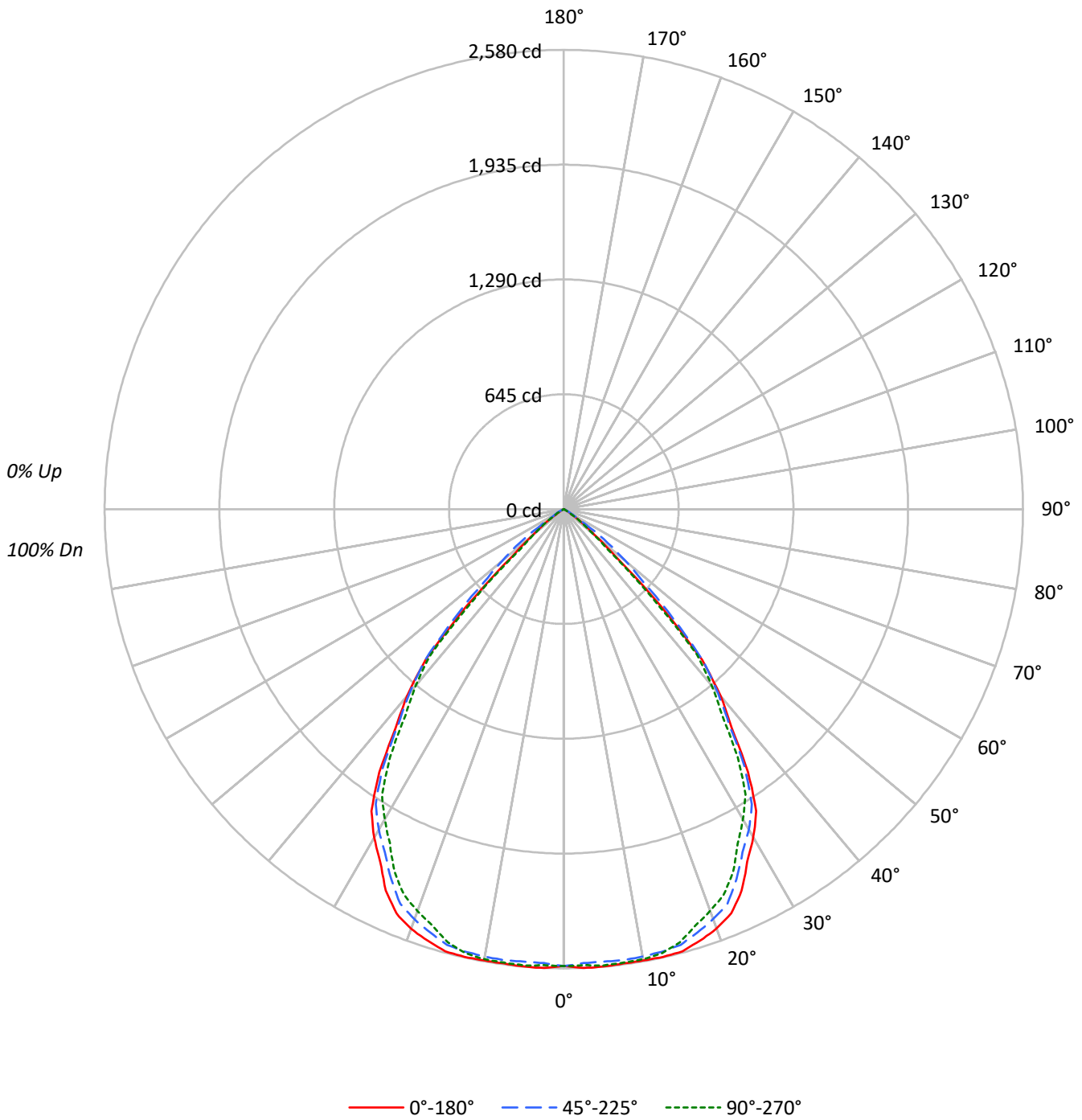
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3840.4 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	106	101	96	93	104	99	95	92	96	92	89	93	90	88	90	88	86	84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	59	58
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41446	41446	41446
5°	41807	41355	41699
10°	42212	41833	42102
15°	42989	42362	42104
20°	43099	42141	41282
25°	42134	40882	40077
30°	39718	38768	37530
35°	35583	34958	33555
40°	28867	28380	27265
45°	17568	19920	15769
50°	5604	11258	5122
55°	1948	4087	2004
60°	155	1179	32
65°	0	73	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19920 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.3	6.4
10°-20°	717.4	18.7
20°-30°	1057.4	27.5
30°-40°	1082.9	28.2
40°-50°	624.0	16.2
50°-60°	109.3	2.8
60°-70°	4.2	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	2020.1	52.6
0°-40°	3103.0	80.8
0°-60°	3836.3	99.9
0°-90°	3840.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3840.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2567	2567	2567	2567	2567	
5°	2580	2574	2552	2582	2573	246
15°	2572	2592	2534	2534	2519	724
25°	2365	2383	2295	2274	2250	1079
35°	1805	1795	1774	1731	1702	1108
45°	769	861	872	829	691	589
55°	69	83	145	79	71	77
65°	0	1	2	1	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2567.0	2567.0	2567.0	2567.0	2567.0
2.5°	2580.1	2573.3	2553.2	2573.8	2564.7
5°	2579.5	2573.9	2551.6	2582.2	2572.8
7.5°	2574.7	2573.4	2556.3	2580.3	2569.5
10°	2574.7	2579.4	2551.6	2576.5	2568.0
12.5°	2576.3	2587.0	2547.0	2566.4	2554.1
15°	2571.8	2592.5	2534.3	2534.0	2518.9
17.5°	2543.0	2567.4	2494.1	2474.2	2454.1
20°	2508.4	2536.6	2452.6	2424.2	2402.6
22.5°	2458.4	2485.8	2400.3	2368.0	2346.4
25°	2365.1	2382.9	2294.8	2274.1	2249.6
27.5°	2232.7	2243.2	2174.8	2138.9	2116.9
30°	2130.4	2137.9	2079.4	2040.3	2013.0
32.5°	2011.9	2008.9	1966.3	1926.5	1900.7
35°	1805.3	1794.9	1773.6	1730.6	1702.4
37.5°	1551.2	1549.3	1528.1	1490.9	1461.4
40°	1369.6	1367.7	1346.5	1313.4	1293.6
42.5°	1149.5	1185.3	1160.3	1119.6	1107.4
45°	769.4	860.7	872.4	828.8	690.6
47.5°	397.0	518.9	607.5	473.2	327.8
50°	223.1	313.4	448.2	253.7	203.9
52.5°	145.4	189.1	312.8	162.0	137.0
55°	69.2	83.4	145.2	78.7	71.2
57.5°	24.8	38.4	63.5	38.9	24.0
60°	4.8	16.1	36.5	11.3	1.0
62.5°	1.7	4.7	21.2	3.0	1.0
65°	0.0	0.9	1.9	0.9	0.0
67.5°	0.0	0.8	0.8	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	5.01	6.14	5.37	6.45	6.77	4.48	5.61	4.84	5.92	6.24
	3H	4.84	5.83	5.22	6.16	6.53	4.31	5.30	4.69	5.63	6.00
	4H	4.75	5.67	5.16	6.02	6.41	4.22	5.14	4.63	5.49	5.87
	6H	4.65	5.49	5.07	5.86	6.26	4.12	4.96	4.54	5.33	5.73
	8H	4.60	5.39	5.04	5.78	6.19	4.07	4.86	4.51	5.25	5.66
	12H	4.55	5.30	4.98	5.68	6.12	4.02	4.77	4.45	5.15	5.58
4H	2H	4.76	5.68	5.17	6.03	6.42	4.23	5.15	4.64	5.50	5.89
	3H	4.59	5.32	5.00	5.73	6.13	4.06	4.79	4.47	5.20	5.60
	4H	4.48	5.13	4.91	5.55	6.00	3.95	4.60	4.38	5.02	5.47
	6H	4.38	4.93	4.84	5.38	5.86	3.85	4.40	4.31	4.85	5.33
	8H	4.31	4.83	4.78	5.28	5.75	3.78	4.30	4.25	4.75	5.22
	12H	4.25	4.70	4.74	5.19	5.67	3.72	4.17	4.21	4.66	5.14
8H	4H	4.31	4.83	4.78	5.28	5.75	3.78	4.30	4.25	4.75	5.22
	6H	4.19	4.61	4.69	5.11	5.59	3.66	4.08	4.16	4.58	5.06
	8H	4.11	4.49	4.64	5.01	5.51	3.58	3.96	4.11	4.48	4.98
	12H	4.06	4.39	4.58	4.89	5.47	3.53	3.86	4.05	4.36	4.94
12H	4H	4.25	4.70	4.74	5.19	5.67	3.72	4.17	4.21	4.66	5.14
	6H	4.11	4.49	4.64	5.01	5.51	3.58	3.96	4.11	4.48	4.98
	8H	4.06	4.39	4.58	4.89	5.47	3.53	3.86	4.05	4.36	4.94