

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: P853531

Luminaire Tested: SQ2-BBM-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853531
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-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

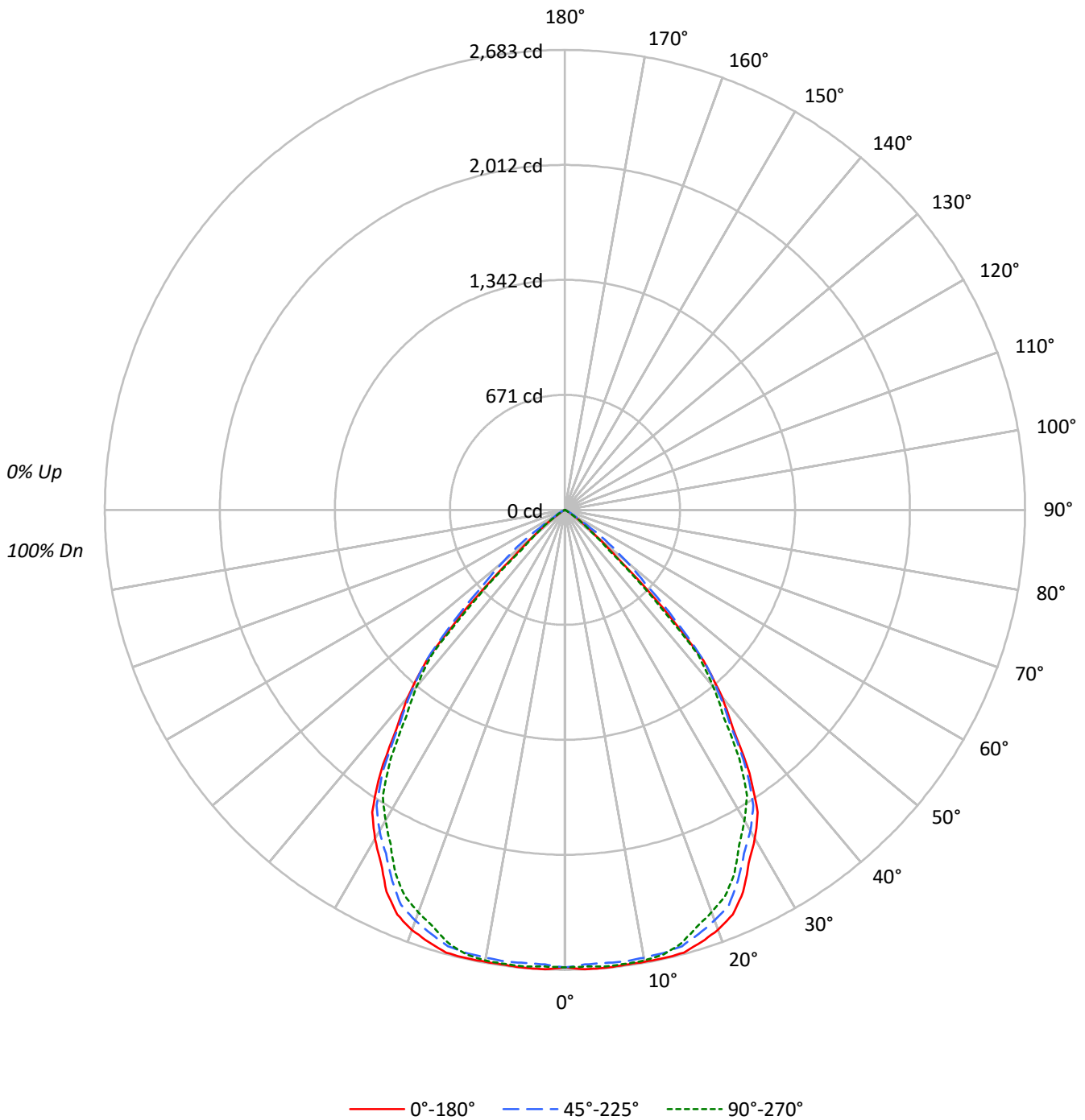
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3993.0 lumens
Efficiency: N/A
Efficacy: 104.8 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°	43093	43093	43093
5°	43469	42999	43355
10°	43889	43496	43774
15°	44697	44045	43778
20°	44811	43814	42921
25°	43807	42507	41669
30°	41296	40307	39021
35°	36996	36346	34887
40°	30014	29508	28348
45°	18267	20710	16395
50°	5827	11705	5325
55°	2027	4251	2083
60°	161	1227	32
65°	0	76	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: 20710 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.1	6.4
10°-20°	745.9	18.7
20°-30°	1099.4	27.5
30°-40°	1125.9	28.2
40°-50°	648.8	16.2
50°-60°	113.6	2.8
60°-70°	4.4	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°	2100.4	52.6
0°-40°	3226.2	80.8
0°-60°	3988.6	99.9
0°-90°	3993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2682	2676	2653	2685	2675	256
15°	2674	2696	2635	2635	2619	753
25°	2459	2478	2386	2364	2339	1122
35°	1877	1866	1844	1799	1770	1152
45°	800	895	907	862	718	612
55°	72	87	151	82	74	80
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°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2682.6	2675.6	2654.6	2676.0	2666.6
5°	2682.0	2676.1	2653.0	2684.8	2675.0
7.5°	2677.0	2675.6	2657.8	2682.7	2671.6
10°	2677.0	2681.9	2653.0	2678.8	2670.0
12.5°	2678.6	2689.7	2648.2	2668.3	2655.6
15°	2674.0	2695.5	2635.0	2634.6	2619.0
17.5°	2644.0	2669.4	2593.2	2572.5	2551.6
20°	2608.0	2637.3	2550.0	2520.5	2498.0
22.5°	2556.0	2584.6	2495.6	2462.1	2439.6
25°	2459.0	2477.6	2386.0	2364.4	2339.0
27.5°	2321.4	2332.4	2261.2	2223.9	2201.0
30°	2215.0	2222.8	2162.0	2121.4	2093.0
32.5°	2091.8	2088.7	2044.4	2003.0	1976.2
35°	1877.0	1866.2	1844.0	1799.3	1770.0
37.5°	1612.8	1610.8	1588.8	1550.1	1519.4
40°	1424.0	1422.0	1400.0	1365.5	1345.0
42.5°	1195.2	1232.4	1206.4	1164.1	1151.4
45°	800.0	894.8	907.0	861.7	718.0
47.5°	412.8	539.5	631.6	492.0	340.8
50°	232.0	325.9	466.0	263.8	212.0
52.5°	151.2	196.6	325.2	168.4	142.4
55°	72.0	86.7	151.0	81.8	74.0
57.5°	25.8	39.9	66.0	40.4	25.0
60°	5.0	16.7	38.0	11.8	1.0
62.5°	1.8	4.9	22.0	3.2	1.0
65°	0.0	1.0	2.0	1.0	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	5.14	6.27	5.51	6.59	6.90	4.61	5.74	4.98	6.06	6.37
	3H	4.97	5.96	5.36	6.30	6.66	4.45	5.44	4.83	5.77	6.13
	4H	4.89	5.80	5.29	6.15	6.54	4.36	5.27	4.76	5.62	6.01
	6H	4.79	5.62	5.21	6.00	6.39	4.26	5.10	4.68	5.47	5.86
	8H	4.74	5.52	5.17	5.92	6.32	4.21	4.99	4.64	5.39	5.79
	12H	4.68	5.44	5.12	5.82	6.25	4.15	4.91	4.59	5.29	5.72
4H	2H	4.90	5.81	5.30	6.16	6.55	4.37	5.28	4.77	5.63	6.02
	3H	4.72	5.46	5.14	5.86	6.27	4.19	4.93	4.61	5.34	5.74
	4H	4.61	5.26	5.05	5.69	6.13	4.08	4.74	4.52	5.16	5.61
	6H	4.51	5.07	4.98	5.52	5.99	3.98	4.54	4.45	4.99	5.46
	8H	4.44	4.96	4.92	5.41	5.89	3.91	4.44	4.39	4.89	5.36
	12H	4.38	4.84	4.87	5.32	5.80	3.85	4.31	4.34	4.80	5.27
8H	4H	4.44	4.96	4.92	5.41	5.89	3.91	4.44	4.39	4.89	5.36
	6H	4.32	4.74	4.83	5.24	5.73	3.79	4.21	4.30	4.72	5.20
	8H	4.25	4.63	4.78	5.15	5.64	3.72	4.10	4.25	4.62	5.11
	12H	4.19	4.53	4.71	5.02	5.60	3.66	4.00	4.18	4.49	5.07
12H	4H	4.38	4.84	4.87	5.32	5.80	3.85	4.31	4.34	4.80	5.27
	6H	4.25	4.63	4.78	5.15	5.64	3.72	4.10	4.25	4.62	5.11
	8H	4.19	4.53	4.71	5.02	5.60	3.66	4.00	4.18	4.49	5.07