

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: P853535

Luminaire Tested: SQ2-BBM-125D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853535
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-125D-940-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

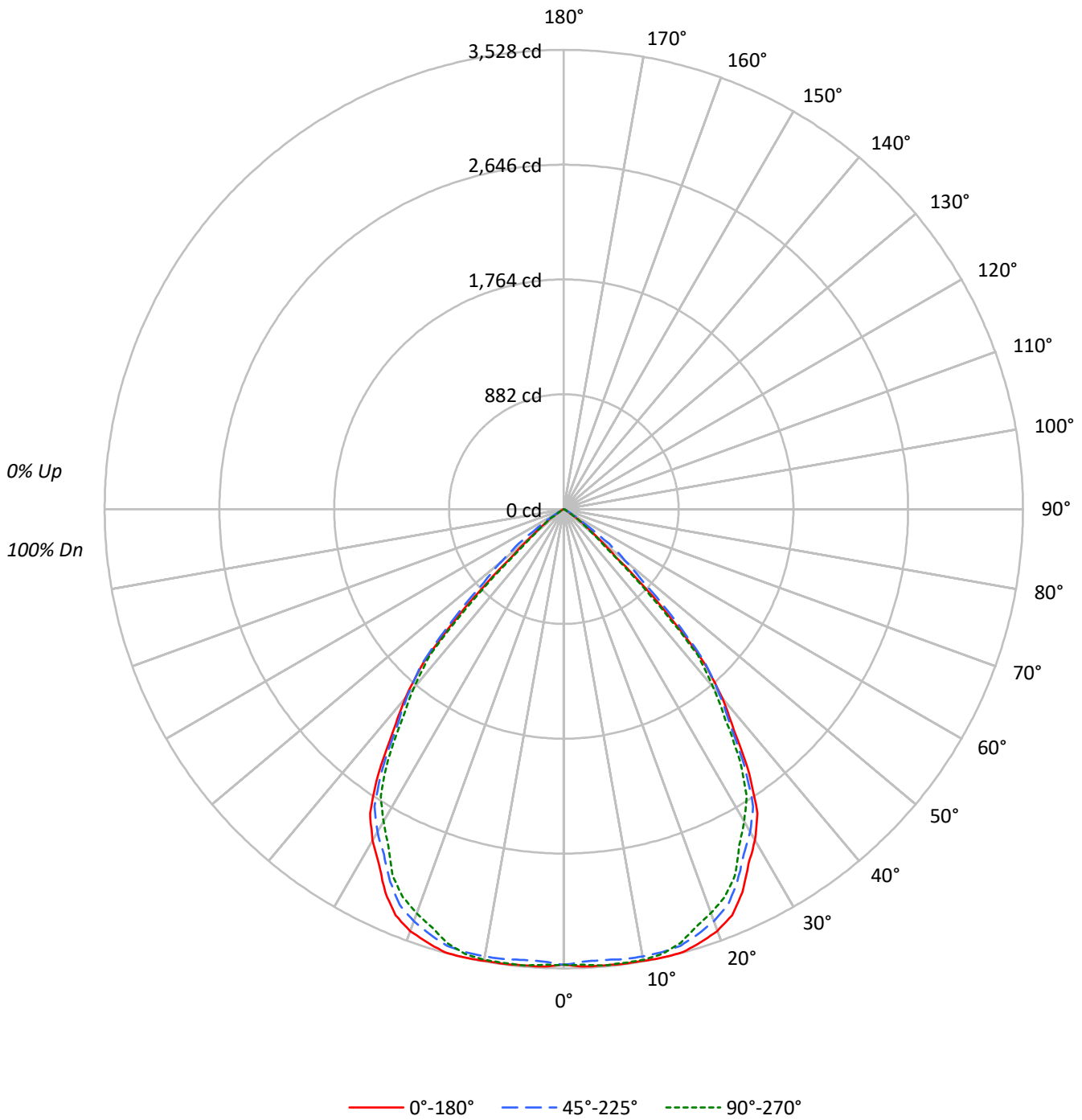
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5285.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.8
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	91	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	75	72	78	74	71	69
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	60	56	76	67	60	55	65	59	55	64	59	55	63	58	55	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	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°	56530	56530	56530
5°	57037	56334	57037
10°	57766	57212	57645
15°	58930	58029	57710
20°	59268	57886	56778
25°	57833	56231	55383
30°	54764	53384	51648
35°	48975	47827	46493
40°	39884	39304	37700
45°	24345	27583	21932
50°	7945	15438	6988
55°	2711	5450	2798
60°	203	1573	68
65°	42	80	0
70°	0	52	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 27629 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.1	6.3
10°-20°	983.9	18.6
20°-30°	1454.0	27.5
30°-40°	1494.3	28.3
40°-50°	863.1	16.3
50°-60°	149.6	2.8
60°-70°	5.6	0.1
70°-80°	0.1	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°	2773.0	52.5
0°-40°	4267.3	80.7
0°-60°	5280.0	99.9
0°-90°	5285.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5285.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3501	3501	3501	3501	3501	
5°	3519	3509	3476	3526	3519	336
15°	3526	3551	3472	3477	3452	993
25°	3246	3275	3156	3120	3109	1484
35°	2485	2486	2426	2389	2359	1529
45°	1066	1210	1208	1144	960	815
55°	96	112	194	110	99	108
65°	1	1	2	1	0	2
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°	3501.2	3501.2	3501.2	3501.2	3501.2
2.5°	3517.3	3507.4	3479.2	3511.2	3503.7
5°	3519.2	3508.8	3475.8	3526.4	3519.2
7.5°	3522.6	3516.2	3487.9	3527.6	3516.0
10°	3523.4	3524.5	3489.6	3524.3	3516.0
12.5°	3528.5	3538.6	3486.2	3514.0	3499.9
15°	3525.5	3551.4	3471.6	3477.4	3452.5
17.5°	3490.0	3527.2	3424.8	3399.8	3368.8
20°	3449.4	3486.6	3369.0	3335.5	3304.5
22.5°	3377.4	3418.0	3292.0	3255.2	3226.6
25°	3246.3	3275.2	3156.4	3120.2	3108.8
27.5°	3073.7	3084.0	2992.0	2944.2	2917.5
30°	2937.4	2935.3	2863.4	2808.6	2770.3
32.5°	2769.0	2779.4	2706.8	2655.4	2616.3
35°	2484.7	2485.7	2426.5	2388.8	2358.8
37.5°	2153.0	2147.8	2106.9	2056.1	2039.2
40°	1892.3	1899.6	1864.8	1807.3	1788.7
42.5°	1590.2	1638.0	1613.5	1545.7	1523.0
45°	1066.2	1210.0	1208.0	1143.5	960.5
47.5°	545.6	725.6	833.7	653.0	438.1
50°	316.3	430.0	614.6	339.2	278.2
52.5°	200.3	254.5	436.9	220.5	185.1
55°	96.3	111.8	193.6	109.8	99.4
57.5°	35.1	52.3	85.9	53.4	37.7
60°	6.3	21.9	48.7	14.5	2.1
62.5°	2.1	6.0	28.3	3.8	1.3
65°	1.1	1.1	2.1	1.0	0.0
67.5°	0.0	1.0	1.1	0.0	0.0
70°	0.0	1.0	1.1	0.0	0.0
72.5°	0.0	0.2	0.2	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	5.98	7.12	6.35	7.43	7.75	5.59	6.73	5.96	7.04	7.35
	3H	5.82	6.81	6.20	7.14	7.51	5.43	6.42	5.81	6.75	7.12
	4H	5.73	6.65	6.14	7.00	7.39	5.34	6.25	5.74	6.60	6.99
	6H	5.63	6.47	6.05	6.84	7.24	5.24	6.08	5.66	6.45	6.85
	8H	5.58	6.37	6.02	6.76	7.17	5.19	5.98	5.62	6.37	6.78
	12H	5.53	6.28	5.96	6.66	7.09	5.14	5.89	5.57	6.27	6.70
4H	2H	5.74	6.65	6.14	7.00	7.39	5.34	6.26	5.75	6.61	7.00
	3H	5.56	6.30	5.98	6.71	7.11	5.17	5.91	5.59	6.31	6.72
	4H	5.45	6.11	5.89	6.53	6.98	5.06	5.71	5.50	6.14	6.58
	6H	5.35	5.91	5.82	6.36	6.83	4.96	5.52	5.43	5.97	6.44
	8H	5.29	5.81	5.76	6.26	6.73	4.89	5.41	5.37	5.86	6.34
	12H	5.23	5.68	5.72	6.17	6.64	4.83	5.29	5.32	5.77	6.25
8H	4H	5.29	5.81	5.76	6.26	6.73	4.89	5.41	5.37	5.86	6.34
	6H	5.16	5.59	5.67	6.09	6.57	4.77	5.19	5.28	5.69	6.18
	8H	5.09	5.47	5.62	5.99	6.49	4.70	5.08	5.23	5.60	6.09
	12H	5.03	5.37	5.55	5.87	6.44	4.64	4.98	5.16	5.47	6.05
12H	4H	5.23	5.68	5.72	6.17	6.64	4.83	5.29	5.32	5.77	6.25
	6H	5.09	5.47	5.62	5.99	6.49	4.70	5.08	5.23	5.60	6.09
	8H	5.03	5.37	5.55	5.87	6.44	4.64	4.98	5.16	5.47	6.05