

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: P854373

Luminaire Tested: SQ2-WBM-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854373
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

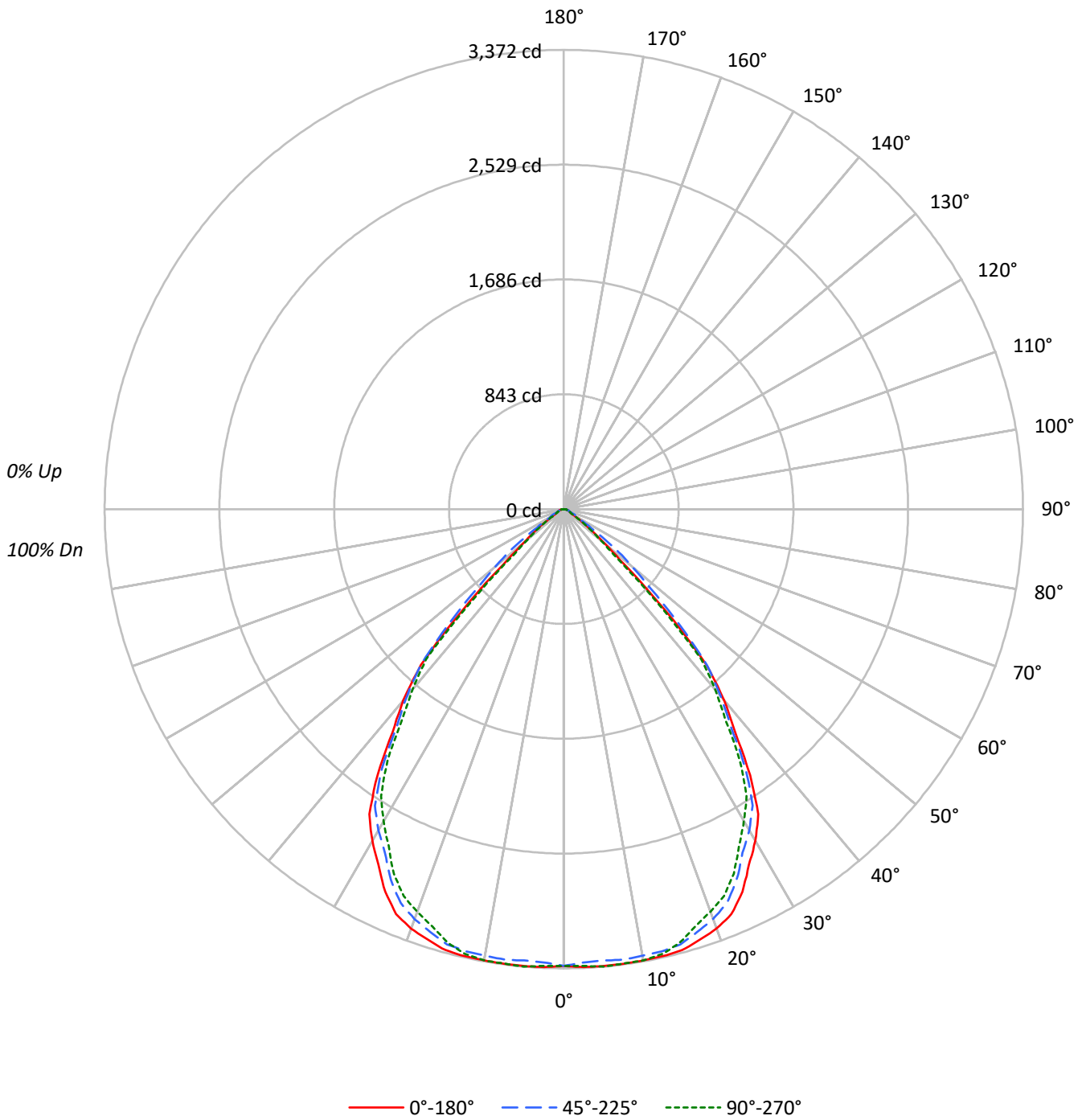
Lumens per Lamp: N/A
Luminaire Lumens: 5238.3 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.7
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				100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83				83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75				75
4	93	84	78	73	91	83	77	72	81	75	71	79	74	70	77	73	70	68				68
5	87	77	70	65	85	76	70	65	74	69	65	73	68	64	71	67	63	62				62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51				51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	54150	54150	54150
5°	54576	53921	54653
10°	55159	54575	55174
15°	56043	55305	55079
20°	56319	55046	54055
25°	55258	53511	52602
30°	52431	50765	49329
35°	47015	45896	44475
40°	38598	37747	36368
45°	24135	27407	21895
50°	9543	16211	8528
55°	4631	7364	4574
60°	2173	3604	1989
65°	1948	2094	1876
70°	1907	1954	1770
75°	1859	1859	1678
80°	1785	1785	1609
85°	1612	1612	1612

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 27407 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.4	6.1
10°-20°	936.6	17.9
20°-30°	1384.7	26.4
30°-40°	1430.8	27.3
40°-50°	860.9	16.4
50°-60°	206.9	4.0
60°-70°	56.5	1.1
70°-80°	31.5	0.6
80°-90°	9.9	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°	2641.8	50.4
0°-40°	4072.6	77.7
0°-60°	5140.5	98.1
0°-90°	5238.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5238.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3354	3354	3354	3354	3354	
5°	3367	3357	3327	3374	3372	321
15°	3353	3378	3309	3309	3295	945
25°	3102	3125	3004	2961	2953	1418
35°	2385	2380	2328	2284	2256	1468
45°	1057	1200	1200	1135	959	819
55°	164	185	262	177	162	167
65°	51	54	55	51	49	52
75°	30	32	30	29	27	31
85°	9	10	9	9	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3353.8	3353.8	3353.8	3353.8	3353.8
2.5°	3366.1	3357.8	3331.5	3362.1	3356.9
5°	3367.3	3356.9	3326.9	3373.9	3372.1
7.5°	3366.7	3361.2	3335.7	3371.9	3364.6
10°	3364.4	3367.2	3328.8	3368.2	3365.3
12.5°	3362.8	3375.4	3324.9	3352.7	3345.3
15°	3352.8	3378.2	3308.6	3309.2	3295.1
17.5°	3316.3	3347.1	3256.8	3230.1	3212.2
20°	3277.8	3307.9	3203.7	3163.9	3146.0
22.5°	3217.8	3245.6	3129.9	3089.3	3074.5
25°	3101.8	3125.3	3003.7	2961.2	2952.7
27.5°	2945.4	2955.4	2843.7	2802.0	2787.5
30°	2812.3	2813.2	2722.9	2673.2	2645.9
32.5°	2657.6	2651.1	2581.3	2531.4	2497.4
35°	2385.3	2379.6	2328.5	2283.7	2256.4
37.5°	2065.2	2064.2	2015.5	1976.8	1949.4
40°	1831.3	1837.8	1790.9	1742.4	1725.5
42.5°	1551.2	1599.9	1560.0	1507.1	1496.2
45°	1057.0	1200.0	1200.3	1134.8	958.9
47.5°	604.6	758.8	863.9	668.8	496.5
50°	379.9	496.5	645.4	407.2	339.5
52.5°	269.9	327.1	477.6	286.4	253.3
55°	164.5	185.2	261.6	176.7	162.5
57.5°	99.6	119.0	151.6	118.5	100.0
60°	67.3	85.2	111.6	78.5	61.6
62.5°	59.6	66.2	87.7	61.8	55.4
65°	51.0	53.8	54.8	50.9	49.1
67.5°	45.0	46.9	46.0	44.9	42.1
70°	40.4	42.3	41.4	40.3	37.5
72.5°	35.8	37.7	36.7	35.7	33.7
75°	29.8	31.7	29.8	28.8	26.9
77.5°	23.1	24.8	23.9	23.0	21.2
80°	19.2	20.2	19.2	19.2	17.3
82.5°	15.4	15.6	14.6	14.6	13.5
85°	8.7	9.6	8.7	8.7	8.7
87.5°	3.1	3.1	3.1	3.1	2.3
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	10.96	12.14	11.32	12.45	12.77	10.63	11.81	10.99	12.12	12.44
	3H	11.50	12.53	11.88	12.87	13.23	11.16	12.19	11.54	12.52	12.89
	4H	11.78	12.74	12.19	13.09	13.48	11.41	12.37	11.82	12.72	13.11
	6H	12.02	12.90	12.44	13.27	13.67	11.63	12.50	12.04	12.88	13.27
	8H	12.10	12.93	12.54	13.32	13.73	11.70	12.53	12.13	12.92	13.33
	12H	12.15	12.94	12.58	13.32	13.75	11.75	12.54	12.19	12.93	13.36
4H	2H	11.01	11.97	11.42	12.33	12.71	10.71	11.67	11.12	12.02	12.41
	3H	11.77	12.55	12.18	12.95	13.36	11.46	12.23	11.87	12.64	13.05
	4H	12.18	12.87	12.62	13.29	13.74	11.83	12.52	12.27	12.94	13.39
	6H	12.56	13.15	13.03	13.60	14.07	12.18	12.78	12.65	13.22	13.70
	8H	12.69	13.24	13.16	13.69	14.17	12.30	12.86	12.78	13.31	13.78
	12H	12.78	13.27	13.27	13.75	14.23	12.40	12.88	12.89	13.37	13.84
8H	4H	12.27	12.83	12.75	13.27	13.75	11.95	12.50	12.42	12.95	13.42
	6H	12.77	13.21	13.27	13.71	14.20	12.42	12.87	12.92	13.37	13.85
	8H	12.97	13.37	13.50	13.89	14.39	12.61	13.01	13.14	13.53	14.03
	12H	13.14	13.50	13.66	13.99	14.57	12.78	13.14	13.30	13.63	14.21
12H	4H	12.26	12.74	12.75	13.23	13.70	11.94	12.42	12.43	12.91	13.39
	6H	12.77	13.18	13.30	13.70	14.19	12.43	12.84	12.96	13.36	13.85
	8H	13.03	13.38	13.55	13.88	14.46	12.68	13.04	13.20	13.53	14.11