

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: P854374

Luminaire Tested: SQ2-WBM-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854374
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-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

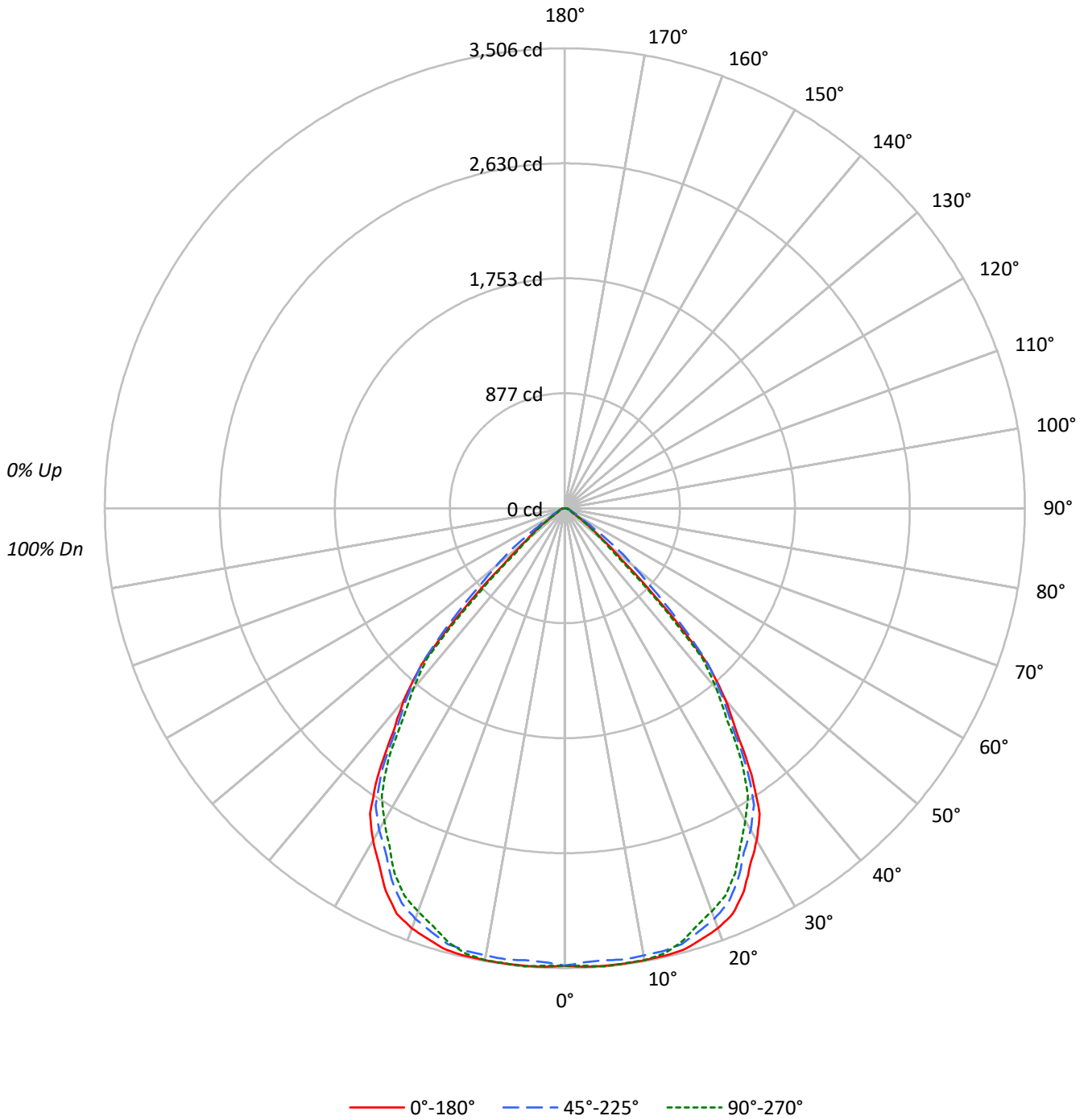
Lumens per Lamp: N/A
Luminaire Lumens: 5446.4 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	56301	56301	56301
5°	56743	56062	56824
10°	57349	56743	57366
15°	58270	57501	57267
20°	58556	57233	56202
25°	57453	55636	54692
30°	54514	52780	51289
35°	48882	47719	46241
40°	40130	39245	37812
45°	25094	28496	22765
50°	9922	16854	8867
55°	4814	7657	4757
60°	2260	3746	2067
65°	2025	2178	1948
70°	1983	2030	1841
75°	1934	1934	1747
80°	1860	1860	1674
85°	1667	1667	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 28496 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.2	6.1
10°-20°	973.8	17.9
20°-30°	1439.7	26.4
30°-40°	1487.7	27.3
40°-50°	895.1	16.4
50°-60°	215.1	3.9
60°-70°	58.8	1.1
70°-80°	32.7	0.6
80°-90°	10.3	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°	2746.7	50.4
0°-40°	4234.4	77.7
0°-60°	5344.6	98.1
0°-90°	5446.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5446.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3487	3487	3487	3487	3487	
5°	3501	3490	3459	3508	3506	334
15°	3486	3512	3440	3441	3426	983
25°	3225	3249	3123	3079	3070	1474
35°	2480	2474	2421	2374	2346	1526
45°	1099	1248	1248	1180	997	851
55°	171	192	272	184	169	174
65°	53	56	57	53	51	54
75°	31	33	31	30	28	32
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°	3487.0	3487.0	3487.0	3487.0	3487.0
2.5°	3499.8	3491.2	3463.8	3495.7	3490.2
5°	3501.0	3490.2	3459.0	3508.0	3506.0
7.5°	3500.4	3494.7	3468.2	3505.8	3498.2
10°	3498.0	3500.9	3461.0	3501.9	3499.0
12.5°	3496.4	3509.5	3457.0	3485.8	3478.2
15°	3486.0	3512.4	3440.0	3440.7	3426.0
17.5°	3448.0	3480.1	3386.2	3358.4	3339.8
20°	3408.0	3439.3	3331.0	3289.6	3271.0
22.5°	3345.6	3374.5	3254.2	3212.1	3196.6
25°	3225.0	3249.4	3123.0	3078.8	3070.0
27.5°	3062.4	3072.8	2956.6	2913.3	2898.2
30°	2924.0	2925.0	2831.0	2779.4	2751.0
32.5°	2763.2	2756.4	2683.8	2632.0	2596.6
35°	2480.0	2474.1	2421.0	2374.4	2346.0
37.5°	2147.2	2146.2	2095.6	2055.4	2026.8
40°	1904.0	1910.8	1862.0	1811.6	1794.0
42.5°	1612.8	1663.4	1622.0	1566.9	1555.6
45°	1099.0	1247.6	1248.0	1179.8	997.0
47.5°	628.6	789.0	898.2	695.3	516.2
50°	395.0	516.2	671.0	423.4	353.0
52.5°	280.6	340.0	496.6	297.8	263.4
55°	171.0	192.5	272.0	183.7	169.0
57.5°	103.6	123.7	157.6	123.2	104.0
60°	70.0	88.6	116.0	81.6	64.0
62.5°	62.0	68.8	91.2	64.2	57.6
65°	53.0	55.9	57.0	53.0	51.0
67.5°	46.8	48.8	47.8	46.7	43.8
70°	42.0	44.0	43.0	41.9	39.0
72.5°	37.2	39.2	38.2	37.2	35.0
75°	31.0	33.0	31.0	30.0	28.0
77.5°	24.0	25.8	24.8	24.0	22.0
80°	20.0	21.0	20.0	20.0	18.0
82.5°	16.0	16.2	15.2	15.2	14.0
85°	9.0	10.0	9.0	9.0	9.0
87.5°	3.2	3.2	3.2	3.2	2.4
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	11.09	12.27	11.46	12.59	12.90	10.76	11.94	11.13	12.25	12.57
	3H	11.63	12.67	12.01	13.00	13.37	11.29	12.33	11.67	12.66	13.03
	4H	11.92	12.88	12.32	13.23	13.61	11.55	12.51	11.95	12.86	13.24
	6H	12.16	13.04	12.57	13.41	13.80	11.76	12.64	12.18	13.01	13.41
	8H	12.24	13.07	12.67	13.46	13.87	11.84	12.67	12.27	13.06	13.46
	12H	12.28	13.08	12.72	13.46	13.89	11.89	12.68	12.32	13.06	13.49
4H	2H	11.15	12.11	11.55	12.46	12.85	10.85	11.81	11.25	12.16	12.55
	3H	11.91	12.68	12.32	13.09	13.49	11.59	12.37	12.01	12.78	13.18
	4H	12.32	13.01	12.76	13.43	13.88	11.97	12.66	12.41	13.08	13.53
	6H	12.70	13.29	13.17	13.74	14.21	12.32	12.91	12.79	13.36	13.83
	8H	12.83	13.38	13.30	13.83	14.30	12.44	12.99	12.92	13.44	13.92
	12H	12.92	13.40	13.41	13.89	14.36	12.53	13.02	13.02	13.50	13.98
8H	4H	12.41	12.96	12.88	13.41	13.88	12.09	12.64	12.56	13.09	13.56
	6H	12.90	13.35	13.41	13.85	14.34	12.55	13.00	13.06	13.50	13.99
	8H	13.11	13.51	13.63	14.03	14.52	12.75	13.15	13.28	13.67	14.17
	12H	13.28	13.63	13.79	14.13	14.71	12.92	13.27	13.43	13.77	14.35
12H	4H	12.39	12.88	12.88	13.36	13.84	12.08	12.56	12.57	13.05	13.52
	6H	12.91	13.31	13.44	13.83	14.33	12.57	12.98	13.10	13.49	13.99
	8H	13.16	13.52	13.68	14.02	14.59	12.82	13.18	13.34	13.67	14.25