

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: P854334

Luminaire Tested: SQ2-WBM-025U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854334
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-025U-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

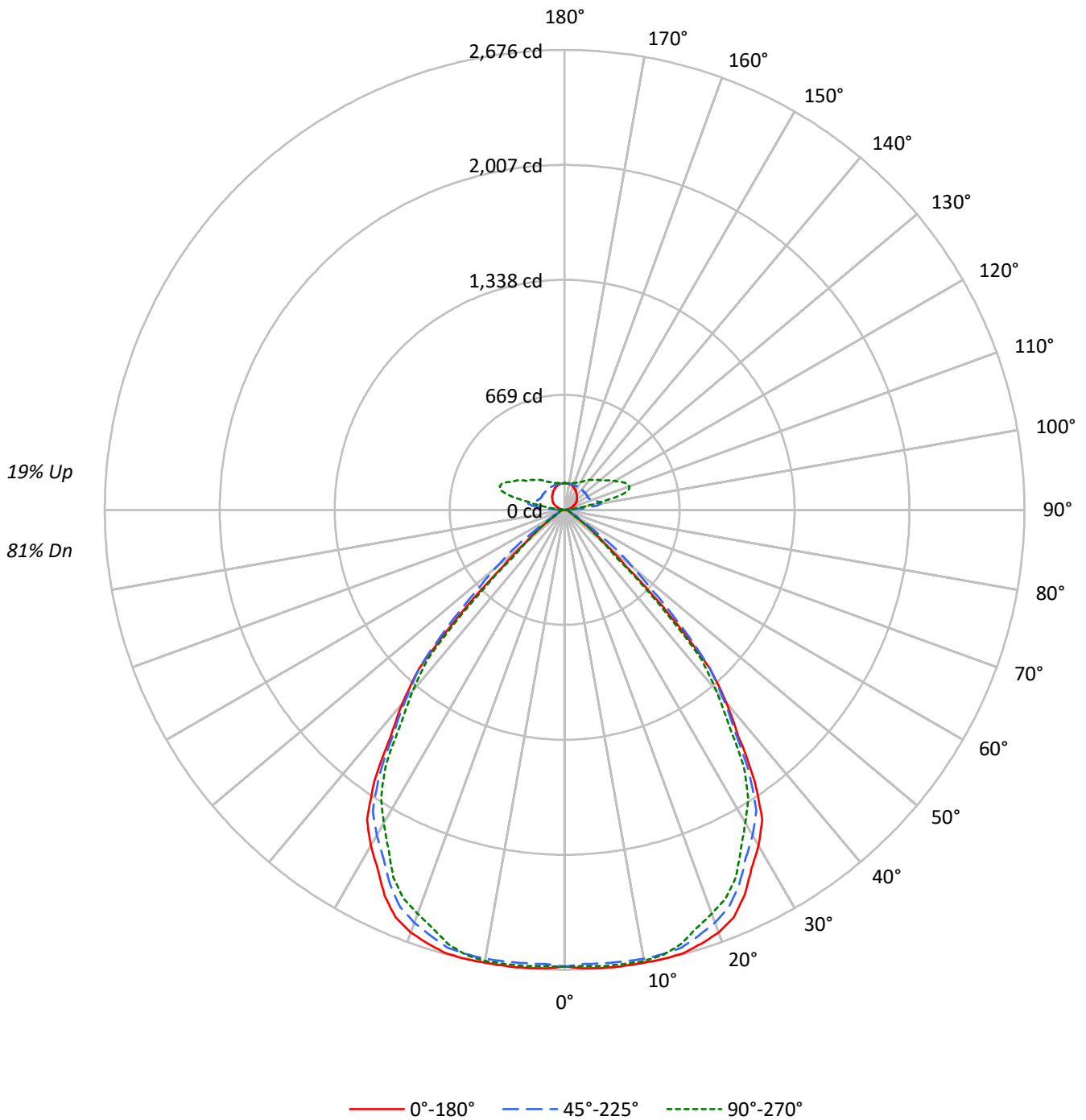
Lumens per Lamp: N/A
Luminaire Lumens: 5158.1 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.5
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	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	81				
1	108	104	101	99	103	100	98	95	93	91	89	86	84	83	80	78	77	74				
2	101	95	90	86	97	91	87	83	85	82	79	79	77	74	74	72	70	67				
3	94	86	80	75	90	83	78	74	78	74	70	73	70	67	68	66	63	61				
4	88	79	72	67	84	76	70	66	72	67	63	67	63	60	63	60	57	55				
5	82	72	65	60	79	70	64	59	66	61	57	62	58	54	59	55	52	50				
6	77	66	59	54	74	64	58	53	61	55	51	58	53	49	54	51	48	46				
7	72	61	54	49	69	59	53	48	56	51	47	53	49	45	51	47	44	42				
8	67	56	49	45	65	55	48	44	52	47	43	50	45	41	47	43	40	38				
9	63	52	45	41	61	51	45	40	48	43	39	46	41	38	44	40	37	35				
10	60	49	42	37	58	47	41	37	45	40	36	43	38	35	41	37	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42899	42899	42899
5°	43358	42908	43188
10°	43860	43466	43702
15°	44637	44058	43721
20°	44974	43934	42959
25°	44113	42829	42006
30°	42041	40768	39209
35°	38041	36941	35784
40°	30888	30260	28922
45°	19783	21980	17785
50°	7754	13019	6980
55°	3654	5956	3654
60°	1741	2887	1582
65°	1578	1654	1471
70°	1496	1544	1407
75°	1497	1497	1379
80°	1432	1432	1339
85°	1241	1241	1241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 22124 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.5	4.9
10°-20°	745.9	14.5
20°-30°	1107.0	21.5
30°-40°	1149.8	22.3
40°-50°	691.9	13.4
50°-60°	165.9	3.2
60°-70°	45.0	0.9
70°-80°	25.2	0.5
80°-90°	8.3	0.2
90°-100°	62.9	1.2
100°-110°	195.6	3.8
110°-120°	191.4	3.7
120°-130°	156.3	3.0
130°-140°	127.8	2.5
140°-150°	99.8	1.9
150°-160°	72.0	1.4
160°-170°	44.0	0.9
170°-180°	14.8	0.3
0°-30°	2107.3	40.9
0°-40°	3257.1	63.1
0°-60°	4114.9	79.8
0°-90°	4193.4	81.3
90°-120°	450.0	8.7
90°-150°	833.8	16.2
90°-180°	965.0	18.7
0°-180°	5158.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2657	2657	2657	2657	2657	
5°	2675	2669	2647	2675	2665	255
15°	2670	2689	2636	2634	2616	753
25°	2476	2493	2404	2372	2358	1133
35°	1930	1912	1874	1836	1816	1182
45°	866	969	963	916	779	662
55°	130	147	212	141	130	134
65°	41	42	43	41	38	41
75°	24	25	24	23	22	25
85°	7	8	7	7	7	8
90°	0	1	3	3	3	1
95°	9	25	115	43	28	10
105°	34	48	193	368	351	36
115°	61	72	156	323	378	60
125°	85	94	154	254	298	75
135°	102	113	154	219	246	79
145°	119	128	154	189	206	75
155°	136	141	154	170	176	63
165°	150	151	155	160	162	42
175°	155	155	155	156	155	15
180°	155	155	155	155	155	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2657.0	2657.0	2657.0	2657.0	2657.0
2.5°	2670.1	2664.0	2644.7	2666.0	2657.0
5°	2675.2	2668.7	2647.4	2675.0	2664.7
7.5°	2676.0	2676.4	2651.2	2675.6	2664.1
10°	2675.2	2680.9	2651.2	2674.1	2665.6
12.5°	2676.0	2685.4	2648.1	2664.8	2651.8
15°	2670.4	2689.2	2635.8	2634.4	2615.6
17.5°	2646.0	2669.3	2597.0	2574.7	2552.5
20°	2617.5	2640.1	2557.0	2524.7	2500.2
22.5°	2568.3	2591.6	2500.0	2465.6	2447.9
25°	2476.2	2493.1	2404.1	2372.0	2357.9
27.5°	2355.0	2360.5	2282.9	2245.6	2221.5
30°	2255.0	2259.7	2186.7	2144.4	2103.1
32.5°	2140.4	2132.3	2076.7	2030.6	1987.7
35°	1930.0	1912.1	1874.2	1836.2	1815.5
37.5°	1663.2	1658.7	1631.1	1585.5	1560.7
40°	1465.5	1480.6	1435.7	1402.3	1372.2
42.5°	1254.0	1290.8	1251.8	1204.7	1179.1
45°	866.4	968.9	962.6	916.2	778.9
47.5°	481.8	610.8	688.3	539.9	399.5
50°	308.7	397.1	518.3	325.9	277.9
52.5°	216.4	264.9	382.9	231.0	204.8
55°	129.8	146.7	211.6	141.1	129.8
57.5°	78.5	94.8	120.2	94.6	76.7
60°	53.9	68.0	89.4	63.1	49.0
62.5°	46.9	52.0	69.4	49.5	44.4
65°	41.3	42.3	43.3	41.3	38.5
67.5°	35.6	37.5	36.5	35.7	33.7
70°	31.7	33.6	32.7	32.6	29.8
72.5°	28.7	30.5	29.6	28.8	26.7
75°	24.0	25.0	24.0	23.1	22.1
77.5°	18.5	19.4	19.2	18.4	17.5
80°	15.4	16.3	15.4	15.4	14.4
82.5°	12.3	12.5	12.3	11.5	11.3
85°	6.7	7.7	6.7	6.7	6.7
87.5°	2.3	2.5	2.9	2.9	2.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.4	12.0	9.7
95°	8.6	25.4	115.4	42.6	27.7
97.5°	15.6	33.0	191.1	119.0	75.0
100°	21.0	36.8	215.5	201.6	134.5
102.5°	26.3	41.4	210.9	287.9	226.0
105°	34.3	48.3	192.6	367.7	350.9
107.5°	42.3	55.4	175.1	373.8	392.3
110°	47.7	60.7	165.9	365.1	401.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.0	65.3	161.3	349.3	395.4
115°	61.0	72.2	156.4	322.6	377.6
117.5°	68.8	79.1	154.3	297.1	353.4
120°	73.4	83.7	153.5	282.5	336.6
122.5°	78.0	88.3	154.3	270.2	319.8
125°	84.9	94.2	154.5	253.7	297.5
127.5°	90.4	99.9	154.5	241.3	278.6
130°	93.5	103.7	154.5	234.4	268.0
132.5°	97.3	107.5	153.7	228.2	259.6
135°	102.0	113.2	153.5	219.0	246.0
137.5°	107.6	117.8	153.5	209.8	234.4
140°	110.6	120.9	153.5	203.6	226.0
142.5°	114.4	123.9	153.5	197.5	217.6
145°	119.2	128.5	153.5	189.2	206.0
147.5°	124.9	132.9	154.5	181.5	194.7
150°	128.7	135.3	154.5	177.6	187.9
152.5°	131.8	137.6	154.5	173.8	182.5
155°	136.4	141.0	154.5	169.9	175.5
157.5°	140.9	144.5	154.5	166.4	169.9
160°	144.0	146.8	154.5	164.1	166.9
162.5°	146.3	148.3	154.5	162.5	164.6
165°	149.7	150.6	155.4	160.2	162.1
167.5°	151.8	152.0	154.5	158.9	159.8
170°	152.6	153.5	154.5	157.4	158.3
172.5°	154.1	154.3	155.2	156.6	156.8
175°	155.4	155.4	155.4	156.4	155.4
177.5°	155.4	155.4	155.4	155.4	155.4
180°	155.4	155.4	155.4	155.4	155.4



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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	8.64	9.58	9.30	10.23	10.98	8.35	9.30	9.02	9.95	10.70
	3H	9.16	9.99	9.84	10.65	11.44	8.87	9.70	9.55	10.36	11.15
	4H	9.43	10.21	10.13	10.89	11.69	9.12	9.90	9.82	10.57	11.38
	6H	9.67	10.38	10.38	11.07	11.88	9.34	10.05	10.05	10.74	11.55
	8H	9.75	10.42	10.47	11.12	11.94	9.42	10.09	10.14	10.79	11.61
	12H	9.79	10.43	10.51	11.12	11.96	9.46	10.10	10.18	10.79	11.64
4H	2H	8.67	9.44	9.37	10.12	10.92	8.41	9.18	9.11	9.86	10.66
	3H	9.40	10.03	10.11	10.75	11.57	9.14	9.77	9.85	10.49	11.31
	4H	9.81	10.38	10.54	11.10	11.95	9.52	10.09	10.25	10.81	11.66
	6H	10.20	10.68	10.94	11.42	12.29	9.88	10.37	10.63	11.11	11.97
	8H	10.33	10.78	11.08	11.52	12.39	10.01	10.46	10.76	11.20	12.07
	12H	10.41	10.81	11.17	11.57	12.45	10.09	10.49	10.85	11.25	12.13
8H	4H	9.90	10.36	10.65	11.09	11.96	9.63	10.08	10.38	10.82	11.69
	6H	10.41	10.78	11.18	11.56	12.43	10.11	10.48	10.89	11.27	12.14
	8H	10.62	10.95	11.41	11.73	12.62	10.31	10.64	11.11	11.43	12.32
	12H	10.78	11.07	11.57	11.84	12.79	10.47	10.76	11.25	11.53	12.48
12H	4H	9.88	10.28	10.65	11.05	11.92	9.62	10.02	10.38	10.78	11.66
	6H	10.42	10.75	11.21	11.54	12.42	10.14	10.47	10.93	11.25	12.14
	8H	10.67	10.96	11.46	11.73	12.69	10.38	10.67	11.16	11.44	12.39