

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: P854328

Luminaire Tested: SQ2-WBM-025U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854328
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-025U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

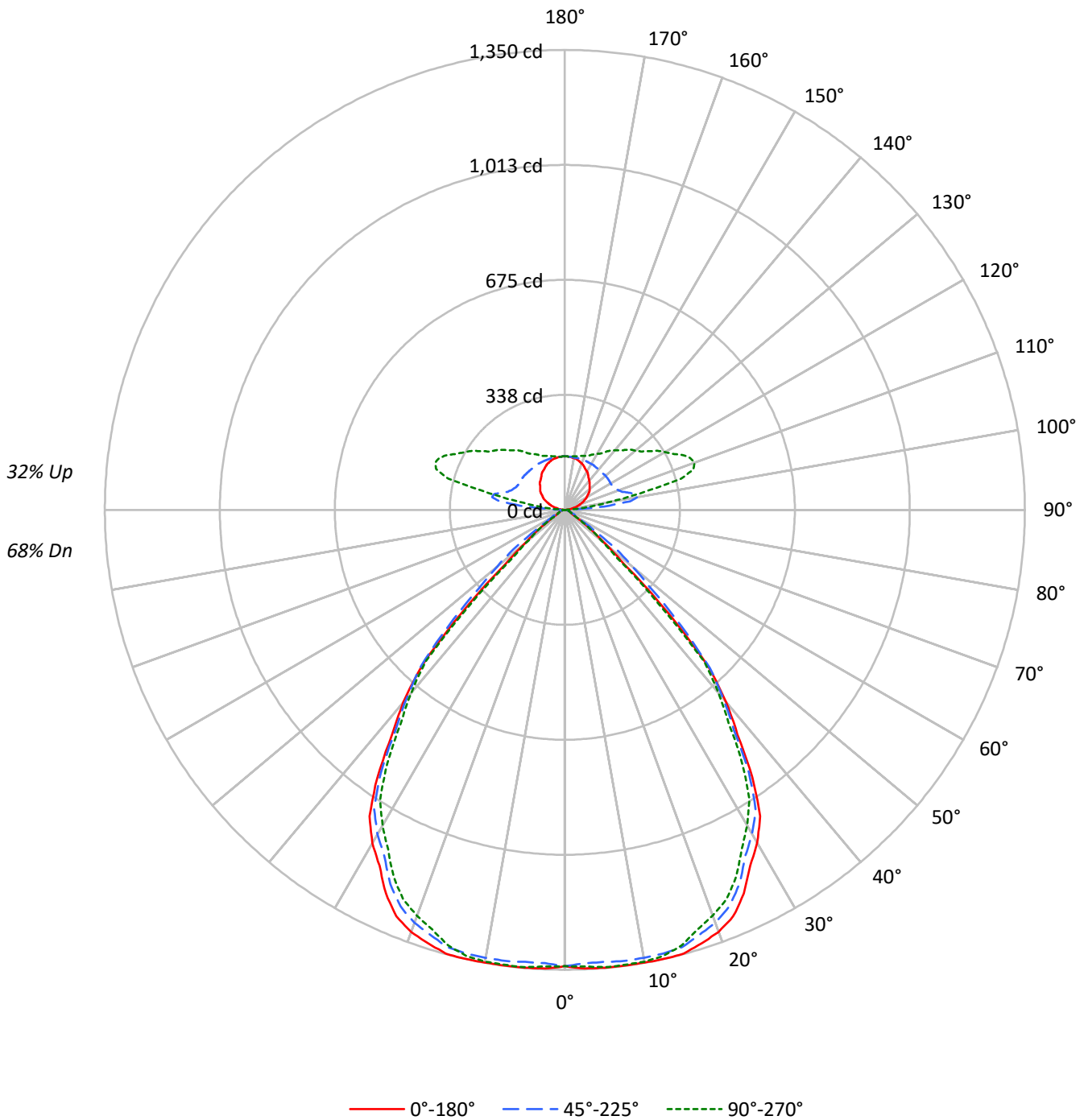
Lumens per Lamp: N/A
Luminaire Lumens: 3081.8 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 25.5
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	68	68	68	68
1	104	101	98	95	99	96	93	90	86	84	82	77	75	74	68	67	66	63	63	63	63
2	97	91	86	82	92	87	82	79	78	75	72	71	68	66	63	62	60	57	57	57	57
3	90	83	77	72	86	79	73	69	72	67	64	65	62	59	59	56	54	51	51	51	51
4	84	75	68	63	80	72	66	61	66	61	57	60	56	53	54	52	49	46	46	46	46
5	78	68	61	56	74	66	59	55	60	55	51	55	51	48	50	47	45	42	42	42	42
6	73	63	56	50	70	60	54	49	55	50	46	51	47	43	47	43	41	38	38	38	38
7	68	58	50	45	65	55	49	44	51	46	42	47	43	40	43	40	37	35	35	35	35
8	64	53	46	41	61	51	45	40	47	42	38	44	39	36	40	37	34	32	32	32	32
9	60	49	42	38	57	47	41	37	44	39	35	41	36	33	38	34	31	30	30	30	30
10	57	45	39	34	54	44	38	34	41	36	32	38	34	31	35	32	29	27	27	27	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21632	21632	21632
5°	21870	21590	21840
10°	22123	21887	22076
15°	22539	22218	22121
20°	22656	22161	21780
25°	22137	21590	21178
30°	21052	20495	19939
35°	18920	18559	17895
40°	15548	15224	14779
45°	9839	11047	8873
50°	3818	6498	3504
55°	1841	2950	1869
60°	869	1460	807
65°	772	844	734
70°	774	774	727
75°	717	780	661
80°	716	716	623
85°	704	704	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11047 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	4.2
10°-20°	376.4	12.2
20°-30°	557.4	18.1
30°-40°	577.4	18.7
40°-50°	347.0	11.3
50°-60°	83.0	2.7
60°-70°	22.6	0.7
70°-80°	12.6	0.4
80°-90°	4.4	0.1
90°-100°	63.4	2.1
100°-110°	197.3	6.4
110°-120°	193.0	6.3
120°-130°	157.6	5.1
130°-140°	128.9	4.2
140°-150°	100.6	3.3
150°-160°	72.6	2.4
160°-170°	44.4	1.4
170°-180°	15.0	0.5
0°-30°	1062.1	34.5
0°-40°	1639.5	53.2
0°-60°	2069.5	67.2
0°-90°	2109.1	68.4
90°-120°	453.7	14.7
90°-150°	840.8	27.3
90°-180°	973.0	31.6
0°-180°	3081.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1349	1345	1332	1349	1348	129
15°	1348	1357	1329	1330	1323	380
25°	1243	1254	1212	1196	1189	568
35°	960	958	942	924	908	590
45°	431	484	484	458	389	329
55°	65	75	105	70	66	67
65°	20	21	22	20	19	21
75°	12	12	12	12	11	13
85°	4	4	4	4	3	4
90°	0	1	3	3	3	1
95°	9	26	116	43	28	10
105°	35	49	194	371	354	37
115°	62	73	158	325	381	61
125°	86	95	156	256	300	76
135°	103	114	155	221	248	80
145°	120	130	155	191	208	75
155°	138	142	156	171	177	63
165°	151	152	157	162	164	42
175°	157	157	157	158	157	15
180°	157	157	157	157	157	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1339.8	1339.8	1339.8	1339.8	1339.8
2.5°	1347.5	1343.0	1332.1	1344.3	1341.3
5°	1349.4	1344.7	1332.1	1349.4	1347.5
7.5°	1349.4	1346.4	1335.7	1350.1	1347.3
10°	1349.4	1349.4	1335.0	1349.3	1346.5
12.5°	1350.2	1353.9	1334.2	1344.7	1340.4
15°	1348.4	1356.9	1329.2	1330.0	1323.4
17.5°	1334.0	1347.2	1309.0	1301.3	1292.3
20°	1318.6	1331.8	1289.8	1275.2	1267.6
22.5°	1291.7	1305.6	1260.5	1246.7	1238.4
25°	1242.6	1253.9	1211.9	1196.3	1188.8
27.5°	1177.6	1182.7	1146.3	1131.7	1123.4
30°	1129.2	1128.2	1099.3	1080.8	1069.5
32.5°	1066.8	1068.1	1041.6	1023.8	1008.7
35°	959.9	958.0	941.6	923.9	907.9
37.5°	832.3	833.7	816.2	797.4	791.2
40°	737.7	740.5	722.3	702.1	701.2
42.5°	622.3	643.2	630.0	608.9	605.0
45°	430.9	483.5	483.8	458.2	388.6
47.5°	239.7	305.5	344.9	272.0	203.3
50°	152.0	195.2	258.7	163.0	139.5
52.5°	108.1	129.5	191.8	116.2	101.8
55°	65.4	74.8	104.8	70.1	66.4
57.5°	40.0	48.3	61.4	47.5	39.6
60°	26.9	34.5	45.2	30.6	25.0
62.5°	23.9	26.1	35.2	24.6	22.7
65°	20.2	21.1	22.1	20.2	19.2
67.5°	17.9	18.8	18.7	17.9	16.9
70°	16.4	17.3	16.4	16.3	15.4
72.5°	14.8	15.0	14.8	14.0	13.8
75°	11.5	12.5	12.5	11.5	10.6
77.5°	9.2	10.0	9.2	9.2	8.3
80°	7.7	7.7	7.7	7.7	6.7
82.5°	6.2	6.2	6.2	6.1	5.2
85°	3.8	3.8	3.8	3.8	2.9
87.5°	1.5	1.7	2.1	1.3	1.3
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.8	36.7	12.1	9.8
95°	8.7	25.6	116.3	42.9	27.9
97.5°	15.8	33.3	192.7	119.9	75.6
100°	21.2	37.1	217.3	203.3	135.6
102.5°	26.5	41.8	212.7	290.3	227.9
105°	34.6	48.7	194.2	370.7	353.8
107.5°	42.7	55.9	176.5	376.9	395.6
110°	48.1	61.2	167.3	368.1	404.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.5	65.9	162.7	352.2	398.6
115°	61.5	72.8	157.7	325.3	380.7
117.5°	69.4	79.8	155.6	299.5	356.3
120°	74.0	84.4	154.8	284.9	339.4
122.5°	78.6	89.0	155.6	272.5	322.5
125°	85.6	95.0	155.8	255.8	300.0
127.5°	91.1	100.7	155.8	243.3	280.9
130°	94.2	104.6	155.8	236.3	270.2
132.5°	98.1	108.4	155.0	230.1	261.7
135°	102.9	114.2	154.8	220.8	248.1
137.5°	108.5	118.8	154.8	211.5	236.3
140°	111.5	121.9	154.8	205.3	227.9
142.5°	115.4	125.0	154.8	199.1	219.4
145°	120.2	129.6	154.8	190.8	207.7
147.5°	126.0	134.0	155.8	183.0	196.3
150°	129.8	136.4	155.8	179.1	189.4
152.5°	132.9	138.7	155.8	175.2	184.0
155°	137.5	142.2	155.8	171.3	176.9
157.5°	142.1	145.7	155.8	167.8	171.3
160°	145.2	148.0	155.8	165.4	168.3
162.5°	147.5	149.6	155.8	163.9	166.0
165°	151.0	151.9	156.7	161.6	163.5
167.5°	153.1	153.3	155.8	160.2	161.1
170°	153.8	154.8	155.8	158.7	159.6
172.5°	155.4	155.6	156.5	157.9	158.1
175°	156.7	156.7	156.7	157.7	156.7
177.5°	156.7	156.7	156.7	156.7	156.7
180°	156.7	156.7	156.7	156.7	156.7



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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	5.25	6.08	6.07	6.89	7.89	4.84	5.67	5.66	6.49	7.48
	3H	5.77	6.50	6.60	7.33	8.35	5.36	6.10	6.19	6.92	7.95
	4H	6.02	6.71	6.87	7.54	8.58	5.60	6.29	6.45	7.12	8.16
	6H	6.23	6.87	7.09	7.70	8.75	5.80	6.43	6.65	7.27	8.31
	8H	6.31	6.91	7.18	7.76	8.81	5.85	6.45	6.72	7.31	8.35
	12H	6.36	6.93	7.23	7.77	8.84	5.88	6.45	6.75	7.29	8.36
4H	2H	5.27	5.96	6.12	6.79	7.83	4.90	5.59	5.75	6.42	7.45
	3H	6.01	6.57	6.87	7.43	8.48	5.64	6.20	6.50	7.07	8.12
	4H	6.39	6.90	7.26	7.77	8.84	6.01	6.52	6.88	7.38	8.46
	6H	6.74	7.18	7.63	8.06	9.15	6.34	6.78	7.23	7.66	8.75
	8H	6.87	7.28	7.76	8.16	9.25	6.45	6.86	7.34	7.74	8.83
	12H	6.96	7.32	7.87	8.22	9.32	6.51	6.88	7.42	7.78	8.87
8H	4H	6.48	6.89	7.37	7.77	8.86	6.13	6.54	7.02	7.41	8.51
	6H	6.95	7.28	7.86	8.20	9.29	6.59	6.92	7.50	7.84	8.94
	8H	7.15	7.45	8.08	8.37	9.48	6.78	7.08	7.71	8.00	9.11
	12H	7.33	7.59	8.25	8.49	9.66	6.93	7.19	7.85	8.09	9.26
12H	4H	6.46	6.82	7.36	7.72	8.81	6.11	6.47	7.01	7.37	8.47
	6H	6.96	7.26	7.89	8.17	9.28	6.61	6.91	7.54	7.83	8.94
	8H	7.21	7.46	8.13	8.37	9.54	6.85	7.11	7.77	8.01	9.18