

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: P854415

Luminaire Tested: SQ2-WBN-025U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854415
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-025U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

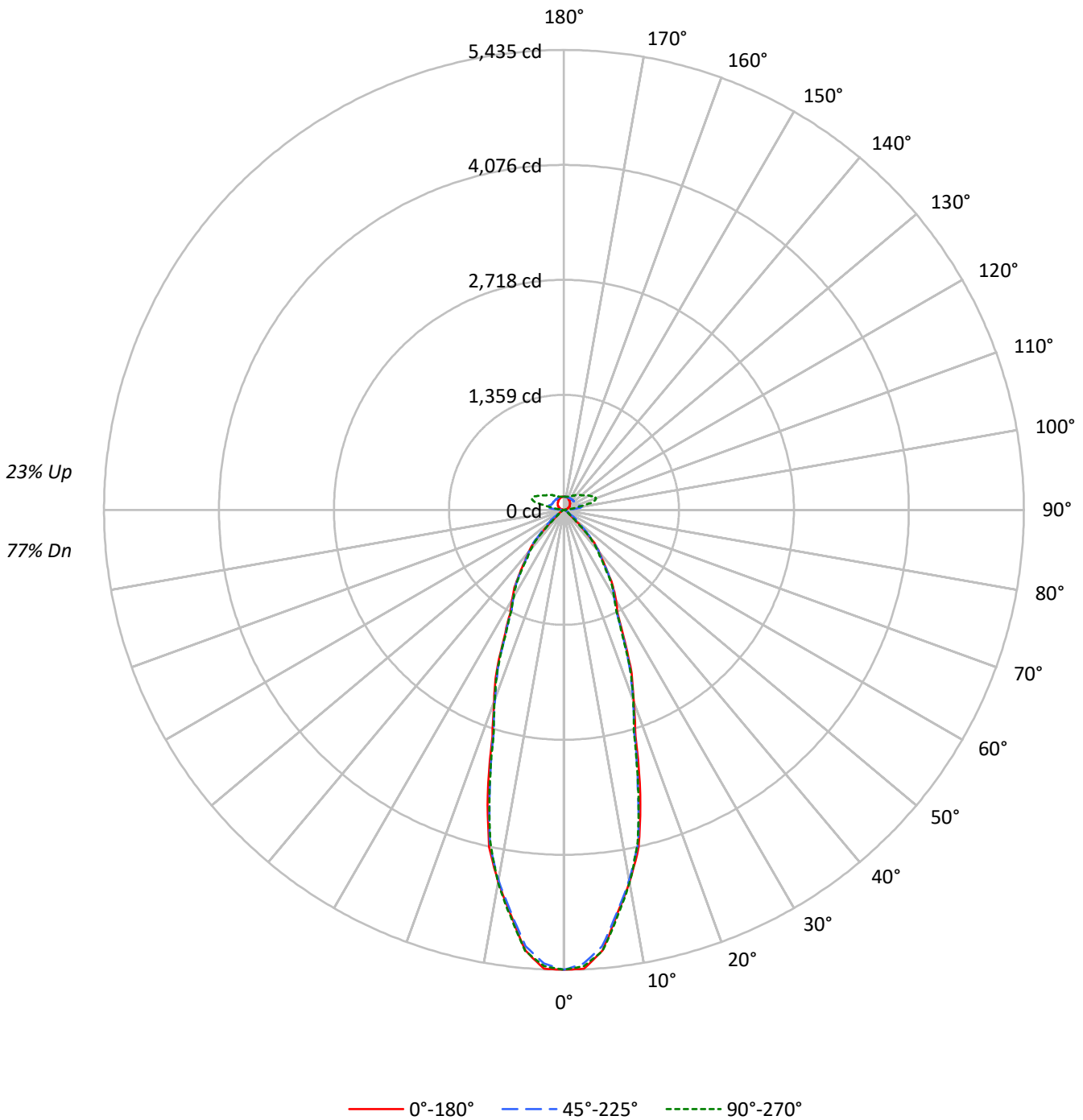
Lumens per Lamp: N/A
Luminaire Lumens: 4123.3 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 35
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
RCR																				
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77		
1	107	104	101	99	102	100	97	95	91	89	88	84	82	81	76	76	75	71		
2	101	96	91	87	96	92	88	85	85	82	79	78	76	74	72	71	69	66		
3	95	88	83	78	91	85	80	76	79	75	72	73	71	68	68	66	64	62		
4	90	82	76	71	86	79	74	69	74	70	66	69	66	63	65	62	60	57		
5	85	76	70	65	81	74	68	64	69	65	61	65	61	58	61	58	56	54		
6	80	71	65	60	77	69	63	59	65	60	57	61	57	54	58	55	52	50		
7	76	66	60	56	73	64	59	55	61	56	53	58	54	51	55	52	49	47		
8	72	62	56	52	70	61	55	51	58	53	49	55	51	48	52	49	46	45		
9	69	59	53	49	66	57	52	48	55	50	47	52	48	45	50	46	44	42		
10	65	55	50	46	63	54	49	45	52	47	44	50	46	43	47	44	42	40		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87746	87746	87746
5°	84722	83879	84816
10°	73231	72882	73405
15°	58273	56436	56662
20°	41397	40850	41148
25°	29781	29199	28992
30°	22755	22145	22091
35°	17862	17558	17103
40°	13533	13350	12701
45°	7572	9047	6759
50°	2665	5569	2349
55°	1627	3040	1548
60°	1246	1589	1153
65°	1142	1181	1070
70°	1090	1090	1001
75°	1023	1023	961
80°	893	893	893
85°	889	722	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9047 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.7	11.4
10°-20°	937.6	22.7
20°-30°	776.4	18.8
30°-40°	558.6	13.5
40°-50°	284.6	6.9
50°-60°	74.1	1.8
60°-70°	30.7	0.7
70°-80°	17.1	0.4
80°-90°	5.4	0.1
90°-100°	63.1	1.5
100°-110°	196.1	4.8
110°-120°	191.9	4.7
120°-130°	156.6	3.8
130°-140°	128.2	3.1
140°-150°	100.0	2.4
150°-160°	72.2	1.8
160°-170°	44.1	1.1
170°-180°	14.9	0.4
0°-30°	2185.7	53.0
0°-40°	2744.3	66.6
0°-60°	3103.0	75.3
0°-90°	3156.2	76.5
90°-120°	451.1	10.9
90°-150°	835.9	20.3
90°-180°	967.0	23.5
0°-180°	4123.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5435	5435	5435	5435	5435	
5°	5227	5220	5175	5250	5233	471
15°	3486	3447	3376	3400	3390	946
25°	1672	1669	1639	1625	1627	786
35°	906	912	891	876	868	569
45°	332	382	396	369	296	265
55°	58	67	108	62	55	57
65°	30	31	31	29	28	30
75°	16	16	16	15	15	17
85°	5	5	4	5	4	5
90°	0	1	3	3	3	1
95°	9	25	116	43	28	10
105°	34	48	193	369	352	36
115°	61	72	157	323	379	60
125°	85	94	155	254	298	76
135°	102	114	154	220	247	79
145°	120	129	154	190	206	75
155°	137	141	155	170	176	63
165°	150	151	156	161	162	42
175°	156	156	156	157	156	15
180°	156	156	156	156	156	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5434.6	5434.6	5434.6	5434.6	5434.6
2.5°	5426.1	5417.1	5365.2	5408.1	5397.6
5°	5227.3	5219.8	5175.3	5250.1	5233.1
7.5°	4816.8	4823.2	4797.1	4863.3	4845.2
10°	4466.7	4483.6	4445.4	4541.4	4477.3
12.5°	4080.2	4069.3	4042.8	4057.6	4022.2
15°	3486.2	3446.6	3376.3	3400.1	3389.8
17.5°	2808.0	2823.3	2762.3	2759.7	2748.1
20°	2409.3	2414.0	2377.5	2396.7	2394.8
22.5°	2088.4	2089.4	2042.7	2070.9	2053.9
25°	1671.7	1668.9	1639.0	1624.6	1627.4
27.5°	1370.9	1359.3	1336.6	1346.1	1339.1
30°	1220.5	1211.1	1187.8	1193.4	1184.9
32.5°	1085.6	1085.9	1062.0	1059.2	1053.0
35°	906.2	911.9	890.8	876.2	867.7
37.5°	746.2	751.5	733.7	712.3	705.1
40°	642.1	645.9	633.4	608.2	602.6
42.5°	528.7	544.5	532.4	508.6	496.1
45°	331.6	381.6	396.2	368.6	296.0
47.5°	167.8	236.9	282.7	208.7	137.5
50°	106.1	154.1	221.7	125.6	93.5
52.5°	81.4	106.1	177.0	92.7	75.0
55°	57.8	67.3	108.0	62.5	55.0
57.5°	44.7	50.0	64.6	47.3	42.6
60°	38.6	42.3	49.2	40.4	35.7
62.5°	34.7	37.0	39.9	34.3	32.6
65°	29.9	30.8	30.9	28.9	28.0
67.5°	25.5	26.4	26.2	25.2	24.3
70°	23.1	24.1	23.1	22.2	21.2
72.5°	20.1	21.0	20.1	19.8	18.9
75°	16.4	16.4	16.4	15.4	15.4
77.5°	12.7	12.9	12.0	11.9	11.2
80°	9.6	10.6	9.6	9.6	9.6
82.5°	8.1	8.3	7.3	7.3	7.3
85°	4.8	4.8	3.9	4.8	3.9
87.5°	1.5	1.7	2.1	2.1	2.1
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.5	12.0	9.8
95°	8.6	25.4	115.7	42.7	27.7
97.5°	15.7	33.1	191.6	119.3	75.1
100°	21.0	36.9	216.0	202.1	134.8
102.5°	26.4	41.5	211.5	288.6	226.6
105°	34.4	48.4	193.1	368.6	351.8
107.5°	42.4	55.5	175.5	374.8	393.3
110°	47.8	60.9	166.3	366.0	402.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.2	65.5	161.7	350.2	396.3
115°	61.2	72.4	156.8	323.4	378.6
117.5°	69.0	79.3	154.7	297.8	354.3
120°	73.6	83.9	153.9	283.2	337.5
122.5°	78.2	88.5	154.7	270.9	320.6
125°	85.1	94.4	154.9	254.3	298.3
127.5°	90.6	100.2	154.9	241.9	279.3
130°	93.7	104.0	154.9	235.0	268.6
132.5°	97.5	107.8	154.1	228.8	260.2
135°	102.3	113.5	153.9	219.5	246.6
137.5°	107.8	118.1	153.9	210.3	235.0
140°	110.9	121.2	153.9	204.1	226.6
142.5°	114.7	124.3	153.9	198.0	218.2
145°	119.5	128.8	153.9	189.7	206.5
147.5°	125.2	133.3	154.9	181.9	195.2
150°	129.1	135.6	154.9	178.0	188.3
152.5°	132.1	137.9	154.9	174.2	183.0
155°	136.7	141.4	154.9	170.3	175.9
157.5°	141.3	144.8	154.9	166.8	170.4
160°	144.4	147.2	154.9	164.5	167.3
162.5°	146.6	148.7	154.9	162.9	165.0
165°	150.1	151.0	155.8	160.6	162.5
167.5°	152.2	152.4	154.9	159.3	160.2
170°	153.0	153.9	154.9	157.8	158.7
172.5°	154.5	154.7	155.6	157.0	157.2
175°	155.8	155.8	155.8	156.8	155.8
177.5°	155.8	155.8	155.8	155.8	155.8
180°	155.8	155.8	155.8	155.8	155.8



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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	4.79	5.62	5.53	6.34	7.19	4.41	5.24	5.15	5.96	6.81
	3H	5.84	6.58	6.59	7.31	8.19	5.41	6.15	6.16	6.88	7.76
	4H	6.27	6.96	7.04	7.70	8.60	5.84	6.52	6.60	7.26	8.16
	6H	6.59	7.21	7.36	7.97	8.87	6.17	6.80	6.95	7.55	8.45
	8H	6.69	7.28	7.47	8.05	8.96	6.27	6.87	7.06	7.63	8.54
	12H	6.75	7.32	7.54	8.08	9.01	6.33	6.89	7.11	7.65	8.58
4H	2H	5.02	5.71	5.79	6.45	7.34	4.70	5.38	5.46	6.12	7.02
	3H	6.32	6.88	7.10	7.66	8.57	5.94	6.50	6.72	7.28	8.19
	4H	6.88	7.39	7.67	8.17	9.11	6.50	7.00	7.28	7.78	8.72
	6H	7.34	7.77	8.14	8.57	9.52	6.96	7.39	7.76	8.19	9.14
	8H	7.49	7.89	8.30	8.69	9.65	7.11	7.51	7.92	8.31	9.27
	12H	7.60	7.95	8.42	8.77	9.74	7.20	7.55	8.02	8.37	9.34
8H	4H	7.03	7.43	7.84	8.23	9.18	6.68	7.08	7.49	7.88	8.84
	6H	7.61	7.94	8.45	8.78	9.74	7.26	7.58	8.09	8.43	9.39
	8H	7.85	8.14	8.70	8.98	9.95	7.49	7.78	8.34	8.62	9.60
	12H	8.04	8.29	8.89	9.12	10.16	7.67	7.92	8.51	8.75	9.79
12H	4H	7.00	7.36	7.83	8.18	9.14	6.67	7.02	7.49	7.84	8.80
	6H	7.63	7.91	8.48	8.76	9.73	7.29	7.58	8.14	8.42	9.39
	8H	7.90	8.15	8.75	8.98	10.02	7.56	7.81	8.41	8.64	9.68