

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: P854077

Luminaire Tested: SQ2-PP3-025U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854077
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-025U-050D-935-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

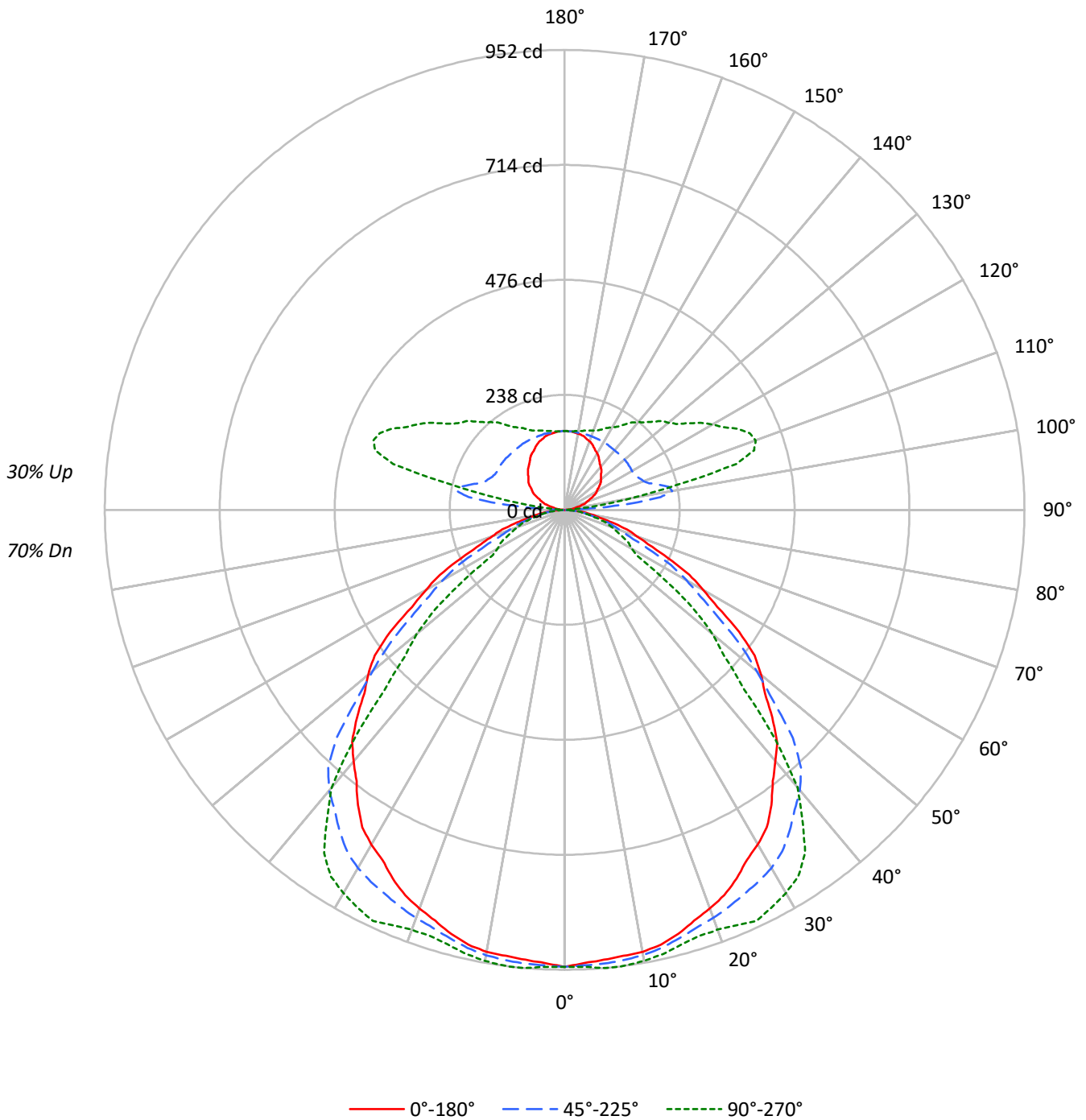
Lumens per Lamp: N/A
Luminaire Lumens: 3394.1 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 25.2
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	106	106	106	106	95	95	95	84	84	84	75	75	75	70				
1	103	99	95	92	97	94	91	88	84	82	79	75	74	72	67	66	65	61				
2	94	87	81	76	89	83	78	73	75	71	67	67	64	61	60	58	56	52				
3	87	77	70	64	82	74	67	62	66	61	57	60	56	52	54	51	48	45				
4	80	69	61	55	75	66	59	53	59	54	49	54	49	45	48	45	42	39				
5	73	62	54	48	69	59	51	46	53	47	43	48	44	40	44	40	37	34				
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30				
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	36	32	29	27				
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24				
9	54	42	34	29	52	40	33	29	37	31	27	34	29	25	31	27	24	22				
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	29	25	21	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15274	15274	15274
5°	15154	15284	15430
10°	15231	15346	15542
15°	15194	15345	15579
20°	15086	15447	15893
25°	15000	15642	16728
30°	14915	15959	17078
35°	14704	16005	17109
40°	14311	15976	15808
45°	13883	15253	12033
50°	13338	13011	10022
55°	12414	10950	7206
60°	10689	9397	5167
65°	9016	7259	5081
70°	7506	5712	4862
75°	6363	4928	4554
80°	5393	4277	4091
85°	4261	3520	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15253 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	2.7
10°-20°	260.7	7.7
20°-30°	408.4	12.0
30°-40°	503.8	14.8
40°-50°	474.4	14.0
50°-60°	335.9	9.9
60°-70°	191.4	5.6
70°-80°	94.7	2.8
80°-90°	23.5	0.7
90°-100°	65.9	1.9
100°-110°	205.1	6.0
110°-120°	200.7	5.9
120°-130°	163.8	4.8
130°-140°	134.0	3.9
140°-150°	104.6	3.1
150°-160°	75.5	2.2
160°-170°	46.1	1.4
170°-180°	15.6	0.5
0°-30°	759.2	22.4
0°-40°	1263.0	37.2
0°-60°	2073.2	61.1
0°-90°	2382.8	70.2
90°-120°	471.7	13.9
90°-150°	874.1	25.8
90°-180°	1011.0	29.8
0°-180°	3394.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	935	952	943	945	952	89
15°	909	922	918	927	932	256
25°	842	864	878	914	939	388
35°	746	766	812	858	868	465
45°	608	654	668	566	527	468
55°	441	467	389	293	256	389
65°	236	249	190	134	133	237
75°	102	113	79	74	73	111
85°	23	21	19	15	12	27
90°	0	1	3	3	3	1
95°	9	27	121	45	29	10
105°	36	51	202	386	368	38
115°	64	76	164	338	396	63
125°	89	99	162	266	312	79
135°	107	119	161	230	258	83
145°	125	135	161	198	216	79
155°	143	148	162	178	184	66
165°	157	158	163	168	170	44
175°	163	163	163	164	163	15
180°	163	163	163	163	163	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.0	946.0	946.0	946.0	946.0
2.5°	938.8	952.1	943.6	945.2	946.8
5°	935.0	951.6	943.0	945.2	952.0
7.5°	931.4	948.4	940.0	943.6	952.0
10°	929.0	943.7	936.0	941.2	948.0
12.5°	921.8	935.7	928.8	935.5	941.6
15°	909.0	921.7	918.0	927.1	932.0
17.5°	891.6	907.1	907.0	919.9	925.0
20°	878.0	896.6	899.0	915.2	925.0
22.5°	863.6	885.3	889.4	913.8	930.6
25°	842.0	863.5	878.0	913.6	939.0
27.5°	816.8	838.1	868.0	907.9	928.0
30°	800.0	820.5	856.0	897.4	916.0
32.5°	779.2	800.5	838.4	883.0	900.0
35°	746.0	766.5	812.0	858.2	868.0
37.5°	707.8	731.1	782.0	807.8	808.4
40°	679.0	709.3	758.0	762.7	750.0
42.5°	651.0	689.9	724.4	703.3	646.8
45°	608.0	654.0	668.0	566.1	527.0
47.5°	562.2	607.6	585.2	474.8	447.8
50°	531.0	574.0	518.0	424.4	399.0
52.5°	495.8	534.1	458.0	376.1	337.4
55°	441.0	467.4	389.0	293.2	256.0
57.5°	375.0	393.6	332.6	220.1	178.4
60°	331.0	345.7	291.0	180.5	160.0
62.5°	291.0	304.1	247.8	156.8	149.6
65°	236.0	248.7	190.0	134.0	133.0
67.5°	187.8	201.7	145.8	117.0	115.8
70°	159.0	173.7	121.0	105.0	103.0
72.5°	135.0	148.9	102.6	92.2	91.0
75°	102.0	112.8	79.0	74.0	73.0
77.5°	74.0	80.8	58.8	56.2	55.2
80°	58.0	60.9	46.0	45.0	44.0
82.5°	43.6	42.6	34.8	33.8	32.0
85°	23.0	21.0	19.0	14.9	12.0
87.5°	7.2	7.4	3.8	3.0	3.0
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.2	38.2	12.5	10.2
95°	9.0	26.6	121.0	44.6	29.0
97.5°	16.4	34.6	200.3	124.7	78.6
100°	22.0	38.6	225.9	211.3	141.0
102.5°	27.6	43.4	221.1	301.8	236.9
105°	36.0	50.7	201.9	385.5	367.9
107.5°	44.4	58.1	183.5	391.9	411.3
110°	50.0	63.7	173.9	382.7	420.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.6	68.5	169.1	366.2	414.5
115°	64.0	75.7	163.9	338.2	395.9
117.5°	72.2	82.9	161.7	311.4	370.5
120°	77.0	87.7	160.9	296.2	352.9
122.5°	81.8	92.5	161.7	283.3	335.3
125°	89.0	98.7	161.9	266.0	311.9
127.5°	94.8	104.7	161.9	253.0	292.1
130°	98.0	108.7	161.9	245.7	280.9
132.5°	102.0	112.7	161.1	239.3	272.1
135°	107.0	118.7	160.9	229.6	257.9
137.5°	112.8	123.5	160.9	219.9	245.7
140°	116.0	126.7	160.9	213.5	236.9
142.5°	120.0	129.9	160.9	207.0	228.1
145°	125.0	134.7	160.9	198.3	215.9
147.5°	131.0	139.4	161.9	190.3	204.1
150°	135.0	141.8	161.9	186.2	196.9
152.5°	138.2	144.2	161.9	182.1	191.3
155°	143.0	147.8	161.9	178.1	183.9
157.5°	147.8	151.5	161.9	174.4	178.1
160°	151.0	153.9	161.9	172.0	174.9
162.5°	153.3	155.5	161.9	170.4	172.5
165°	156.9	157.9	162.9	168.0	169.9
167.5°	159.1	159.3	161.9	166.6	167.5
170°	159.9	160.9	161.9	165.0	165.9
172.5°	161.5	161.7	162.7	164.2	164.3
175°	162.9	162.9	162.9	163.9	162.9
177.5°	162.9	162.9	162.9	162.9	162.9
180°	162.9	162.9	162.9	162.9	162.9

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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	18.72	19.75	19.49	20.54	21.49	15.12	16.15	15.89	16.93	17.88
	3H	19.83	20.75	20.61	21.54	22.53	16.24	17.15	17.02	17.95	18.93
	4H	20.18	21.04	20.98	21.85	22.84	16.71	17.57	17.51	18.37	19.37
	6H	20.40	21.20	21.22	22.01	23.02	17.06	17.86	17.87	18.67	19.68
	8H	20.46	21.21	21.28	22.05	23.06	17.15	17.91	17.97	18.74	19.75
	12H	20.48	21.20	21.31	22.02	23.06	17.17	17.89	18.00	18.72	19.75
4H	2H	18.85	19.71	19.66	20.52	21.51	15.85	16.72	16.66	17.52	18.52
	3H	20.18	20.89	20.99	21.73	22.74	17.12	17.83	17.94	18.67	19.68
	4H	20.66	21.30	21.49	22.14	23.18	17.68	18.33	18.51	19.17	20.21
	6H	21.00	21.56	21.85	22.42	23.47	18.13	18.69	18.98	19.55	20.60
	8H	21.10	21.62	21.95	22.48	23.53	18.25	18.78	19.10	19.63	20.69
	12H	21.14	21.61	22.01	22.49	23.55	18.29	18.76	19.16	19.64	20.70
8H	4H	20.69	21.21	21.54	22.07	23.12	17.97	18.49	18.82	19.34	20.40
	6H	21.12	21.55	22.00	22.45	23.51	18.52	18.95	19.40	19.85	20.90
	8H	21.28	21.66	22.17	22.56	23.63	18.70	19.09	19.59	19.98	21.05
	12H	21.37	21.71	22.26	22.60	23.72	18.78	19.12	19.67	20.01	21.14
12H	4H	20.65	21.12	21.52	22.00	23.06	17.98	18.45	18.85	19.33	20.39
	6H	21.11	21.50	22.00	22.39	23.46	18.57	18.95	19.46	19.85	20.92
	8H	21.29	21.63	22.18	22.51	23.64	18.79	19.12	19.68	20.01	21.14