

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: P854078

Luminaire Tested: SQ2-PP3-025U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854078
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-940-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

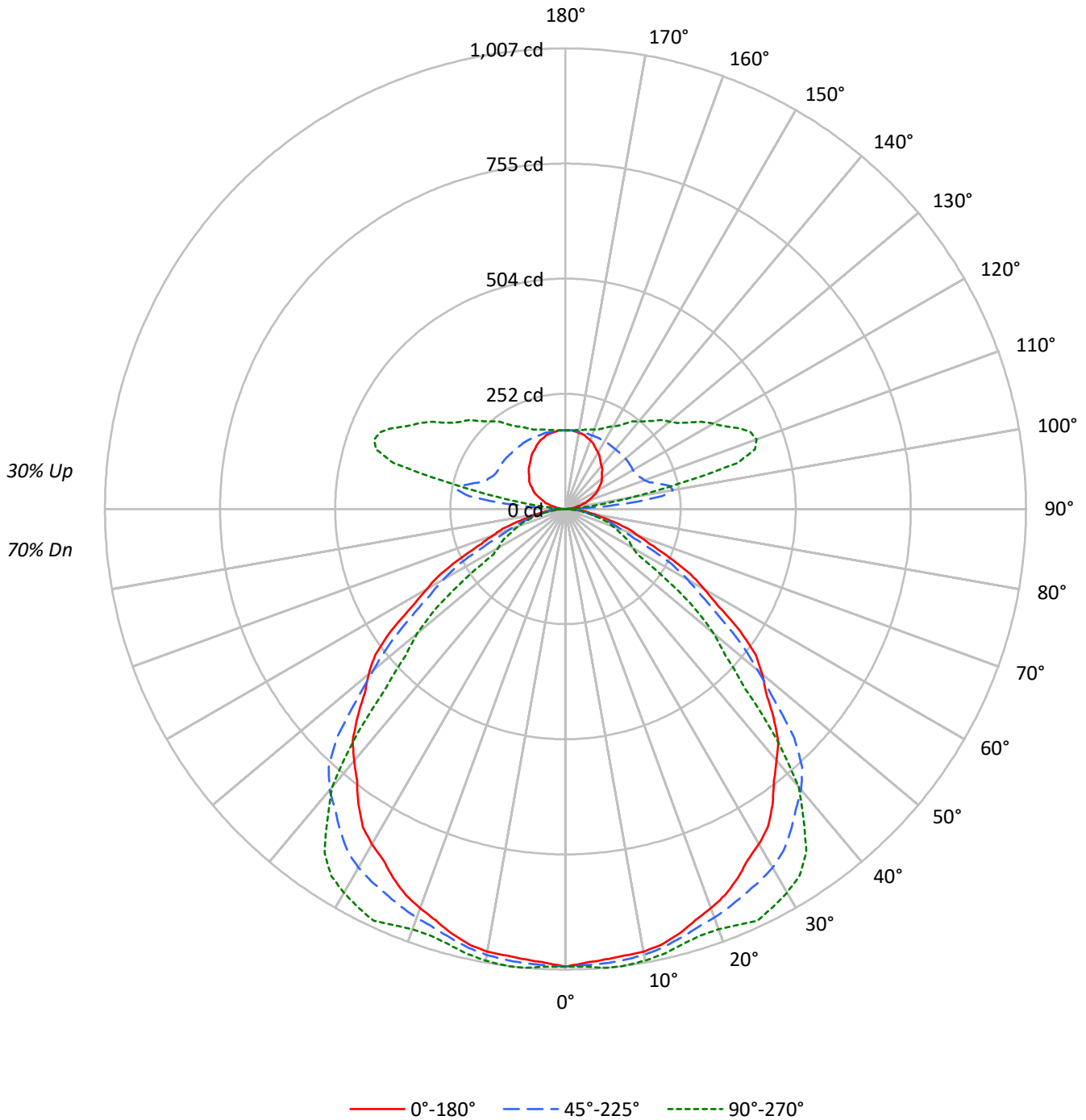
Lumens per Lamp: N/A
Luminaire Lumens: 3589.3 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	52	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°	16157	16157	16157
5°	16029	16167	16321
10°	16111	16233	16441
15°	16072	16231	16478
20°	15957	16338	16811
25°	15866	16545	17696
30°	15776	16882	18064
35°	15554	16929	18096
40°	15137	16899	16720
45°	14684	16134	12727
50°	14109	13762	10603
55°	13132	11583	7623
60°	11305	9939	5464
65°	9536	7679	5375
70°	7940	6043	5146
75°	6731	5215	4816
80°	5709	4528	4324
85°	4502	3724	2353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16134 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	2.7
10°-20°	275.8	7.7
20°-30°	432.0	12.0
30°-40°	532.9	14.8
40°-50°	501.8	14.0
50°-60°	355.3	9.9
60°-70°	202.4	5.6
70°-80°	100.2	2.8
80°-90°	24.9	0.7
90°-100°	69.7	1.9
100°-110°	216.8	6.0
110°-120°	212.1	5.9
120°-130°	173.1	4.8
130°-140°	141.6	3.9
140°-150°	110.5	3.1
150°-160°	79.8	2.2
160°-170°	48.8	1.4
170°-180°	16.4	0.5
0°-30°	803.0	22.4
0°-40°	1336.0	37.2
0°-60°	2193.0	61.1
0°-90°	2520.5	70.2
90°-120°	498.5	13.9
90°-150°	923.8	25.7
90°-180°	1069.0	29.8
0°-180°	3589.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	989	1007	998	1000	1007	94
15°	962	975	971	981	986	271
25°	891	913	929	966	993	410
35°	789	811	859	908	918	492
45°	643	692	707	599	557	495
55°	466	494	412	310	271	412
65°	250	263	201	142	141	251
75°	108	119	84	78	77	117
85°	24	22	20	16	13	29
90°	0	1	3	3	3	2
95°	10	28	128	47	31	11
105°	38	54	213	407	389	40
115°	68	80	173	357	418	67
125°	94	104	171	281	330	83
135°	113	125	170	243	273	87
145°	132	142	170	210	228	83
155°	151	156	171	188	194	70
165°	166	167	172	178	180	47
175°	172	172	172	173	172	16
180°	172	172	172	172	172	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.7	1000.7	1000.7	1000.7	1000.7
2.5°	993.0	1007.1	998.1	999.8	1001.5
5°	989.0	1006.6	997.5	999.8	1007.0
7.5°	985.2	1003.2	994.3	998.1	1007.0
10°	982.7	998.2	990.1	995.5	1002.8
12.5°	975.1	989.7	982.5	989.6	996.0
15°	961.5	975.0	971.0	980.7	985.8
17.5°	943.1	959.5	959.4	973.1	978.4
20°	928.7	948.4	950.9	968.1	978.4
22.5°	913.5	936.5	940.8	966.6	984.4
25°	890.6	913.4	928.7	966.4	993.3
27.5°	864.0	886.5	918.1	960.3	981.6
30°	846.2	867.9	905.5	949.3	968.9
32.5°	824.2	846.8	886.8	934.0	952.0
35°	789.1	810.8	858.9	907.8	918.1
37.5°	748.7	773.3	827.2	854.5	855.1
40°	718.2	750.3	801.8	806.8	793.3
42.5°	688.6	729.8	766.3	743.9	684.2
45°	643.1	691.7	706.6	598.8	557.4
47.5°	594.7	642.7	619.0	502.2	473.7
50°	561.7	607.2	547.9	448.9	422.1
52.5°	524.4	565.0	484.5	397.9	356.9
55°	466.5	494.4	411.5	310.1	270.8
57.5°	396.7	416.3	351.8	232.8	188.7
60°	350.1	365.6	307.8	191.0	169.2
62.5°	307.8	321.7	262.1	165.9	158.2
65°	249.6	263.1	201.0	141.7	140.7
67.5°	198.7	213.3	154.2	123.7	122.5
70°	168.2	183.7	128.0	111.0	109.0
72.5°	142.8	157.5	108.5	97.5	96.3
75°	107.9	119.3	83.6	78.3	77.2
77.5°	78.3	85.5	62.2	59.4	58.4
80°	61.4	64.5	48.7	47.6	46.5
82.5°	46.1	45.1	36.8	35.7	33.8
85°	24.3	22.3	20.1	15.8	12.7
87.5°	7.6	7.8	4.0	3.2	3.2
90°	0.0	1.0	3.2	3.2	3.2
92.5°	3.4	11.9	40.4	13.3	10.8
95°	9.5	28.1	127.8	47.2	30.6
97.5°	17.3	36.5	211.7	131.8	83.0
100°	23.2	40.8	238.8	223.3	149.0
102.5°	29.2	45.9	233.7	319.0	250.4
105°	38.0	53.5	213.4	407.4	388.8
107.5°	46.9	61.4	194.0	414.2	434.6
110°	52.8	67.3	183.8	404.5	444.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.7	72.4	178.8	387.0	438.0
115°	67.6	80.0	173.3	357.4	418.4
117.5°	76.3	87.6	170.9	329.1	391.5
120°	81.3	92.7	170.1	313.0	372.9
122.5°	86.4	97.8	170.9	299.4	354.3
125°	94.0	104.4	171.1	281.1	329.6
127.5°	100.2	110.7	171.1	267.4	308.7
130°	103.5	114.9	171.1	259.7	296.9
132.5°	107.8	119.1	170.3	252.9	287.6
135°	113.0	125.4	170.1	242.6	272.6
137.5°	119.2	130.5	170.1	232.4	259.7
140°	122.6	133.9	170.1	225.6	250.4
142.5°	126.8	137.3	170.1	218.8	241.1
145°	132.1	142.4	170.1	209.6	228.2
147.5°	138.4	147.3	171.1	201.1	215.7
150°	142.6	149.9	171.1	196.8	208.1
152.5°	146.0	152.4	171.1	192.5	202.2
155°	151.1	156.2	171.1	188.2	194.4
157.5°	156.1	160.1	171.1	184.3	188.3
160°	159.5	162.6	171.1	181.8	184.9
162.5°	162.1	164.3	171.1	180.1	182.3
165°	165.9	166.9	172.2	177.5	179.6
167.5°	168.2	168.4	171.1	176.0	177.1
170°	169.0	170.1	171.1	174.3	175.4
172.5°	170.7	170.9	172.0	173.5	173.7
175°	172.2	172.2	172.2	173.2	172.2
177.5°	172.2	172.2	172.2	172.2	172.2
180°	172.2	172.2	172.2	172.2	172.2

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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	18.92	19.95	19.69	20.73	21.68	15.31	16.34	16.08	17.13	18.08
	3H	20.03	20.94	20.81	21.74	22.72	16.43	17.35	17.21	18.15	19.13
	4H	20.38	21.24	21.18	22.05	23.04	16.90	17.77	17.70	18.57	19.57
	6H	20.60	21.40	21.41	22.21	23.22	17.26	18.05	18.07	18.87	19.87
	8H	20.65	21.41	21.48	22.24	23.25	17.35	18.10	18.17	18.93	19.94
	12H	20.67	21.39	21.50	22.22	23.25	17.37	18.09	18.19	18.91	19.95
4H	2H	19.05	19.91	19.85	20.72	21.71	16.05	16.91	16.85	17.72	18.71
	3H	20.37	21.09	21.19	21.93	22.94	17.32	18.03	18.13	18.87	19.88
	4H	20.85	21.50	21.68	22.34	23.38	17.88	18.53	18.71	19.36	20.40
	6H	21.20	21.76	22.05	22.62	23.66	18.33	18.89	19.17	19.75	20.79
	8H	21.30	21.82	22.15	22.67	23.73	18.45	18.97	19.30	19.83	20.89
	12H	21.34	21.81	22.21	22.69	23.75	18.49	18.95	19.36	19.83	20.89
8H	4H	20.88	21.40	21.73	22.26	23.32	18.16	18.68	19.01	19.54	20.60
	6H	21.32	21.75	22.20	22.65	23.71	18.71	19.15	19.59	20.04	21.10
	8H	21.48	21.86	22.37	22.75	23.83	18.90	19.28	19.79	20.18	21.25
	12H	21.57	21.91	22.46	22.79	23.92	18.98	19.32	19.87	20.20	21.33
12H	4H	20.85	21.32	21.72	22.20	23.26	18.18	18.65	19.05	19.52	20.59
	6H	21.31	21.69	22.20	22.59	23.66	18.77	19.15	19.66	20.04	21.12
	8H	21.49	21.83	22.38	22.71	23.84	18.98	19.32	19.87	20.21	21.33