

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: P854089

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854089
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-050U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

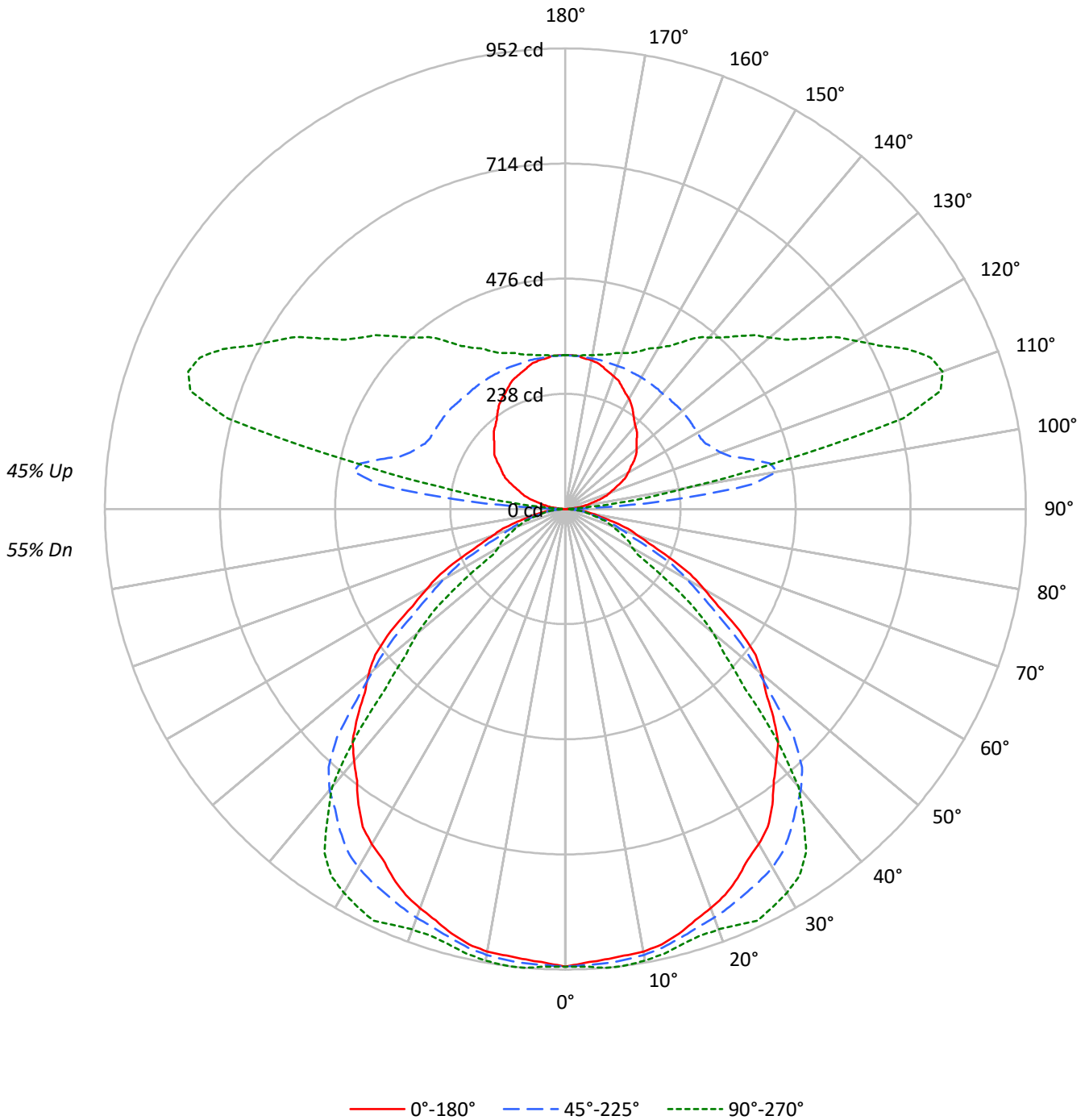
Lumens per Lamp: N/A
Luminaire Lumens: 4357.4 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 32.6
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

TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

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	50	30	10	0		
RCR																										
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55								
1	99	95	92	88	92	89	86	83	76	74	72	65	63	62	54	53	52	47								
2	91	84	78	73	84	78	73	69	67	64	60	58	55	52	49	47	45	40								
3	83	74	67	61	77	69	63	58	60	55	51	51	48	45	43	41	39	35								
4	76	66	58	52	71	62	55	50	54	48	44	46	42	39	39	36	34	30								
5	70	59	51	45	65	55	48	43	48	43	38	41	37	34	35	32	30	27								
6	65	53	45	39	60	50	43	37	43	38	34	38	33	30	32	29	26	23								
7	60	48	40	35	56	45	38	33	39	34	30	34	30	26	29	26	23	21								
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	24	21	19								
9	52	40	32	27	48	37	31	26	33	28	24	29	24	21	25	21	19	17								
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15								

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



TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	2.1
10°-20°	260.7	6.0
20°-30°	408.4	9.4
30°-40°	503.8	11.6
40°-50°	474.4	10.9
50°-60°	335.9	7.7
60°-70°	191.4	4.4
70°-80°	94.7	2.2
80°-90°	23.5	0.5
90°-100°	126.6	2.9
100°-110°	401.7	9.2
110°-120°	393.9	9.0
120°-130°	320.5	7.4
130°-140°	261.3	6.0
140°-150°	203.8	4.7
150°-160°	146.8	3.4
160°-170°	89.7	2.1
170°-180°	30.3	0.7
0°-30°	759.2	17.4
0°-40°	1263.0	29.0
0°-60°	2073.2	47.6
0°-90°	2382.8	54.7
90°-120°	922.2	21.2
90°-150°	1707.8	39.2
90°-180°	1975.0	45.3
0°-180°	4357.4	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	2
95°	17	51	230	85	55	20
105°	70	98	396	754	723	74
115°	125	148	320	665	782	123
125°	173	194	315	521	614	154
135°	209	230	313	448	505	161
145°	244	263	313	387	421	153
155°	278	288	314	345	359	128
165°	303	306	315	327	330	85
175°	317	316	317	319	318	30
180°	318	318	318	318	318	



TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

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°	5.6	22.2	71.0	23.6	16.6
95°	17.0	51.2	230.0	85.3	55.0
97.5°	31.6	66.4	389.6	243.4	149.4
100°	42.0	75.2	444.0	404.7	263.0
102.5°	53.2	84.9	434.4	594.4	455.0
105°	70.0	98.3	396.0	754.2	722.9
107.5°	86.8	113.0	359.4	770.9	813.1
110°	98.0	123.4	341.0	751.7	829.9



TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.2	133.0	330.6	718.6	817.9
115°	125.0	148.5	320.0	664.6	781.9
117.5°	140.4	162.7	315.8	612.6	730.9
120°	150.0	171.5	315.0	580.5	694.9
122.5°	159.6	180.3	315.0	554.8	661.3
125°	173.0	193.5	315.0	521.1	613.9
127.5°	184.8	204.5	315.0	495.0	574.1
130°	192.0	212.5	315.0	479.6	550.9
132.5°	199.2	219.7	314.2	467.4	531.8
135°	209.0	229.5	313.0	448.2	505.0
137.5°	218.6	240.1	312.8	429.9	480.6
140°	225.0	246.5	312.0	417.0	463.0
142.5°	233.0	253.7	312.8	404.1	447.0
145°	244.0	262.6	313.0	386.7	421.0
147.5°	255.0	270.8	313.2	371.4	399.4
150°	263.0	275.7	314.0	362.5	385.0
152.5°	269.4	280.5	314.0	355.2	373.8
155°	278.0	287.8	314.0	345.3	359.0
157.5°	287.2	293.8	315.0	339.2	348.6
160°	292.0	297.8	315.0	335.1	343.0
162.5°	296.8	301.1	315.0	331.9	337.4
165°	303.0	305.9	315.0	327.0	330.0
167.5°	308.8	309.6	316.0	323.6	326.2
170°	312.0	312.0	316.0	322.0	323.0
172.5°	313.6	314.4	316.0	320.4	320.6
175°	317.0	316.0	317.0	318.9	318.0
177.5°	318.0	317.2	317.2	318.7	317.2
180°	318.0	318.0	318.0	318.0	318.0



TEST NUMBER: P854089

CATALOG NUMBER: SQ2-PP3-050U-050D-935-UNV-STD-W-4

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	17.44	18.31	18.36	19.25	20.45	13.84	14.71	14.76	15.64	16.85
	3H	18.54	19.31	19.47	20.26	21.49	14.94	15.72	15.88	16.66	17.89
	4H	18.88	19.61	19.83	20.56	21.80	15.41	16.14	16.36	17.09	18.33
	6H	19.10	19.77	20.06	20.73	21.98	15.75	16.43	16.71	17.38	18.63
	8H	19.15	19.79	20.11	20.76	22.01	15.84	16.48	16.81	17.45	18.70
	12H	19.16	19.77	20.13	20.74	22.01	15.85	16.46	16.83	17.43	18.70
4H	2H	17.55	18.28	18.51	19.23	20.47	14.55	15.28	15.51	16.23	17.47
	3H	18.86	19.47	19.83	20.45	21.70	15.80	16.41	16.77	17.39	18.64
	4H	19.33	19.89	20.31	20.86	22.14	16.36	16.91	17.33	17.89	19.16
	6H	19.67	20.15	20.66	21.15	22.42	16.80	17.28	17.79	18.27	19.55
	8H	19.77	20.21	20.75	21.20	22.49	16.92	17.37	17.91	18.36	19.65
	12H	19.80	20.20	20.81	21.21	22.51	16.95	17.35	17.96	18.36	19.65
8H	4H	19.35	19.80	20.34	20.79	22.08	16.63	17.08	17.62	18.07	19.36
	6H	19.79	20.15	20.80	21.19	22.47	17.18	17.55	18.19	18.58	19.87
	8H	19.94	20.26	20.96	21.29	22.59	17.36	17.69	18.39	18.71	20.02
	12H	20.03	20.31	21.05	21.33	22.68	17.44	17.72	18.46	18.74	20.09
12H	4H	19.31	19.71	20.32	20.72	22.02	16.64	17.04	17.65	18.05	19.34
	6H	19.77	20.10	20.80	21.12	22.43	17.23	17.56	18.25	18.58	19.88
	8H	19.94	20.23	20.97	21.24	22.60	17.44	17.73	18.46	18.74	20.09