

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: P853659

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853659
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-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

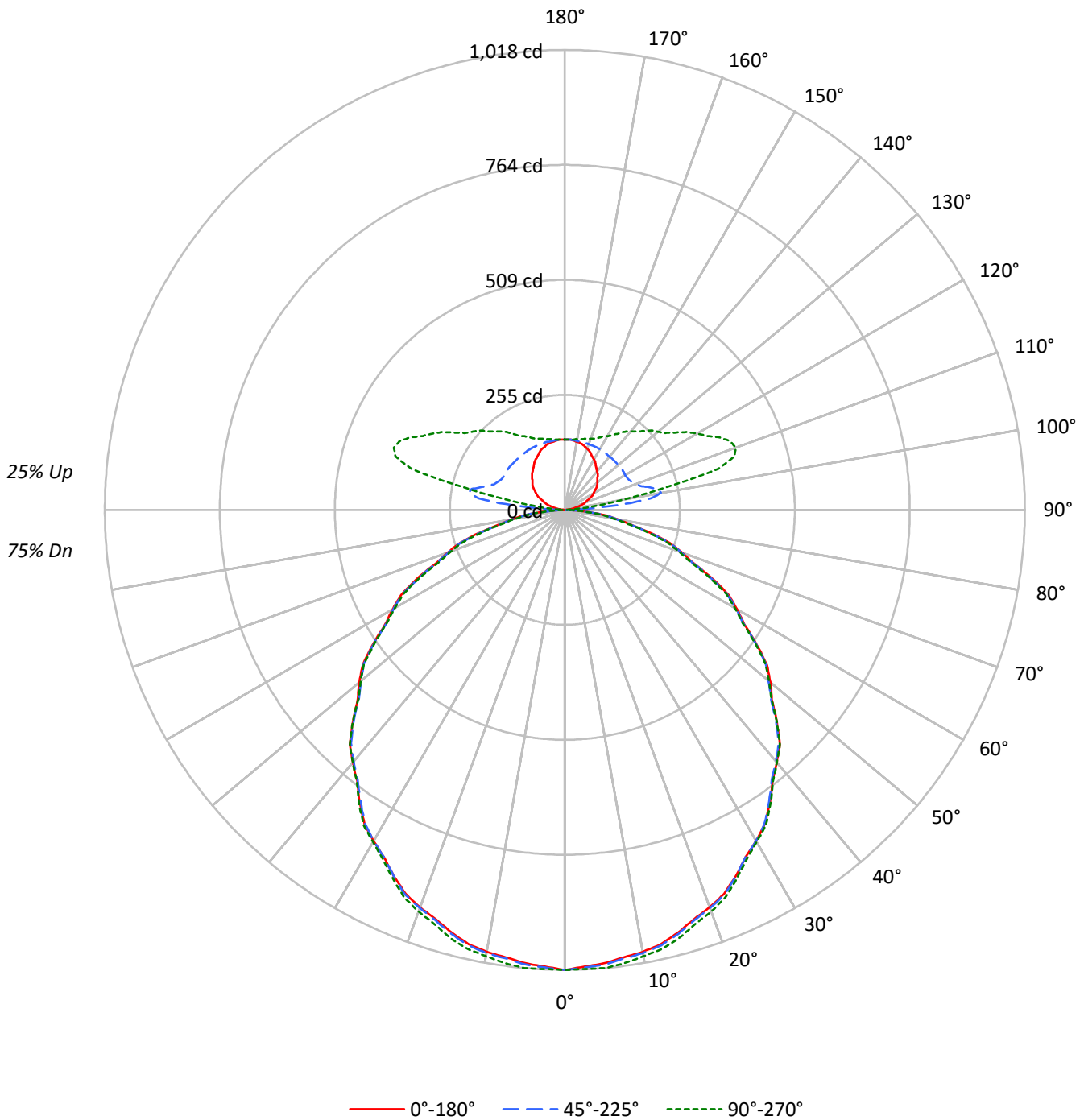
Lumens per Lamp: N/A
Luminaire Lumens: 3826.3 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 34.1
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: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-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	0	
RCR																						
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75				
1	103	99	94	91	98	94	90	87	85	82	80	77	75	73	69	68	66	62				
2	94	86	79	74	89	82	76	71	74	70	66	67	64	60	61	58	55	52				
3	85	75	67	61	81	72	65	59	65	60	55	59	55	51	54	50	47	44				
4	78	67	58	52	74	64	56	50	58	52	47	53	48	43	48	44	40	37				
5	72	59	51	44	68	57	49	43	52	45	40	47	42	38	43	39	35	32				
6	66	53	45	39	63	51	43	37	47	40	35	43	37	33	39	34	31	28				
7	61	48	40	34	58	46	38	33	42	36	31	39	33	29	36	31	27	25				
8	57	44	36	30	54	42	35	29	39	32	28	36	30	26	33	28	24	22				
9	53	40	32	27	50	39	31	26	36	29	25	33	27	23	30	25	22	20				
10	50	37	29	24	47	36	28	24	33	27	22	30	25	21	28	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16443	16443	16443
5°	16326	16371	16506
10°	16287	16333	16446
15°	16187	16234	16396
20°	16091	16115	16258
25°	15943	15943	16042
30°	15778	15778	15830
35°	15589	15534	15642
40°	15382	15323	15382
45°	15143	15079	15143
50°	14915	14777	14812
55°	14567	14528	14452
60°	14202	14111	14024
65°	13780	13624	13463
70°	12968	12902	12642
75°	12202	11946	11597
80°	10832	10581	10191
85°	8744	7966	7447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15237 cd/sqm



TEST NUMBER: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	2.5
10°-20°	275.1	7.2
20°-30°	413.8	10.8
30°-40°	495.2	12.9
40°-50°	510.9	13.4
50°-60°	460.9	12.0
60°-70°	351.7	9.2
70°-80°	202.2	5.3
80°-90°	53.2	1.4
90°-100°	63.1	1.6
100°-110°	196.1	5.1
110°-120°	191.9	5.0
120°-130°	156.6	4.1
130°-140°	128.2	3.3
140°-150°	100.0	2.6
150°-160°	72.2	1.9
160°-170°	44.1	1.2
170°-180°	14.9	0.4
0°-30°	785.2	20.5
0°-40°	1280.3	33.5
0°-60°	2252.1	58.9
0°-90°	2859.2	74.7
90°-120°	451.1	11.8
90°-150°	835.9	21.8
90°-180°	967.0	25.3
0°-180°	3826.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1007	1021	1010	1012	1018	96
15°	968	981	971	976	981	273
25°	895	904	895	896	900	412
35°	791	796	788	791	794	495
45°	663	667	660	662	663	512
55°	518	520	516	513	513	463
65°	361	359	357	354	352	355
75°	196	194	192	187	186	206
85°	47	44	43	39	40	55
90°	0	1	3	3	3	2
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	



TEST NUMBER: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1018.4	1018.4	1018.4	1018.4	1018.4
2.5°	1011.7	1023.7	1014.0	1016.2	1017.3
5°	1007.3	1020.9	1010.1	1011.6	1018.4
7.5°	999.0	1013.6	1001.7	1004.4	1012.0
10°	993.4	1007.0	996.2	997.7	1003.1
12.5°	984.5	998.1	987.3	989.9	995.4
15°	968.4	980.7	971.2	975.5	980.9
17.5°	949.9	962.9	952.4	956.1	960.7
20°	936.5	947.4	937.9	939.5	946.2
22.5°	919.9	930.7	922.4	922.8	928.5
25°	894.9	904.4	894.9	896.4	900.5
27.5°	866.3	874.5	866.3	867.8	871.3
30°	846.3	854.5	846.3	847.8	849.1
32.5°	824.2	831.2	823.0	824.5	828.0
35°	790.9	796.3	788.1	790.9	793.6
37.5°	755.3	759.4	752.6	754.0	756.4
40°	729.8	733.9	727.0	728.4	729.8
42.5°	704.3	707.3	700.4	701.8	704.3
45°	663.2	667.3	660.4	661.8	663.2
47.5°	621.6	624.0	618.3	617.2	619.6
50°	593.8	595.2	588.3	588.3	589.7
52.5°	563.9	565.2	560.5	558.3	559.7
55°	517.5	520.2	516.1	513.4	513.4
57.5°	470.9	473.3	468.1	466.7	466.5
60°	439.8	441.2	437.0	435.6	434.3
62.5°	408.7	409.0	404.9	403.4	402.1
65°	360.7	359.4	356.6	353.8	352.4
67.5°	306.9	308.3	305.5	301.1	301.1
70°	274.7	276.1	273.3	267.8	267.8
72.5°	243.6	242.8	241.1	236.7	234.5
75°	195.6	194.3	191.5	187.3	185.9
77.5°	147.6	146.3	144.9	139.6	140.7
80°	116.5	115.2	113.8	109.6	109.6
82.5°	88.8	86.4	84.9	80.8	80.8
85°	47.2	44.5	43.0	38.9	40.2
87.5°	13.3	12.4	11.7	9.5	9.5
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



TEST NUMBER: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-UNV-STD-W-4

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

TEST NUMBER: P853659

CATALOG NUMBER: SQ2-F-025U-075D-930-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	19.71	20.87	20.42	21.60	22.46	19.63	20.79	20.34	21.52	22.39
	3H	21.51	22.55	22.23	23.29	24.19	21.39	22.43	22.11	23.17	24.07
	4H	22.18	23.17	22.92	23.92	24.83	22.03	23.01	22.77	23.77	24.68
	6H	22.67	23.58	23.42	24.34	25.26	22.48	23.39	23.24	24.15	25.08
	8H	22.81	23.68	23.58	24.46	25.39	22.61	23.48	23.38	24.26	25.19
	12H	22.90	23.73	23.67	24.50	25.45	22.68	23.50	23.45	24.28	25.23
4H	2H	20.30	21.28	21.04	22.03	22.94	20.23	21.22	20.98	21.97	22.88
	3H	22.31	23.13	23.07	23.92	24.85	22.20	23.02	22.96	23.81	24.74
	4H	23.11	23.86	23.88	24.65	25.60	22.97	23.72	23.74	24.50	25.46
	6H	23.72	24.37	24.51	25.18	26.14	23.54	24.19	24.33	25.00	25.96
	8H	23.91	24.52	24.71	25.33	26.30	23.71	24.32	24.51	25.13	26.10
	12H	24.03	24.58	24.84	25.41	26.39	23.80	24.35	24.62	25.18	26.16
8H	4H	23.38	23.99	24.18	24.80	25.77	23.26	23.86	24.05	24.67	25.65
	6H	24.11	24.62	24.94	25.47	26.44	23.95	24.45	24.77	25.30	26.28
	8H	24.38	24.83	25.22	25.68	26.67	24.19	24.64	25.03	25.49	26.48
	12H	24.57	24.96	25.40	25.80	26.85	24.34	24.73	25.18	25.57	26.62
12H	4H	23.39	23.94	24.21	24.77	25.75	23.27	23.82	24.08	24.65	25.63
	6H	24.16	24.61	24.99	25.45	26.45	24.00	24.45	24.84	25.30	26.29
	8H	24.47	24.86	25.30	25.70	26.75	24.28	24.68	25.12	25.51	26.56