

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: P854244

Luminaire Tested: SQ2-PW1-025U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854244
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-025U-050D-930-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

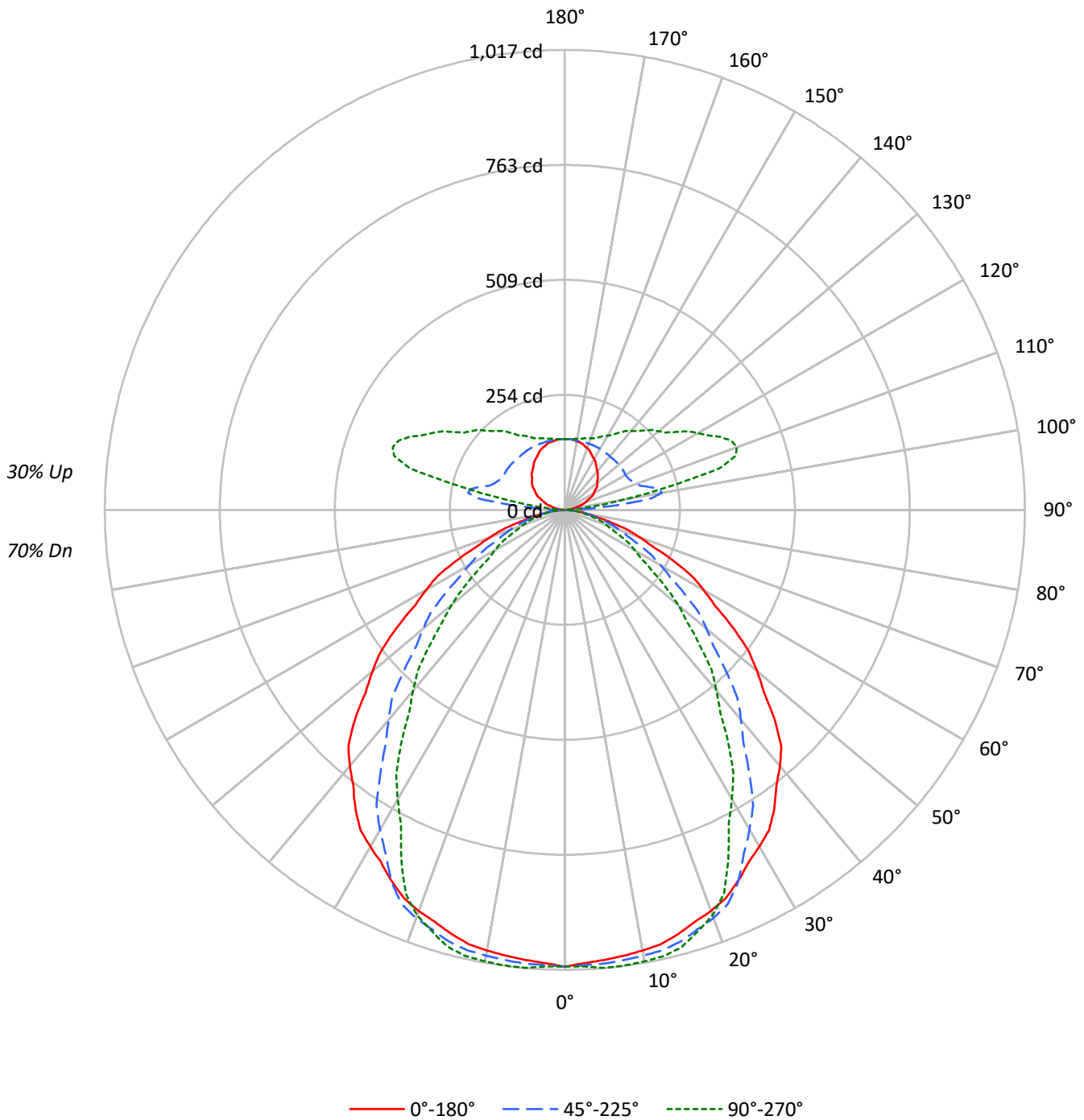
Lumens per Lamp: N/A
Luminaire Lumens: 3213.9 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-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	0
RCR																		
0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	103	99	95	92	97	94	90	88	84	82	79	75	73	72	67	66	64	60
2	94	87	81	76	89	83	78	73	75	71	67	67	64	61	60	58	55	52
3	87	77	70	65	82	74	67	62	67	61	57	60	56	53	54	51	48	45
4	80	69	61	55	75	66	59	53	60	54	50	54	49	46	49	45	42	39
5	74	62	54	48	69	59	52	47	54	48	43	49	44	40	44	40	37	34
6	68	56	48	42	64	54	46	41	49	43	38	44	39	36	40	36	33	31
7	63	51	43	38	60	49	42	36	45	39	34	41	36	32	37	33	30	27
8	59	47	39	34	56	45	38	33	41	35	31	37	32	29	34	30	27	25
9	55	43	35	30	52	41	34	29	38	32	28	35	30	26	32	27	24	22
10	52	39	32	27	49	38	31	27	35	29	25	32	27	24	29	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16306	16306	16306
5°	16196	16321	16477
10°	16226	16415	16620
15°	16222	16527	16720
20°	16228	16509	16393
25°	16140	16158	15232
30°	16032	15224	13772
35°	15906	14010	12435
40°	15588	12770	10987
45°	14979	11485	9597
50°	13941	10268	8214
55°	12752	9070	6660
60°	11428	7889	5745
65°	9994	6797	5108
70°	8172	6038	4631
75°	6363	5221	4261
80°	4742	4472	3756
85°	3205	3390	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14979 cd/sqm



TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.2	3.0
10°-20°	278.6	8.7
20°-30°	410.0	12.8
30°-40°	448.3	13.9
40°-50°	402.2	12.5
50°-60°	300.0	9.3
60°-70°	189.6	5.9
70°-80°	93.9	2.9
80°-90°	22.4	0.7
90°-100°	63.4	2.0
100°-110°	197.3	6.1
110°-120°	193.0	6.0
120°-130°	157.6	4.9
130°-140°	128.9	4.0
140°-150°	100.6	3.1
150°-160°	72.6	2.3
160°-170°	44.4	1.4
170°-180°	15.0	0.5
0°-30°	784.8	24.4
0°-40°	1233.1	38.4
0°-60°	1935.3	60.2
0°-90°	2241.2	69.7
90°-120°	453.7	14.1
90°-150°	840.8	26.2
90°-180°	973.0	30.3
0°-180°	3213.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	999	1015	1007	1008	1017	95
15°	970	989	989	996	1000	274
25°	906	926	907	869	855	417
35°	807	798	711	649	631	503
45°	656	603	503	440	420	503
55°	453	410	322	253	237	405
65°	262	240	178	143	134	259
75°	102	110	84	70	68	112
85°	17	22	18	12	12	22
90°	0	1	3	3	3	1
95°	9	26	116	43	28	10
105°	35	49	194	371	354	37
115°	62	73	158	325	381	61
125°	86	95	156	256	300	76
135°	103	114	155	221	248	80
145°	120	130	155	191	208	75
155°	138	142	156	171	177	63
165°	151	152	157	162	164	42
175°	157	157	157	158	157	15
180°	157	157	157	157	157	



TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1009.9	1009.9	1009.9	1009.9	1009.9
2.5°	1003.0	1015.8	1007.6	1008.4	1010.7
5°	999.3	1015.3	1007.0	1008.2	1016.6
7.5°	994.3	1010.5	1004.3	1007.8	1016.1
10°	989.7	1006.6	1001.2	1006.2	1013.7
12.5°	983.5	1001.2	997.4	1003.1	1010.7
15°	970.5	989.3	988.7	995.6	1000.3
17.5°	955.3	974.1	973.2	974.9	977.2
20°	944.5	963.3	960.8	954.1	954.1
22.5°	929.1	949.4	943.1	924.7	918.7
25°	906.0	925.8	907.0	869.2	855.0
27.5°	879.1	895.1	857.4	803.6	784.1
30°	859.9	872.1	816.6	757.5	738.7
32.5°	839.9	844.6	775.0	713.6	693.3
35°	807.0	798.5	710.8	648.8	630.9
37.5°	768.1	742.9	649.0	584.1	564.4
40°	739.6	703.9	605.9	541.0	521.3
42.5°	708.1	663.3	565.2	500.3	479.8
45°	656.0	603.3	503.0	440.1	420.3
47.5°	597.3	545.0	444.9	384.0	367.0
50°	555.0	504.2	408.8	347.7	327.0
52.5°	511.9	466.4	373.4	310.6	282.4
55°	453.0	409.8	322.2	252.6	236.6
57.5°	392.4	355.0	275.8	212.6	199.5
60°	353.9	321.0	244.3	191.1	177.9
62.5°	317.0	287.9	213.5	171.1	160.2
65°	261.6	240.0	177.9	143.1	133.7
67.5°	207.8	195.7	147.9	117.4	111.2
70°	173.1	169.4	127.9	102.8	98.1
72.5°	143.1	144.6	108.7	89.0	85.8
75°	102.0	109.5	83.7	70.2	68.3
77.5°	69.4	80.7	61.9	51.9	50.4
80°	51.0	62.3	48.1	40.4	40.4
82.5°	35.6	44.6	34.2	30.4	30.4
85°	17.3	22.0	18.3	12.5	11.5
87.5°	4.6	7.1	3.7	2.9	2.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.8	36.7	12.1	9.8
95°	8.7	25.6	116.3	42.9	27.9
97.5°	15.8	33.3	192.7	119.9	75.6
100°	21.2	37.1	217.3	203.3	135.6
102.5°	26.5	41.8	212.7	290.3	227.9
105°	34.6	48.7	194.2	370.7	353.8
107.5°	42.7	55.9	176.5	376.9	395.6
110°	48.1	61.2	167.3	368.1	404.8



TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.5	65.9	162.7	352.2	398.6
115°	61.5	72.8	157.7	325.3	380.7
117.5°	69.4	79.8	155.6	299.5	356.3
120°	74.0	84.4	154.8	284.9	339.4
122.5°	78.6	89.0	155.6	272.5	322.5
125°	85.6	95.0	155.8	255.8	300.0
127.5°	91.1	100.7	155.8	243.3	280.9
130°	94.2	104.6	155.8	236.3	270.2
132.5°	98.1	108.4	155.0	230.1	261.7
135°	102.9	114.2	154.8	220.8	248.1
137.5°	108.5	118.8	154.8	211.5	236.3
140°	111.5	121.9	154.8	205.3	227.9
142.5°	115.4	125.0	154.8	199.1	219.4
145°	120.2	129.6	154.8	190.8	207.7
147.5°	126.0	134.0	155.8	183.0	196.3
150°	129.8	136.4	155.8	179.1	189.4
152.5°	132.9	138.7	155.8	175.2	184.0
155°	137.5	142.2	155.8	171.3	176.9
157.5°	142.1	145.7	155.8	167.8	171.3
160°	145.2	148.0	155.8	165.4	168.3
162.5°	147.5	149.6	155.8	163.9	166.0
165°	151.0	151.9	156.7	161.6	163.5
167.5°	153.1	153.3	155.8	160.2	161.1
170°	153.8	154.8	155.8	158.7	159.6
172.5°	155.4	155.6	156.5	157.9	158.1
175°	156.7	156.7	156.7	157.7	156.7
177.5°	156.7	156.7	156.7	156.7	156.7
180°	156.7	156.7	156.7	156.7	156.7

TEST NUMBER: P854244

CATALOG NUMBER: SQ2-PW1-025U-050D-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	18.43	19.44	19.20	20.23	21.19	14.91	15.93	15.69	16.72	17.68
	3H	19.76	20.67	20.55	21.47	22.46	16.13	17.04	16.92	17.84	18.83
	4H	20.14	21.00	20.95	21.81	22.81	16.59	17.44	17.39	18.25	19.25
	6H	20.35	21.14	21.17	21.96	22.97	16.91	17.69	17.73	18.51	19.53
	8H	20.39	21.14	21.22	21.97	22.99	16.99	17.74	17.82	18.57	19.59
	12H	20.39	21.10	21.23	21.93	22.98	17.01	17.72	17.84	18.55	19.59
4H	2H	18.55	19.40	19.36	20.21	21.22	15.62	16.47	16.43	17.28	18.28
	3H	20.11	20.82	20.93	21.66	22.68	17.02	17.72	17.84	18.57	19.59
	4H	20.62	21.26	21.46	22.11	23.15	17.57	18.21	18.41	19.05	20.10
	6H	20.96	21.52	21.82	22.38	23.44	17.98	18.53	18.83	19.40	20.45
	8H	21.05	21.56	21.90	22.42	23.49	18.09	18.61	18.95	19.47	20.53
	12H	21.07	21.53	21.94	22.41	23.48	18.12	18.58	18.99	19.46	20.53
8H	4H	20.67	21.19	21.53	22.05	23.12	17.91	18.42	18.76	19.28	20.35
	6H	21.12	21.54	22.00	22.44	23.51	18.42	18.84	19.30	19.75	20.81
	8H	21.26	21.64	22.15	22.54	23.62	18.58	18.96	19.48	19.86	20.94
	12H	21.33	21.67	22.23	22.56	23.69	18.65	18.98	19.54	19.87	21.01
12H	4H	20.64	21.10	21.51	21.98	23.05	17.93	18.39	18.80	19.28	20.34
	6H	21.11	21.48	22.00	22.38	23.46	18.48	18.86	19.38	19.76	20.84
	8H	21.28	21.61	22.17	22.50	23.63	18.68	19.01	19.57	19.90	21.03