

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: P853575

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853575
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-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

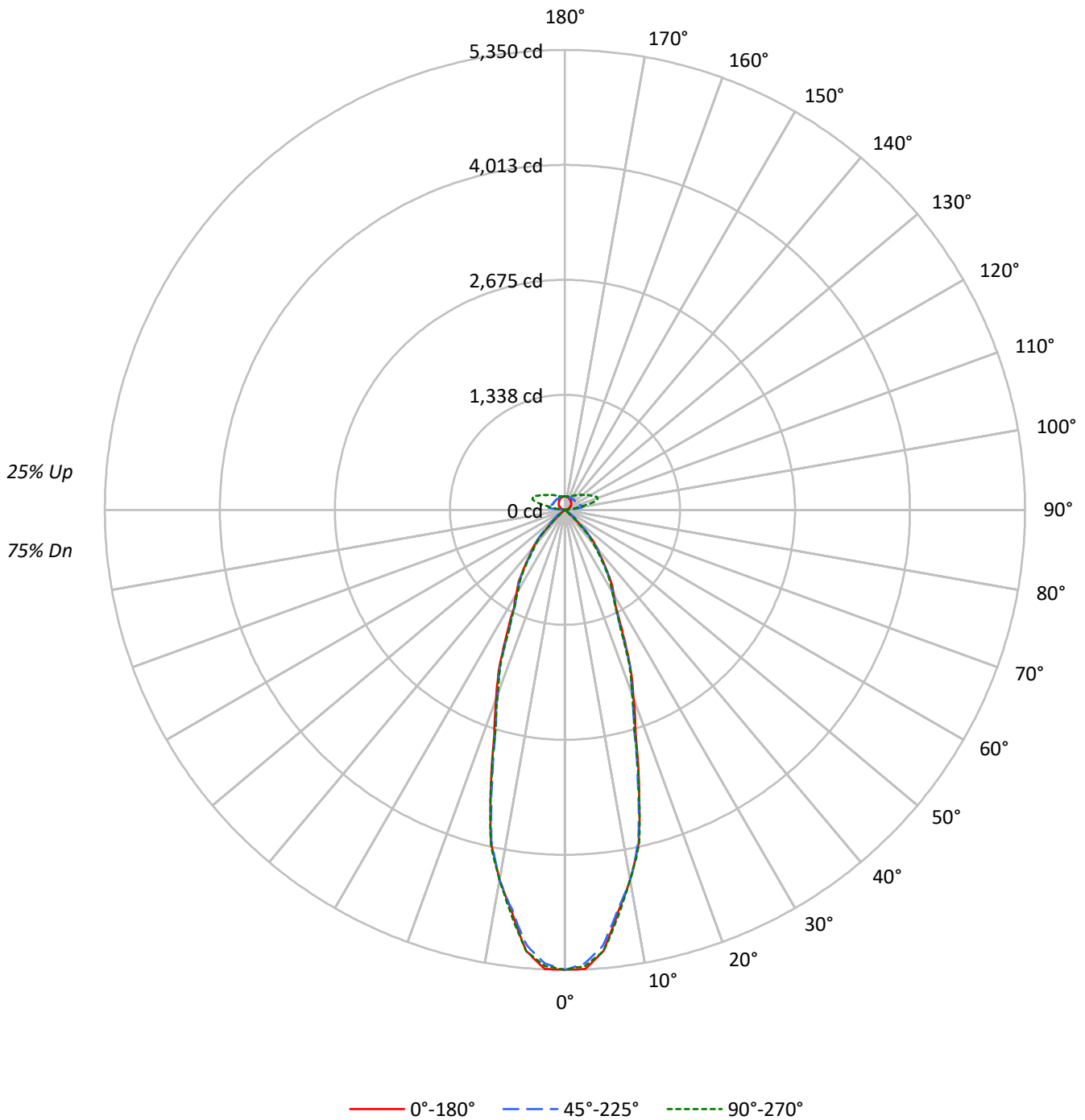
Lumens per Lamp: N/A
Luminaire Lumens: 3859.5 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 35
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: P853575

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

Luminous Intensity Polar Plot





TEST NUMBER: P853575

CATALOG NUMBER: SQ2-BBN-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	108	108	108	108	97	97	97	88	88	88	79	79	79	75				
1	107	104	101	99	102	99	97	95	91	89	88	83	82	81	76	75	74	71				
2	101	96	92	88	96	92	88	85	85	82	79	78	76	74	72	70	69	66				
3	95	89	83	79	91	85	81	77	79	76	73	73	71	69	68	66	64	62				
4	90	82	77	72	86	80	74	70	74	70	67	69	66	64	65	62	60	58				
5	85	77	71	66	82	74	69	65	70	65	62	65	62	59	61	59	57	54				
6	81	72	66	61	78	70	64	60	66	61	58	62	58	55	58	55	53	51				
7	77	67	61	57	74	65	60	56	62	57	54	59	55	52	55	52	50	48				
8	73	63	57	53	70	62	56	52	58	54	51	56	52	49	53	50	47	46				
9	69	60	54	50	67	58	53	49	55	51	48	53	49	46	50	47	45	43				
10	66	56	51	47	64	55	50	46	53	48	45	50	46	44	48	45	43	41				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	86382	86382	86382
5°	83493	82461	83540
10°	71654	71702	71654
15°	55617	54731	55488
20°	40139	39311	39278
25°	28461	27328	27380
30°	21175	20637	20437
35°	16476	16058	15717
40°	12193	11887	11137
45°	6231	7640	5019
50°	1356	4215	992
55°	380	1709	298
60°	61	342	32
65°	0	38	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 7640 cd/sqm



TEST NUMBER: P853575

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.6	12.0
10°-20°	912.1	23.6
20°-30°	735.8	19.1
30°-40°	511.1	13.2
40°-50°	236.1	6.1
50°-60°	33.1	0.9
60°-70°	1.1	0.0
70°-80°	0.0	0.0
80°-90°	0.5	0.0
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	1.1
170°-180°	14.9	0.4
0°-30°	2110.5	54.7
0°-40°	2621.6	67.9
0°-60°	2890.9	74.9
0°-90°	2892.5	74.9
90°-120°	451.1	11.7
90°-150°	835.9	21.7
90°-180°	967.0	25.1
0°-180°	3859.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5350	5350	5350	5350	5350	
5°	5152	5124	5088	5151	5154	463
15°	3327	3370	3274	3320	3320	916
25°	1598	1562	1534	1557	1537	748
35°	836	836	815	800	797	523
45°	273	326	335	304	220	220
55°	14	21	61	17	11	17
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	3	3	0
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: P853575

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5350.1	5350.1	5350.1	5350.1	5350.1
2.5°	5347.0	5327.4	5280.7	5322.8	5310.0
5°	5151.5	5124.1	5087.8	5150.6	5154.4
7.5°	4719.9	4728.8	4695.1	4764.3	4756.9
10°	4370.5	4377.1	4373.4	4396.0	4370.5
12.5°	3965.6	3991.8	3942.2	3977.2	3987.9
15°	3327.3	3369.7	3274.3	3320.5	3319.6
17.5°	2728.8	2724.4	2675.1	2683.8	2680.9
20°	2336.1	2329.5	2287.9	2281.3	2286.0
22.5°	1999.9	1988.7	1974.0	1957.4	1963.6
25°	1597.6	1561.8	1534.0	1556.7	1536.9
27.5°	1282.3	1281.8	1258.8	1261.4	1265.2
30°	1135.8	1129.2	1106.9	1107.6	1096.2
32.5°	1005.4	1010.1	982.7	977.2	965.9
35°	835.9	835.9	814.7	800.2	797.4
37.5°	678.8	677.1	662.0	641.4	634.0
40°	578.5	573.8	564.0	538.7	528.4
42.5°	464.3	477.0	467.6	442.2	426.5
45°	272.9	325.6	334.6	303.7	219.8
47.5°	117.2	175.3	223.3	145.5	75.8
50°	54.0	99.2	167.8	71.6	39.5
52.5°	31.6	54.2	124.6	41.8	24.9
55°	13.5	21.0	60.7	17.2	10.6
57.5°	5.0	9.2	22.9	7.4	4.0
60°	1.9	3.8	10.6	2.8	1.0
62.5°	0.4	1.5	5.2	1.3	0.2
65°	0.0	0.0	1.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.2	0.6	0.6	0.6
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: P853575

CATALOG NUMBER: SQ2-BBN-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: P853575

CATALOG NUMBER: SQ2-BBN-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00