

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: P853576

Luminaire Tested: SQ2-BBN-025U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853576
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-935-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

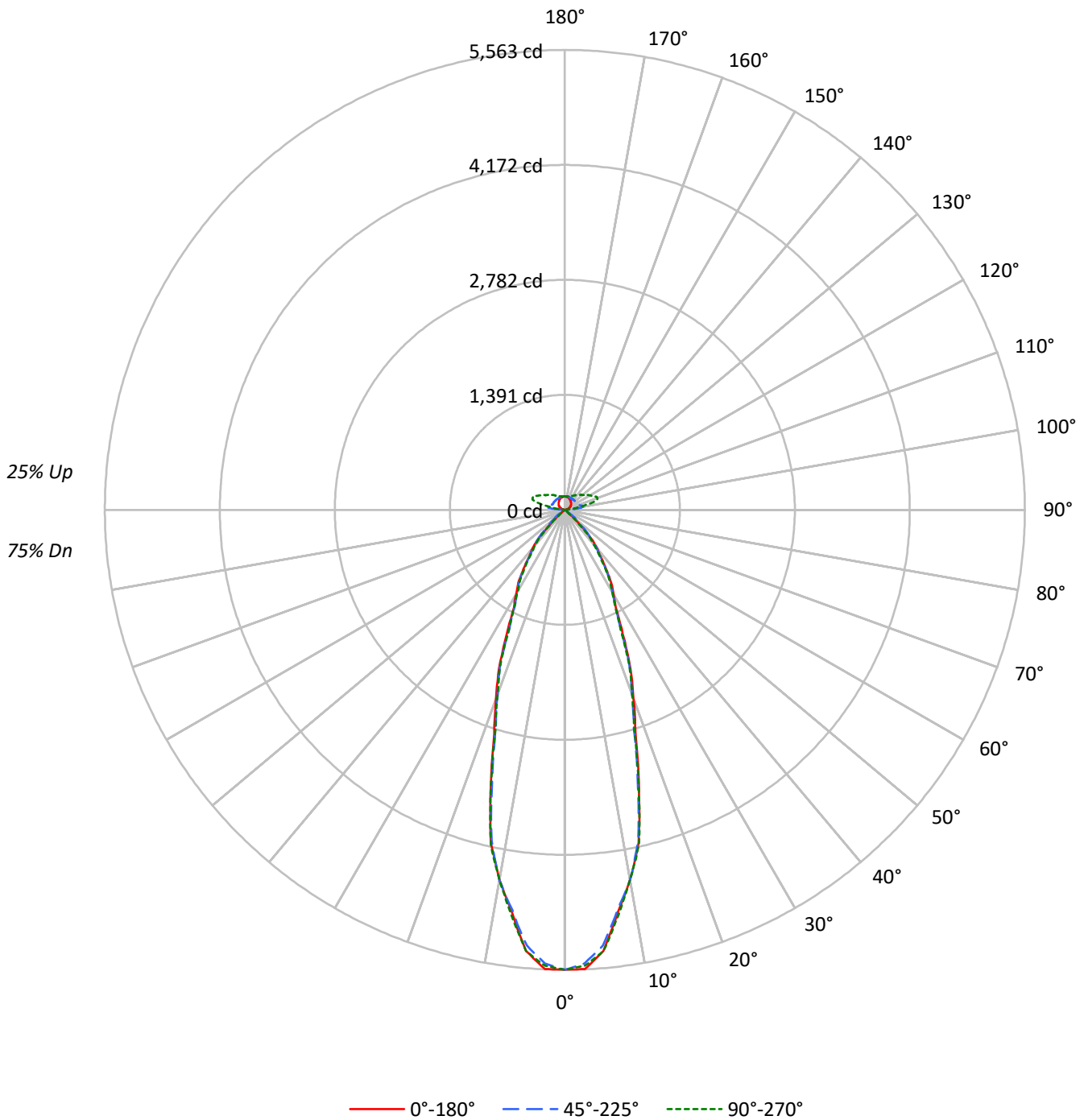
Lumens per Lamp: N/A
Luminaire Lumens: 4012.8 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

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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	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°	89813	89813	89813
5°	86809	85736	86858
10°	74500	74549	74500
15°	57827	56904	57692
20°	41733	40873	40838
25°	29592	28413	28467
30°	22016	21455	21250
35°	17130	16697	16340
40°	12678	12359	11578
45°	6478	7944	5220
50°	1409	4381	1032
55°	394	1779	310
60°	65	355	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: 7944 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.0	12.0
10°-20°	948.3	23.6
20°-30°	765.0	19.1
30°-40°	531.4	13.2
40°-50°	245.5	6.1
50°-60°	34.5	0.9
60°-70°	1.2	0.0
70°-80°	0.0	0.0
80°-90°	0.5	0.0
90°-100°	65.6	1.6
100°-110°	203.9	5.1
110°-120°	199.5	5.0
120°-130°	162.9	4.1
130°-140°	133.2	3.3
140°-150°	104.0	2.6
150°-160°	75.0	1.9
160°-170°	45.9	1.1
170°-180°	15.5	0.4
0°-30°	2194.3	54.7
0°-40°	2725.7	67.9
0°-60°	3005.7	74.9
0°-90°	3007.4	74.9
90°-120°	469.0	11.7
90°-150°	869.1	21.7
90°-180°	1006.0	25.1
0°-180°	4012.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5563	5563	5563	5563	5563	
5°	5356	5328	5290	5355	5359	481
15°	3460	3504	3404	3452	3451	952
25°	1661	1624	1595	1618	1598	778
35°	869	869	847	832	829	544
45°	284	339	348	316	229	229
55°	14	22	63	18	11	18
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	26	120	44	29	10
105°	36	50	201	383	366	38
115°	64	75	163	336	394	63
125°	88	98	161	264	310	79
135°	106	118	160	228	256	82
145°	124	134	160	197	215	78
155°	142	147	161	177	183	66
165°	156	157	162	167	169	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5562.6	5562.6	5562.6	5562.6	5562.6
2.5°	5559.4	5539.0	5490.4	5534.2	5520.9
5°	5356.1	5327.7	5289.9	5355.2	5359.1
7.5°	4907.4	4916.6	4881.5	4953.5	4945.9
10°	4544.1	4551.0	4547.1	4570.6	4544.1
12.5°	4123.1	4150.3	4098.8	4135.2	4146.3
15°	3459.5	3503.6	3404.3	3452.4	3451.4
17.5°	2837.1	2832.6	2781.4	2790.4	2787.4
20°	2428.9	2422.1	2378.8	2371.9	2376.8
22.5°	2079.3	2067.7	2052.4	2035.1	2041.6
25°	1661.1	1623.8	1594.9	1618.5	1597.9
27.5°	1333.3	1332.7	1308.8	1311.5	1315.4
30°	1180.9	1174.0	1150.8	1151.5	1139.8
32.5°	1045.4	1050.3	1021.7	1016.0	1004.3
35°	869.1	869.1	847.1	832.0	829.0
37.5°	705.7	704.0	688.3	666.9	659.2
40°	601.5	596.6	586.4	560.1	549.3
42.5°	482.8	495.9	486.2	459.8	443.5
45°	283.7	338.6	347.9	315.8	228.6
47.5°	121.9	182.3	232.2	151.3	78.8
50°	56.1	103.2	174.4	74.4	41.1
52.5°	32.9	56.4	129.5	43.5	25.9
55°	14.0	21.9	63.2	17.9	11.0
57.5°	5.2	9.5	23.9	7.7	4.2
60°	2.0	4.0	11.0	3.0	1.0
62.5°	0.4	1.6	5.4	1.4	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	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	38.0	12.5	10.1
95°	8.9	26.4	120.3	44.4	28.8
97.5°	16.3	34.4	199.2	124.0	78.1
100°	21.9	38.4	224.6	210.1	140.1
102.5°	27.4	43.2	219.9	300.1	235.6
105°	35.8	50.4	200.8	383.3	365.8
107.5°	44.1	57.7	182.5	389.7	408.9
110°	49.7	63.3	172.9	380.5	418.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.3	68.1	168.2	364.1	412.1
115°	63.6	75.3	163.0	336.3	393.6
117.5°	71.8	82.5	160.8	309.7	368.4
120°	76.5	87.2	160.0	294.5	350.9
122.5°	81.3	92.0	160.8	281.7	333.4
125°	88.5	98.2	161.0	264.4	310.1
127.5°	94.2	104.1	161.0	251.6	290.4
130°	97.4	108.1	161.0	244.3	279.3
132.5°	101.4	112.1	160.2	237.9	270.5
135°	106.4	118.0	160.0	228.3	256.4
137.5°	112.1	122.8	160.0	218.7	244.3
140°	115.3	126.0	160.0	212.2	235.6
142.5°	119.3	129.2	160.0	205.8	226.8
145°	124.2	134.0	160.0	197.2	214.7
147.5°	130.2	138.6	161.0	189.2	203.0
150°	134.2	141.0	161.0	185.1	195.8
152.5°	137.4	143.4	161.0	181.1	190.2
155°	142.1	147.0	161.0	177.1	182.9
157.5°	146.9	150.6	161.0	173.4	177.1
160°	150.1	153.0	161.0	171.0	173.9
162.5°	152.5	154.6	161.0	169.4	171.6
165°	156.0	157.0	162.0	167.0	169.0
167.5°	158.2	158.4	161.0	165.6	166.6
170°	159.0	160.0	161.0	164.0	165.0
172.5°	160.6	160.8	161.8	163.2	163.4
175°	162.0	162.0	162.0	163.0	162.0
177.5°	162.0	162.0	162.0	162.0	162.0
180°	162.0	162.0	162.0	162.0	162.0



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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	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