

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: P853579

Luminaire Tested: SQ2-BBN-025U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853579
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-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

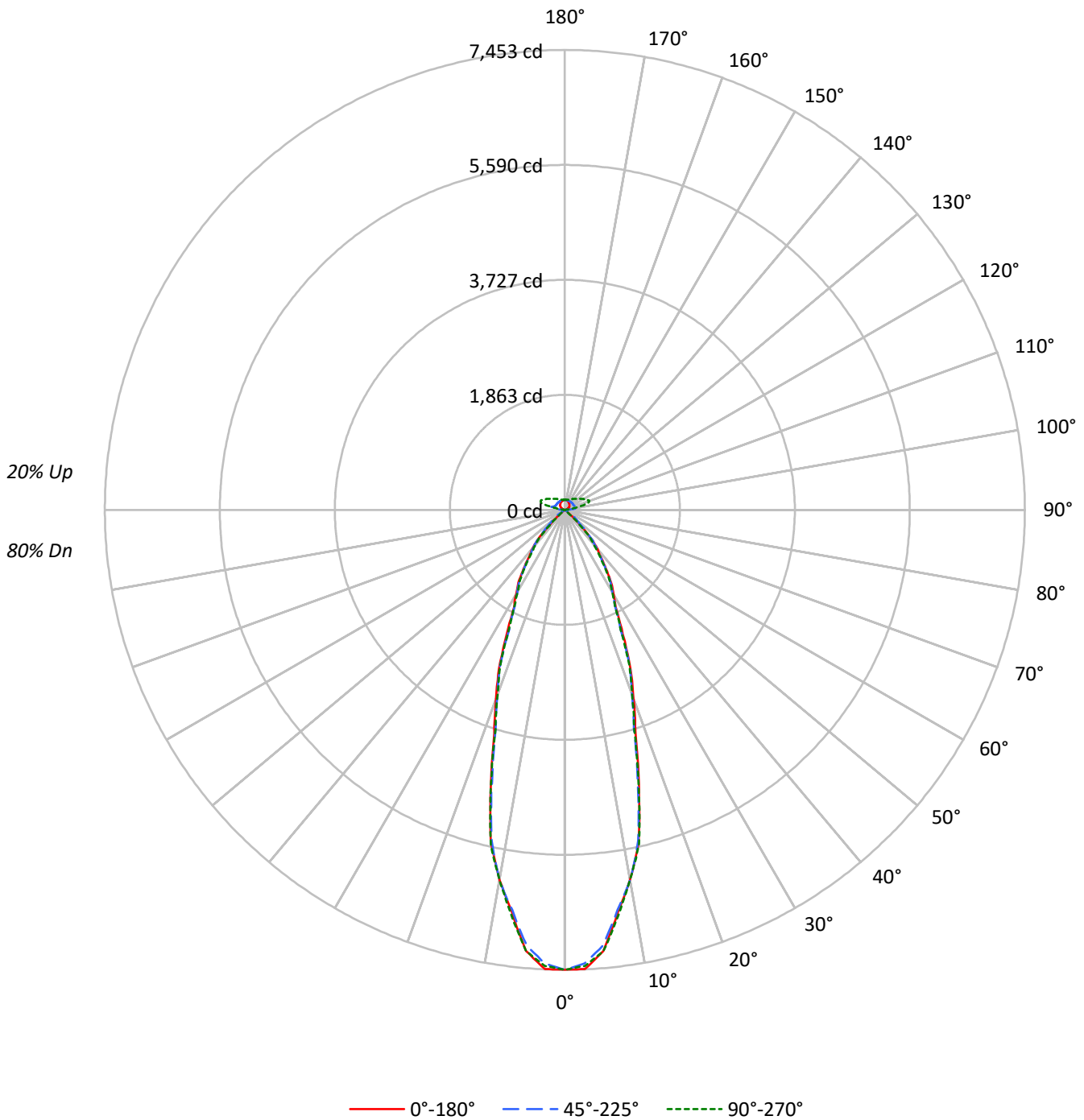
Lumens per Lamp: N/A
Luminaire Lumens: 5032.1 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.6
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

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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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	108	105	103	100	104	101	99	97	94	92	90	87	85	84	80	79	78	75
2	103	97	93	90	98	94	90	87	88	85	82	82	80	78	76	75	73	71
3	97	90	85	81	93	88	83	79	82	79	76	77	74	72	72	70	68	66
4	92	84	79	74	89	82	77	73	77	73	70	73	69	67	69	66	64	62
5	87	79	73	68	84	76	71	67	72	68	65	69	65	62	65	62	60	58
6	83	74	68	63	80	72	66	62	68	64	60	65	61	58	62	59	57	55
7	78	69	63	59	76	68	62	58	64	60	56	62	58	55	59	56	53	52
8	75	65	59	55	72	64	58	54	61	56	53	59	55	52	56	53	50	49
9	71	62	56	52	69	60	55	51	58	53	50	56	52	49	54	50	48	46
10	68	58	53	49	66	57	52	48	55	51	47	53	49	46	51	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120333	120333	120333
5°	116308	114872	116375
10°	99817	99883	99817
15°	77478	76242	77297
20°	55917	54763	54716
25°	39647	38069	38140
30°	29498	28747	28471
35°	22953	22369	21894
40°	16986	16560	15513
45°	8679	10643	6992
50°	1889	5870	1384
55°	529	2381	417
60°	87	478	42
65°	0	50	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: 10643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	644.5	12.8
10°-20°	1270.6	25.2
20°-30°	1024.9	20.4
30°-40°	712.0	14.1
40°-50°	328.9	6.5
50°-60°	46.2	0.9
60°-70°	1.6	0.0
70°-80°	0.0	0.0
80°-90°	0.5	0.0
90°-100°	65.4	1.3
100°-110°	203.4	4.0
110°-120°	199.0	4.0
120°-130°	162.5	3.2
130°-140°	132.9	2.6
140°-150°	103.7	2.1
150°-160°	74.9	1.5
160°-170°	45.8	0.9
170°-180°	15.4	0.3
0°-30°	2940.0	58.4
0°-40°	3652.0	72.6
0°-60°	4027.1	80.0
0°-90°	4029.2	80.1
90°-120°	467.8	9.3
90°-150°	867.0	17.2
90°-180°	1003.0	19.9
0°-180°	5032.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7453	7453	7453	7453	7453	
5°	7176	7138	7088	7175	7180	645
15°	4635	4694	4561	4626	4624	1276
25°	2226	2176	2137	2168	2141	1042
35°	1164	1164	1135	1115	1111	729
45°	380	454	466	423	306	307
55°	19	29	85	24	15	24
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	200	382	365	38
115°	64	75	163	335	393	63
125°	88	98	161	264	309	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	182	65
165°	156	157	162	167	168	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°	7452.9	7452.9	7452.9	7452.9	7452.9
2.5°	7448.6	7421.3	7356.2	7414.9	7397.0
5°	7176.2	7138.1	7087.6	7175.0	7180.3
7.5°	6575.1	6587.4	6540.4	6636.9	6626.6
10°	6088.3	6097.5	6092.3	6123.8	6088.3
12.5°	5524.2	5560.7	5491.7	5540.4	5555.4
15°	4635.1	4694.2	4561.2	4625.6	4624.3
17.5°	3801.3	3795.2	3726.6	3738.6	3734.6
20°	3254.4	3245.2	3187.2	3177.9	3184.5
22.5°	2785.9	2770.4	2749.9	2726.7	2735.4
25°	2225.5	2175.6	2136.9	2168.5	2140.9
27.5°	1786.3	1785.5	1753.6	1757.2	1762.4
30°	1582.2	1573.0	1541.9	1542.9	1527.1
32.5°	1400.6	1407.2	1368.9	1361.3	1345.5
35°	1164.5	1164.5	1134.9	1114.7	1110.8
37.5°	945.5	943.2	922.2	893.5	883.2
40°	805.9	799.3	785.7	750.5	736.0
42.5°	646.8	664.4	651.4	616.0	594.2
45°	380.1	453.6	466.1	423.1	306.2
47.5°	163.3	244.2	311.1	202.7	105.6
50°	75.2	138.3	233.7	99.7	55.1
52.5°	44.1	75.6	173.5	58.3	34.7
55°	18.8	29.3	84.6	24.0	14.8
57.5°	7.0	12.8	32.0	10.4	5.6
60°	2.7	5.3	14.8	4.0	1.3
62.5°	0.5	2.1	7.3	1.8	0.3
65°	0.0	0.0	1.3	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	37.9	12.4	10.1
95°	8.9	26.4	120.0	44.3	28.8
97.5°	16.3	34.3	198.7	123.7	77.9
100°	21.8	38.3	224.1	209.6	139.8
102.5°	27.4	43.1	219.3	299.3	235.0
105°	35.7	50.2	200.3	382.3	364.9
107.5°	44.0	57.6	182.0	388.7	407.9
110°	49.6	63.1	172.5	379.6	417.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	67.9	167.8	363.2	411.1
115°	63.5	75.1	162.6	335.4	392.6
117.5°	71.6	82.2	160.4	308.9	367.4
120°	76.3	87.0	159.6	293.8	350.0
122.5°	81.1	91.8	160.4	281.0	332.5
125°	88.2	97.9	160.6	263.8	309.3
127.5°	94.0	103.9	160.6	250.9	289.7
130°	97.2	107.8	160.6	243.7	278.6
132.5°	101.1	111.8	159.8	237.3	269.9
135°	106.1	117.7	159.6	227.7	255.8
137.5°	111.8	122.5	159.6	218.1	243.7
140°	115.0	125.7	159.6	211.7	235.0
142.5°	119.0	128.9	159.6	205.3	226.2
145°	123.9	133.6	159.6	196.7	214.2
147.5°	129.9	138.2	160.6	188.7	202.5
150°	133.8	140.6	160.6	184.7	195.3
152.5°	137.0	143.0	160.6	180.7	189.8
155°	141.8	146.6	160.6	176.6	182.4
157.5°	146.5	150.2	160.6	173.0	176.7
160°	149.7	152.6	160.6	170.6	173.5
162.5°	152.1	154.2	160.6	169.0	171.1
165°	155.7	156.6	161.6	166.6	168.5
167.5°	157.8	158.0	160.6	165.2	166.2
170°	158.6	159.6	160.6	163.6	164.6
172.5°	160.2	160.4	161.4	162.8	163.0
175°	161.6	161.6	161.6	162.6	161.6
177.5°	161.6	161.6	161.6	161.6	161.6
180°	161.6	161.6	161.6	161.6	161.6



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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