

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: P853599

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853599
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-075U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

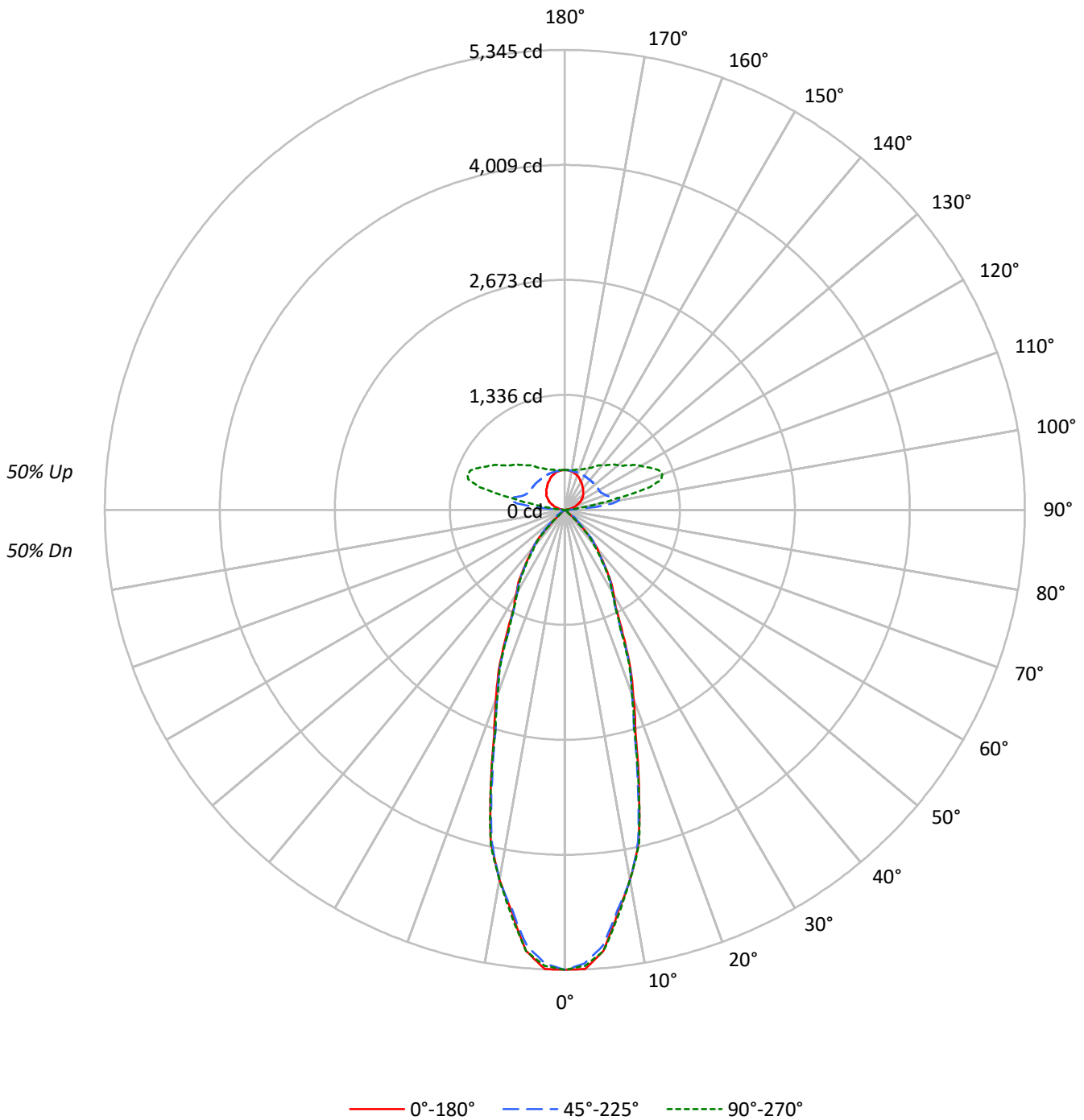
Lumens per Lamp: N/A
Luminaire Lumens: 5752.4 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	100	97	94	91	93	90	87	85	77	75	74	65	64	63	54	53	52	47
2	94	88	83	79	87	82	78	75	71	68	66	60	58	57	51	50	49	44
3	88	80	75	70	81	75	70	66	65	62	59	56	54	52	48	46	45	41
4	82	74	67	63	76	69	64	60	61	57	54	53	50	48	45	44	42	39
5	77	68	61	56	72	64	58	54	56	52	49	49	46	44	43	41	39	36
6	72	63	56	51	67	59	53	49	53	48	45	46	43	41	41	39	37	34
7	68	58	52	47	64	55	49	45	49	45	42	44	40	38	39	36	35	32
8	64	54	48	43	60	51	46	42	46	42	39	41	38	36	37	34	33	31
9	61	51	44	40	57	48	43	39	43	39	36	39	36	33	35	33	31	29
10	58	47	41	37	54	45	40	36	41	37	34	37	34	32	33	31	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	86296	86296	86296
5°	83410	82381	83457
10°	71583	71631	71583
15°	55562	54678	55433
20°	40101	39273	39240
25°	28433	27301	27353
30°	21155	20616	20418
35°	16460	16042	15701
40°	12180	11877	11124
45°	6224	7631	5014
50°	1354	4210	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: 7631 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.2	8.0
10°-20°	911.2	15.8
20°-30°	735.0	12.8
30°-40°	510.6	8.9
40°-50°	235.9	4.1
50°-60°	33.1	0.6
60°-70°	1.1	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	174.9	3.0
100°-110°	579.7	10.1
110°-120°	575.3	10.0
120°-130°	468.6	8.1
130°-140°	380.8	6.6
140°-150°	295.8	5.1
150°-160°	213.1	3.7
160°-170°	130.5	2.3
170°-180°	44.1	0.8
0°-30°	2108.4	36.7
0°-40°	2619.0	45.5
0°-60°	2888.0	50.2
0°-90°	2889.8	50.2
90°-120°	1329.9	23.1
90°-150°	2475.1	43.0
90°-180°	2863.0	49.8
0°-180°	5752.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5345	5345	5345	5345	5345	
5°	5146	5119	5083	5146	5149	462
15°	3324	3366	3271	3317	3316	915
25°	1596	1560	1532	1555	1535	747
35°	835	835	814	799	797	523
45°	273	325	334	303	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	4	4	1
95°	25	74	317	113	76	28
105°	102	144	580	1094	1023	107
115°	181	216	467	972	1137	179
125°	253	281	458	764	901	225
135°	302	333	455	656	740	234
145°	351	378	454	564	618	220
155°	401	415	457	504	523	185
165°	440	445	458	477	482	124
175°	460	460	461	464	463	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5344.8	5344.8	5344.8	5344.8	5344.8
2.5°	5341.8	5322.2	5275.5	5317.6	5304.8
5°	5146.4	5119.1	5082.9	5145.5	5149.3
7.5°	4715.3	4724.1	4690.4	4759.6	4752.3
10°	4366.2	4372.8	4369.1	4391.7	4366.2
12.5°	3961.7	3987.9	3938.4	3973.3	3984.0
15°	3324.0	3366.4	3271.1	3317.3	3316.3
17.5°	2726.1	2721.7	2672.5	2681.1	2678.3
20°	2333.9	2327.3	2285.7	2279.1	2283.8
22.5°	1997.9	1986.8	1972.1	1955.5	1961.7
25°	1596.0	1560.2	1532.5	1555.1	1535.4
27.5°	1281.1	1280.5	1257.6	1260.2	1263.9
30°	1134.7	1128.1	1105.8	1106.5	1095.2
32.5°	1004.4	1009.1	981.7	976.2	964.9
35°	835.1	835.1	813.9	799.4	796.6
37.5°	678.1	676.4	661.3	640.8	633.4
40°	577.9	573.2	563.5	538.2	527.8
42.5°	463.9	476.5	467.2	441.8	426.1
45°	272.6	325.3	334.2	303.4	219.6
47.5°	117.1	175.1	223.1	145.4	75.7
50°	53.9	99.1	167.6	71.5	39.5
52.5°	31.6	54.2	124.4	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	0.8	0.8
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.7	29.6	87.1	28.2	23.7
95°	24.9	73.6	316.9	113.1	75.6
97.5°	45.8	96.7	553.1	322.6	203.9
100°	60.3	109.0	640.4	550.1	364.7
102.5°	76.4	123.6	635.1	840.6	635.1
105°	101.5	144.5	580.1	1094.5	1023.3
107.5°	127.1	165.5	527.5	1120.3	1174.4
110°	141.7	180.1	500.7	1094.8	1204.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	157.0	194.6	484.6	1049.5	1189.0
115°	180.9	216.5	467.2	972.5	1137.3
117.5°	204.7	236.3	460.8	899.0	1071.8
120°	219.2	250.1	458.5	852.9	1020.5
122.5°	232.2	262.4	458.5	815.1	969.9
125°	252.7	280.8	458.5	764.2	900.8
127.5°	269.6	297.1	457.4	725.6	842.4
130°	279.5	308.5	456.6	703.1	808.0
132.5°	288.7	318.5	455.9	684.5	778.9
135°	302.5	333.4	454.7	655.7	740.0
137.5°	317.4	347.2	453.6	628.0	702.3
140°	327.4	356.4	452.8	609.4	677.8
142.5°	336.6	364.9	453.6	590.9	651.7
145°	351.3	377.5	453.8	564.1	617.5
147.5°	367.2	389.1	453.9	541.4	581.1
150°	377.2	396.8	454.7	528.2	561.9
152.5°	386.4	405.3	455.5	517.4	544.3
155°	401.1	415.1	456.6	504.0	522.7
157.5°	415.5	426.3	457.8	494.5	507.7
160°	423.1	432.5	458.5	487.5	497.8
162.5°	430.8	437.9	458.5	482.9	490.9
165°	440.4	445.0	458.5	476.8	481.5
167.5°	449.2	451.6	459.5	471.4	473.9
170°	453.8	454.7	459.5	469.1	470.0
172.5°	456.8	457.8	460.3	466.8	467.0
175°	460.5	460.5	461.4	464.3	463.3
177.5°	462.4	462.4	461.6	463.1	461.6
180°	462.4	462.4	462.4	462.4	462.4



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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