

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: P853600

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853600
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-935-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

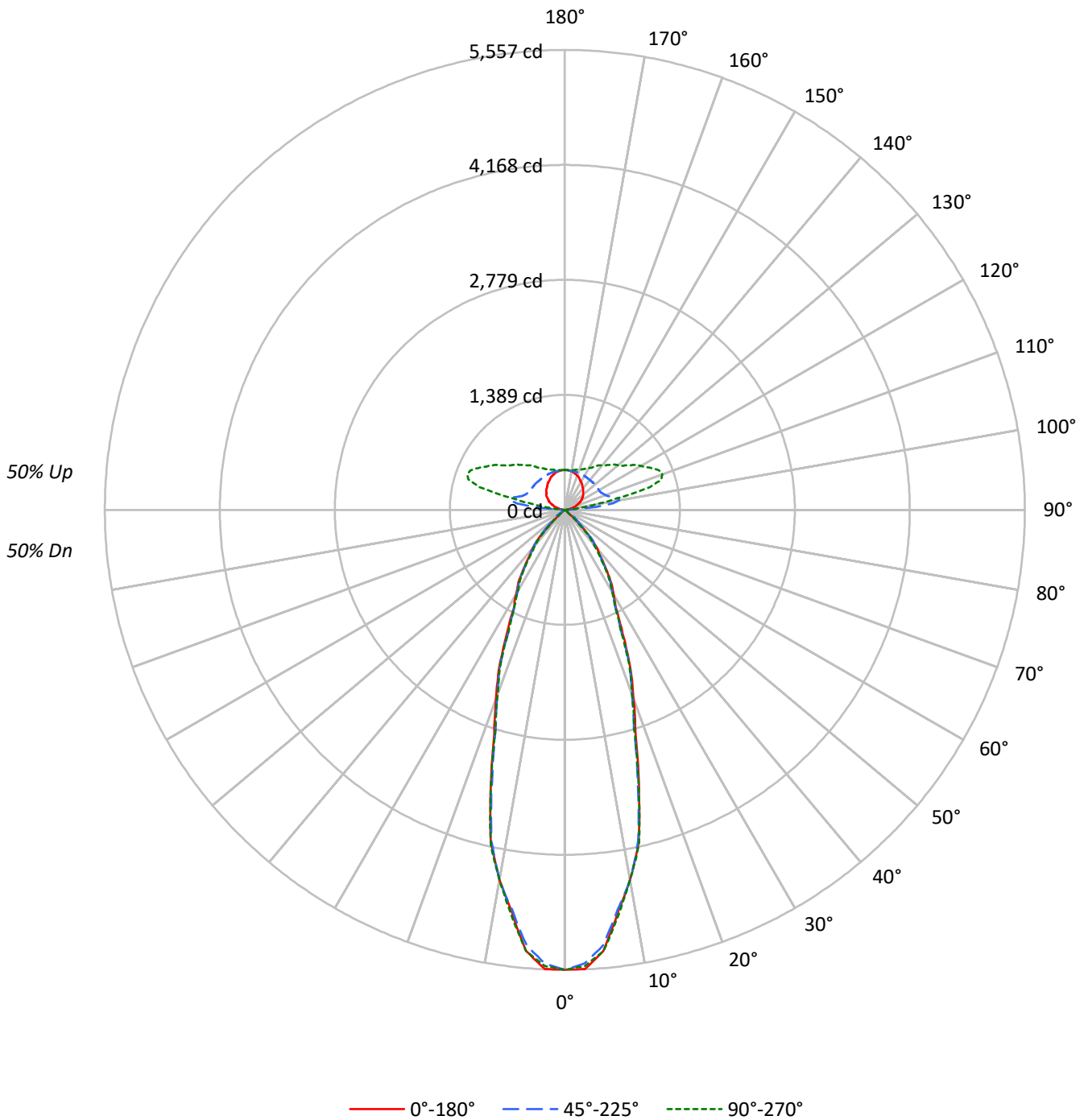
Lumens per Lamp: N/A
Luminaire Lumens: 5980.9 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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°	89724	89724	89724
5°	86723	85652	86772
10°	74428	74477	74428
15°	57770	56849	57636
20°	41694	40833	40799
25°	29562	28385	28438
30°	21994	21435	21229
35°	17115	16679	16324
40°	12665	12349	11567
45°	6471	7935	5213
50°	1409	4378	1032
55°	394	1776	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: 7935 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.5	8.0
10°-20°	947.4	15.8
20°-30°	764.2	12.8
30°-40°	530.9	8.9
40°-50°	245.3	4.1
50°-60°	34.4	0.6
60°-70°	1.2	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	181.8	3.0
100°-110°	602.7	10.1
110°-120°	598.2	10.0
120°-130°	487.2	8.1
130°-140°	396.0	6.6
140°-150°	307.5	5.1
150°-160°	221.6	3.7
160°-170°	135.7	2.3
170°-180°	45.8	0.8
0°-30°	2192.1	36.7
0°-40°	2723.0	45.5
0°-60°	3002.7	50.2
0°-90°	3004.5	50.2
90°-120°	1382.7	23.1
90°-150°	2573.4	43.0
90°-180°	2977.0	49.8
0°-180°	5980.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5557	5557	5557	5557	5557	
5°	5351	5322	5285	5350	5354	481
15°	3456	3500	3401	3449	3448	951
25°	1659	1622	1593	1617	1596	777
35°	868	868	846	831	828	543
45°	283	338	348	316	228	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	4	4	1
95°	26	76	330	118	79	30
105°	106	150	603	1138	1064	111
115°	188	225	486	1011	1182	186
125°	263	292	477	794	937	234
135°	314	347	473	682	769	243
145°	365	392	472	586	642	229
155°	417	432	475	524	543	192
165°	458	463	477	496	501	129
175°	479	479	480	483	482	45
180°	481	481	481	481	481	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5557.1	5557.1	5557.1	5557.1	5557.1
2.5°	5553.9	5533.6	5485.0	5528.8	5515.5
5°	5350.8	5322.4	5284.7	5349.9	5353.8
7.5°	4902.6	4911.8	4876.7	4948.7	4941.0
10°	4539.7	4546.5	4542.7	4566.1	4539.7
12.5°	4119.0	4146.3	4094.8	4131.1	4142.3
15°	3456.1	3500.1	3401.0	3449.0	3448.1
17.5°	2834.4	2829.8	2778.7	2787.6	2784.7
20°	2426.6	2419.7	2376.5	2369.6	2374.5
22.5°	2077.2	2065.7	2050.4	2033.1	2039.6
25°	1659.4	1622.2	1593.3	1616.9	1596.3
27.5°	1332.0	1331.4	1307.5	1310.2	1314.1
30°	1179.7	1172.9	1149.7	1150.4	1138.7
32.5°	1044.3	1049.2	1020.7	1015.0	1003.3
35°	868.3	868.3	846.2	831.2	828.2
37.5°	705.0	703.3	687.6	666.2	658.6
40°	600.9	596.0	585.9	559.6	548.8
42.5°	482.3	495.4	485.7	459.3	443.0
45°	283.4	338.3	347.5	315.5	228.3
47.5°	121.8	182.1	231.9	151.2	78.7
50°	56.1	103.1	174.3	74.4	41.1
52.5°	32.8	56.3	129.4	43.5	25.8
55°	14.0	21.9	63.1	17.9	11.0
57.5°	5.2	9.5	23.8	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	0.8	0.8
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.7	90.6	29.4	24.7
95°	25.9	76.5	329.5	117.6	78.6
97.5°	47.6	100.5	575.1	335.4	212.0
100°	62.7	113.3	665.9	571.9	379.2
102.5°	79.4	128.5	660.3	874.0	660.3
105°	105.5	150.3	603.2	1138.0	1064.0
107.5°	132.2	172.1	548.4	1164.8	1221.1
110°	147.3	187.2	520.6	1138.2	1252.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.2	202.4	503.8	1091.2	1236.2
115°	188.1	225.1	485.7	1011.2	1182.4
117.5°	212.8	245.7	479.1	934.7	1114.4
120°	227.9	260.0	476.8	886.8	1061.0
122.5°	241.5	272.8	476.8	847.5	1008.5
125°	262.8	292.0	476.8	794.5	936.6
127.5°	280.3	308.9	475.6	754.4	875.9
130°	290.6	320.8	474.8	731.0	840.0
132.5°	300.2	331.1	474.0	711.7	809.8
135°	314.5	346.6	472.8	681.8	769.4
137.5°	330.0	361.0	471.6	652.9	730.2
140°	340.4	370.6	470.8	633.6	704.7
142.5°	350.0	379.3	471.6	614.4	677.6
145°	365.3	392.5	471.8	586.5	642.0
147.5°	381.8	404.6	472.0	562.9	604.2
150°	392.2	412.6	472.8	549.2	584.3
152.5°	401.7	421.4	473.6	537.9	565.9
155°	417.0	431.6	474.8	524.0	543.4
157.5°	432.0	443.3	476.0	514.1	527.9
160°	439.9	449.7	476.8	506.9	517.6
162.5°	447.9	455.3	476.8	502.0	510.4
165°	457.8	462.7	476.8	495.8	500.6
167.5°	467.0	469.5	477.8	490.2	492.7
170°	471.8	472.8	477.8	487.7	488.7
172.5°	475.0	475.9	478.5	485.3	485.5
175°	478.7	478.7	479.7	482.7	481.7
177.5°	480.7	480.7	479.9	481.5	479.9
180°	480.7	480.7	480.7	480.7	480.7



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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