

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: P853603

Luminaire Tested: SQ2-BBN-075U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853603
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-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

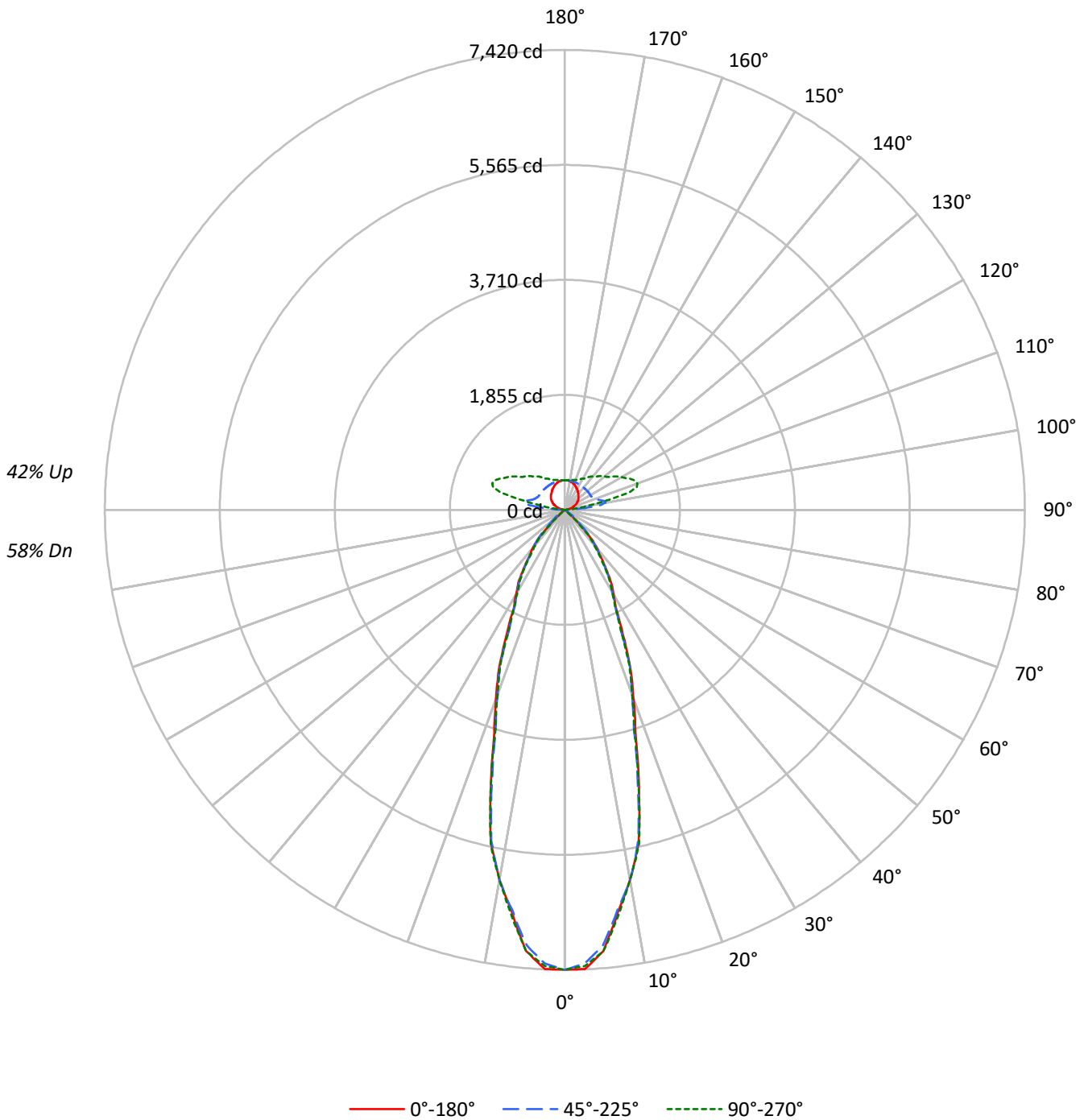
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6974.5 lumens
Efficiency: N/A
Efficacy: 113.6 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): 61.4
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	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58
1	102	99	96	94	95	93	90	88	81	79	78	70	69	68	60	59	59	54
2	96	90	86	82	90	85	81	78	75	72	70	66	64	62	57	56	55	51
3	90	83	77	73	84	78	73	69	69	66	63	61	59	57	54	52	51	47
4	84	76	70	65	79	72	67	63	65	61	58	58	55	52	51	49	47	44
5	79	70	64	59	75	67	61	57	60	56	53	54	51	49	48	46	44	42
6	75	65	59	54	70	62	57	52	56	52	49	51	48	45	46	44	42	39
7	71	61	54	50	67	58	52	48	53	48	45	48	45	42	44	41	39	37
8	67	57	51	46	63	54	49	45	50	45	42	45	42	40	41	39	37	35
9	63	53	47	43	60	51	46	42	47	43	40	43	40	37	39	37	35	33
10	60	50	44	40	57	48	43	39	44	40	37	41	38	35	38	35	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	119804	119804	119804
5°	115796	114367	115861
10°	99378	99443	99378
15°	77137	75906	76958
20°	55670	54522	54476
25°	39473	37901	37973
30°	29367	28620	28346
35°	22850	22271	21798
40°	16910	16488	15445
45°	8640	10595	6962
50°	1881	5845	1376
55°	526	2370	414
60°	87	475	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: 10595 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	641.6	9.2
10°-20°	1265.0	18.1
20°-30°	1020.4	14.6
30°-40°	708.9	10.2
40°-50°	327.5	4.7
50°-60°	46.0	0.7
60°-70°	1.6	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	181.0	2.6
100°-110°	600.0	8.6
110°-120°	595.5	8.5
120°-130°	485.0	7.0
130°-140°	394.2	5.7
140°-150°	306.1	4.4
150°-160°	220.6	3.2
160°-170°	135.1	1.9
170°-180°	45.6	0.7
0°-30°	2927.0	42.0
0°-40°	3635.9	52.1
0°-60°	4009.4	57.5
0°-90°	4011.5	57.5
90°-120°	1376.5	19.7
90°-150°	2561.8	36.7
90°-180°	2963.0	42.5
0°-180°	6974.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7420	7420	7420	7420	7420	
5°	7145	7107	7056	7143	7149	642
15°	4615	4674	4541	4605	4604	1270
25°	2216	2166	2128	2159	2132	1037
35°	1159	1159	1130	1110	1106	725
45°	378	452	464	421	305	306
55°	19	29	84	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	4	4	1
95°	26	76	328	117	78	29
105°	105	150	600	1133	1059	111
115°	187	224	484	1007	1177	185
125°	262	291	475	791	932	232
135°	313	345	471	679	766	242
145°	364	391	470	584	639	228
155°	415	430	473	522	541	191
165°	456	461	475	494	498	129
175°	477	477	478	480	480	45
180°	479	479	479	479	479	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7420.1	7420.1	7420.1	7420.1	7420.1
2.5°	7415.8	7388.6	7323.8	7382.2	7364.5
5°	7144.6	7106.7	7056.4	7143.4	7148.6
7.5°	6546.1	6558.4	6511.6	6607.6	6597.5
10°	6061.5	6070.7	6065.5	6096.8	6061.5
12.5°	5499.9	5536.2	5467.5	5516.0	5530.9
15°	4614.7	4673.5	4541.1	4605.3	4604.0
17.5°	3784.5	3778.5	3710.2	3722.1	3718.2
20°	3240.0	3230.9	3173.2	3164.0	3170.5
22.5°	2773.6	2758.2	2737.8	2714.7	2723.3
25°	2215.7	2166.0	2127.5	2158.9	2131.5
27.5°	1778.5	1777.7	1745.8	1749.4	1754.7
30°	1575.2	1566.1	1535.1	1536.1	1520.4
32.5°	1394.4	1401.0	1362.9	1355.3	1339.6
35°	1159.3	1159.3	1129.9	1109.8	1105.9
37.5°	941.4	939.0	918.1	889.5	879.3
40°	802.3	795.8	782.3	747.2	732.8
42.5°	644.0	661.5	648.5	613.3	591.6
45°	378.4	451.6	464.0	421.2	304.9
47.5°	162.6	243.1	309.7	201.9	105.1
50°	74.9	137.6	232.7	99.3	54.8
52.5°	43.9	75.2	172.8	58.0	34.5
55°	18.7	29.2	84.2	23.9	14.7
57.5°	7.0	12.7	31.8	10.3	5.6
60°	2.7	5.3	14.7	4.0	1.3
62.5°	0.5	2.1	7.2	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	0.8	0.8
90°	0.0	1.0	3.0	4.0	4.0
92.5°	7.9	30.6	90.2	29.2	24.6
95°	25.8	76.1	328.0	117.0	78.3
97.5°	47.4	100.1	572.5	333.9	211.0
100°	62.4	112.8	662.9	569.3	377.5
102.5°	79.1	127.9	657.3	870.1	657.3
105°	105.0	149.6	600.4	1132.8	1059.2
107.5°	131.6	171.3	546.0	1159.6	1215.6
110°	146.6	186.4	518.2	1133.1	1246.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	162.5	201.4	501.6	1086.3	1230.6
115°	187.3	224.1	483.5	1006.6	1177.1
117.5°	211.8	244.6	477.0	930.5	1109.3
120°	226.9	258.9	474.6	882.8	1056.2
122.5°	240.4	271.6	474.6	843.7	1003.9
125°	261.6	290.6	474.6	790.9	932.4
127.5°	279.0	307.5	473.4	751.0	871.9
130°	289.3	319.4	472.6	727.8	836.3
132.5°	298.8	329.6	471.8	708.5	806.1
135°	313.1	345.1	470.6	678.7	765.9
137.5°	328.6	359.4	469.5	650.0	726.9
140°	338.9	368.9	468.7	630.8	701.5
142.5°	348.4	377.6	469.5	611.6	674.6
145°	363.6	390.8	469.7	583.9	639.1
147.5°	380.1	402.8	469.9	560.4	601.4
150°	390.4	410.7	470.6	546.7	581.6
152.5°	399.9	419.5	471.4	535.5	563.4
155°	415.2	429.7	472.6	521.6	541.0
157.5°	430.0	441.3	473.8	511.8	525.5
160°	437.9	447.6	474.6	504.6	515.2
162.5°	445.9	453.2	474.6	499.8	508.1
165°	455.8	460.6	474.6	493.5	498.4
167.5°	464.9	467.4	475.6	487.9	490.5
170°	469.7	470.6	475.6	485.5	486.5
172.5°	472.8	473.8	476.4	483.1	483.3
175°	476.6	476.6	477.6	480.5	479.6
177.5°	478.6	478.6	477.8	479.3	477.8
180°	478.6	478.6	478.6	478.6	478.6



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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