

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: P853613

Luminaire Tested: SQ2-BBN-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853613
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-075D-940-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

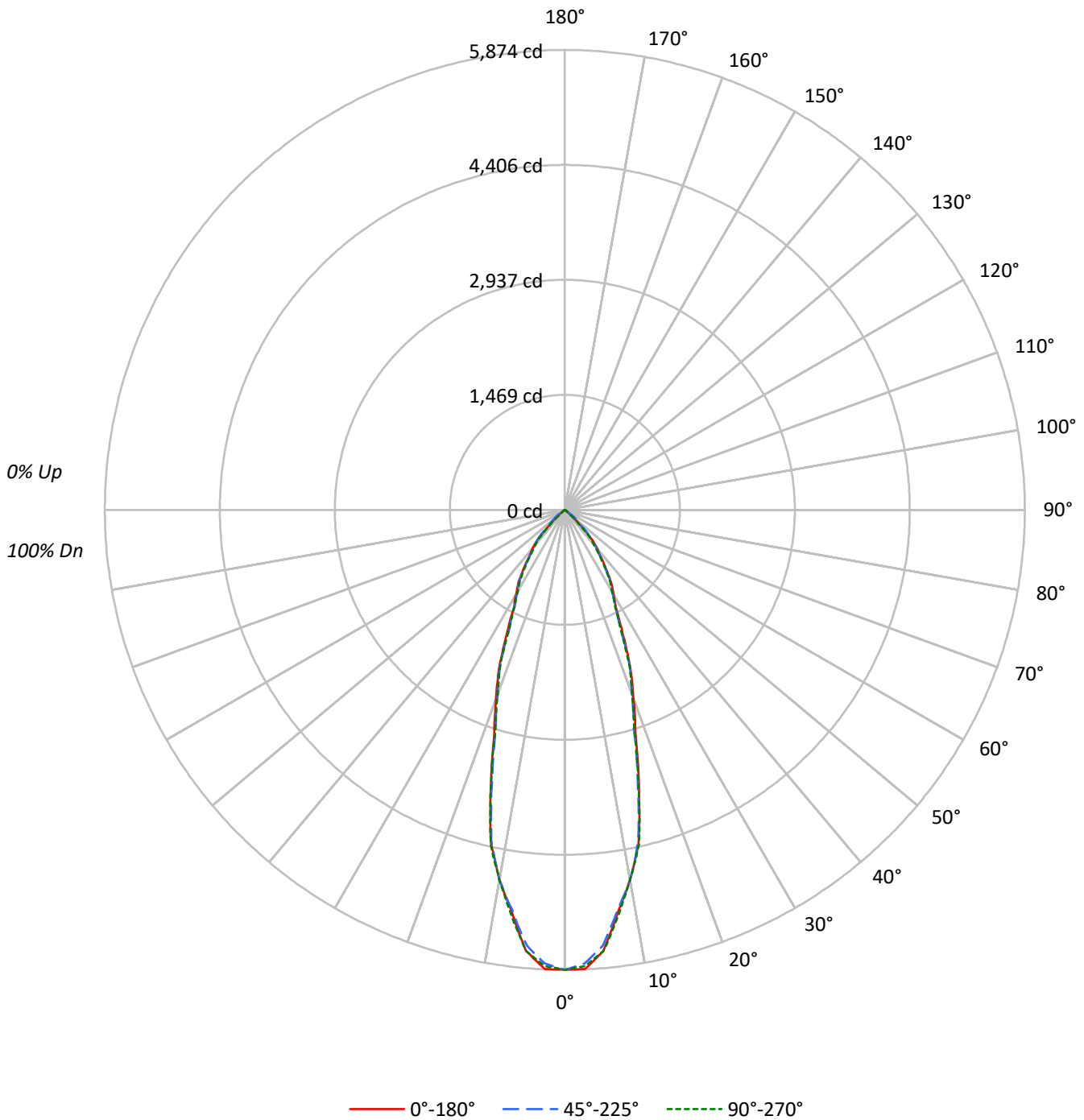
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3175.2 lumens
Efficiency: N/A
Efficacy: 115.0 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: Direct

Input Watts (W): 27.6
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68
7	85	77	71	67	84	76	71	67	75	70	66	74	69	66	72	69	66	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	64	60	56	64	59	56	63	59	56	55

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	94842	94842	94842
5°	91670	90537	91722
10°	78671	78723	78671
15°	61065	60090	60923
20°	44070	43161	43125
25°	31249	30004	30061
30°	23249	22656	22439
35°	18090	17631	17255
40°	13386	13053	12227
45°	6841	8387	5512
50°	1490	4627	1090
55°	417	1878	327
60°	68	375	36
65°	0	42	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: 8387 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.9	16.0
10°-20°	1001.4	31.5
20°-30°	807.8	25.4
30°-40°	561.2	17.7
40°-50°	259.3	8.2
50°-60°	36.4	1.1
60°-70°	1.2	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2317.1	73.0
0°-40°	2878.3	90.6
0°-60°	3174.0	100.0
0°-90°	3175.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3175.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5874	5874	5874	5874	5874	
5°	5656	5626	5586	5655	5659	508
15°	3653	3700	3595	3646	3645	1006
25°	1754	1715	1684	1709	1687	821
35°	918	918	894	878	875	574
45°	300	358	367	334	241	242
55°	15	23	67	19	12	19
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5874.1	5874.1	5874.1	5874.1	5874.1
2.5°	5870.7	5849.1	5797.8	5844.1	5830.0
5°	5656.0	5626.0	5586.1	5655.0	5659.2
7.5°	5182.2	5191.9	5154.9	5230.9	5222.8
10°	4798.5	4805.8	4801.7	4826.5	4798.5
12.5°	4353.9	4382.7	4328.3	4366.7	4378.5
15°	3653.2	3699.7	3594.9	3645.7	3644.7
17.5°	2996.0	2991.2	2937.1	2946.6	2943.5
20°	2564.9	2557.7	2512.0	2504.7	2509.9
22.5°	2195.7	2183.5	2167.3	2149.1	2155.9
25°	1754.1	1714.7	1684.2	1709.1	1687.4
27.5°	1407.9	1407.3	1382.1	1384.9	1389.1
30°	1247.0	1239.8	1215.2	1216.0	1203.6
32.5°	1103.9	1109.1	1078.9	1072.9	1060.5
35°	917.8	917.8	894.5	878.5	875.4
37.5°	745.2	743.4	726.8	704.2	696.1
40°	635.1	630.0	619.3	591.5	580.1
42.5°	509.8	523.7	513.4	485.5	468.3
45°	299.6	357.5	367.3	333.5	241.4
47.5°	128.7	192.5	245.2	159.8	83.2
50°	59.3	109.0	184.2	78.6	43.4
52.5°	34.7	59.6	136.8	45.9	27.3
55°	14.8	23.1	66.7	18.9	11.6
57.5°	5.5	10.1	25.2	8.2	4.4
60°	2.1	4.2	11.6	3.1	1.1
62.5°	0.4	1.7	5.7	1.5	0.2
65°	0.0	0.0	1.1	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	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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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