

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:

Luminaire Tested: SQ4-FB-0U-075D-830-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

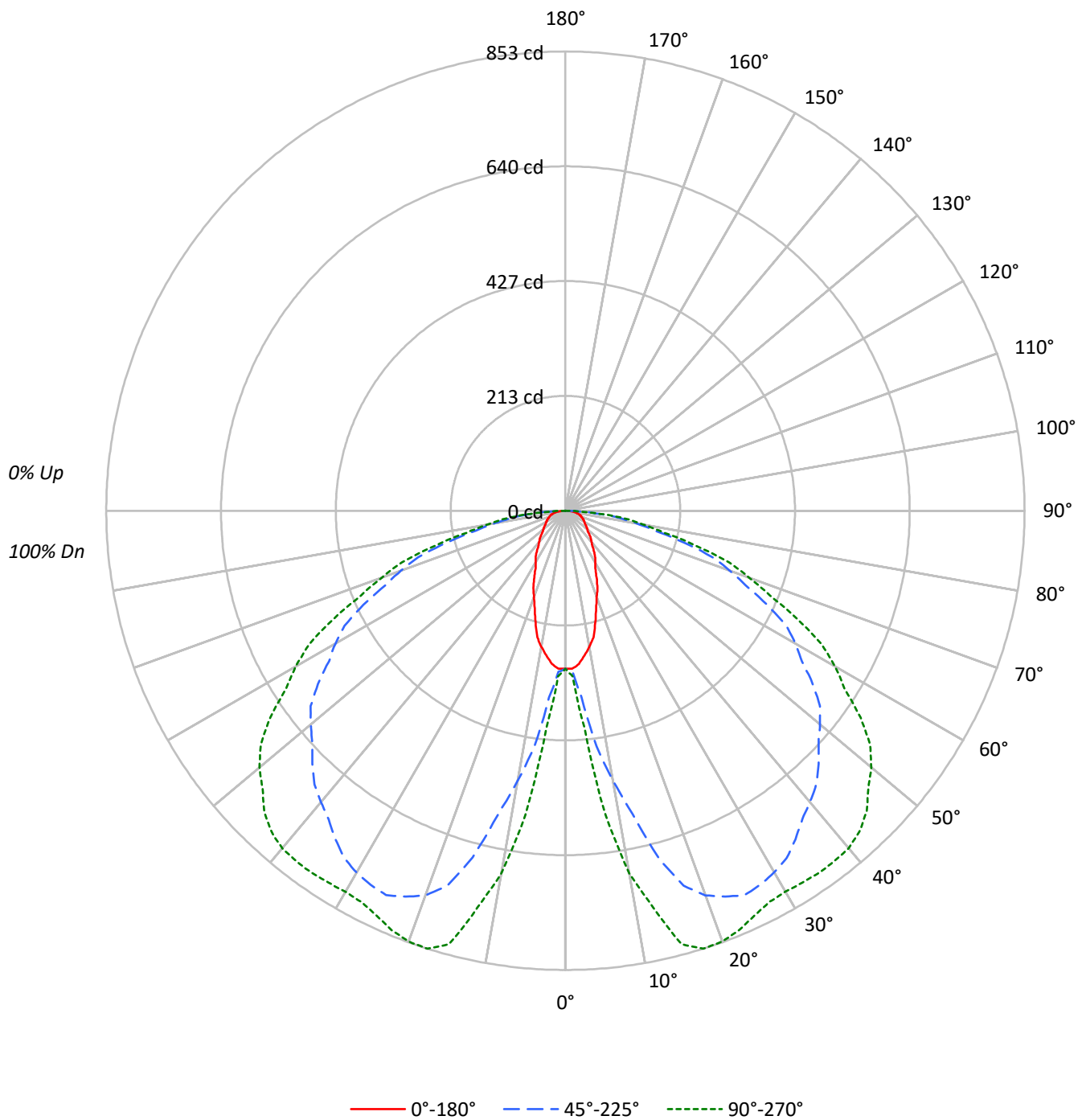
Lumens per Lamp: N/A
Luminaire Lumens: 2271.8 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2708	2708	2708
5°	2649	3221	3750
10°	2405	4766	6402
15°	2047	6370	7961
20°	1668	7465	8359
25°	1394	8019	8446
30°	1176	8266	8708
35°	1042	8388	9249
40°	909	8509	9857
45°	825	8677	10321
50°	759	8860	10649
55°	729	9026	10764
60°	749	9109	10677
65°	784	9036	10365
70°	839	8759	9803
75°	941	8126	8983
80°	1052	7021	7821
85°	995	5849	6690

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 10809 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	1.7
10°-20°	167.7	7.4
20°-30°	293.9	12.9
30°-40°	378.4	16.7
40°-50°	422.5	18.6
50°-60°	405.1	17.8
60°-70°	322.4	14.2
70°-80°	190.0	8.4
80°-90°	53.2	2.3
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°	500.1	22.0
0°-40°	878.5	38.7
0°-60°	1706.1	75.1
0°-90°	2271.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2271.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	294	294	294	294	294	
5°	286	306	348	392	405	26
15°	214	394	667	806	834	59
25°	137	446	788	828	830	63
35°	92	419	745	790	821	58
45°	63	329	665	756	791	49
55°	45	219	561	649	669	41
65°	36	143	414	467	475	36
75°	26	90	228	248	252	28
85°	9	25	55	62	63	11
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	293.5	293.5	293.5	293.5	293.5	293.5	293.5	293.5	293.5	293.5
2.5°	293.5	293.5	295.1	297.3	298.1	301.1	305.6	307.9	309.4	307.9
5°	286.0	289.8	302.0	320.0	337.9	357.7	383.2	395.5	403.0	404.9
7.5°	271.1	281.5	316.4	363.2	415.3	467.0	511.8	548.0	569.2	570.1
10°	256.7	274.7	328.5	400.2	471.9	545.6	606.9	644.7	674.9	683.4
12.5°	240.9	267.9	341.3	437.2	535.4	618.1	686.2	727.7	751.9	755.1
15°	214.3	253.9	359.6	495.5	617.3	716.4	781.5	814.6	829.7	833.5
17.5°	189.5	241.4	375.7	541.2	685.5	774.7	824.2	845.0	852.5	852.9
20°	169.9	229.4	383.2	572.9	720.2	800.4	836.3	849.5	853.3	851.4
22.5°	155.6	216.5	387.8	594.1	741.3	810.2	837.0	843.5	845.0	843.1
25°	136.9	195.4	387.9	622.0	762.7	812.7	826.8	828.7	830.6	829.7
27.5°	120.3	171.8	382.3	640.5	765.7	801.2	807.8	812.5	818.4	819.7
30°	110.4	156.7	374.7	646.6	762.7	789.1	795.7	804.2	814.6	817.4
32.5°	102.9	142.3	363.4	647.3	755.1	774.7	783.6	799.7	814.6	818.9
35°	92.5	120.8	344.5	641.8	738.1	751.3	770.2	796.6	816.5	821.2
37.5°	82.3	105.3	318.8	630.7	715.8	729.6	760.8	792.7	814.8	820.6
40°	75.5	96.3	299.2	620.1	698.5	714.5	753.2	788.1	811.7	818.4
42.5°	70.2	88.7	278.1	606.5	678.8	700.9	744.2	781.4	803.4	808.5
45°	63.2	77.4	244.5	581.4	648.5	681.5	728.7	764.6	785.3	791.0
47.5°	56.6	69.5	209.4	552.7	617.5	657.9	706.2	740.2	759.3	763.0
50°	52.9	64.2	185.9	532.4	595.6	639.0	688.1	722.1	738.1	741.9
52.5°	49.8	59.7	164.0	508.9	572.9	619.4	666.2	697.2	711.7	713.2
55°	45.3	53.8	135.0	472.9	537.1	585.2	630.5	655.1	665.4	669.2
57.5°	42.9	49.5	112.1	433.8	496.7	545.0	586.2	605.2	613.5	614.9
60°	40.6	47.2	100.1	405.9	471.0	516.3	552.2	568.2	575.8	578.6
62.5°	38.3	45.7	91.0	377.2	440.8	484.6	515.9	529.7	535.8	536.3
65°	35.9	43.4	80.2	333.2	393.6	434.2	458.7	470.1	472.9	474.8
67.5°	33.4	41.2	72.5	288.8	344.9	378.5	396.6	406.4	407.0	411.0
70°	31.1	39.6	68.0	258.6	308.7	340.7	355.8	363.4	362.5	363.4
72.5°	29.6	37.4	64.9	227.7	273.9	299.2	312.8	318.1	318.7	318.8
75°	26.4	33.0	60.4	180.3	217.1	238.8	249.2	248.2	251.1	252.0
77.5°	22.8	28.5	49.6	132.9	162.7	177.1	185.4	188.0	187.1	187.3
80°	19.8	25.5	40.6	101.9	126.5	137.8	145.4	147.2	146.3	147.2
82.5°	16.0	21.0	31.5	75.5	94.8	103.8	109.1	109.5	110.1	111.8
85°	9.4	12.3	18.9	41.5	52.9	57.6	61.4	62.3	63.2	63.2
87.5°	3.8	5.3	9.8	17.4	21.9	23.4	23.4	21.9	23.4	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)