

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-050D-840-1D-UNV-STD-W-6

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-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

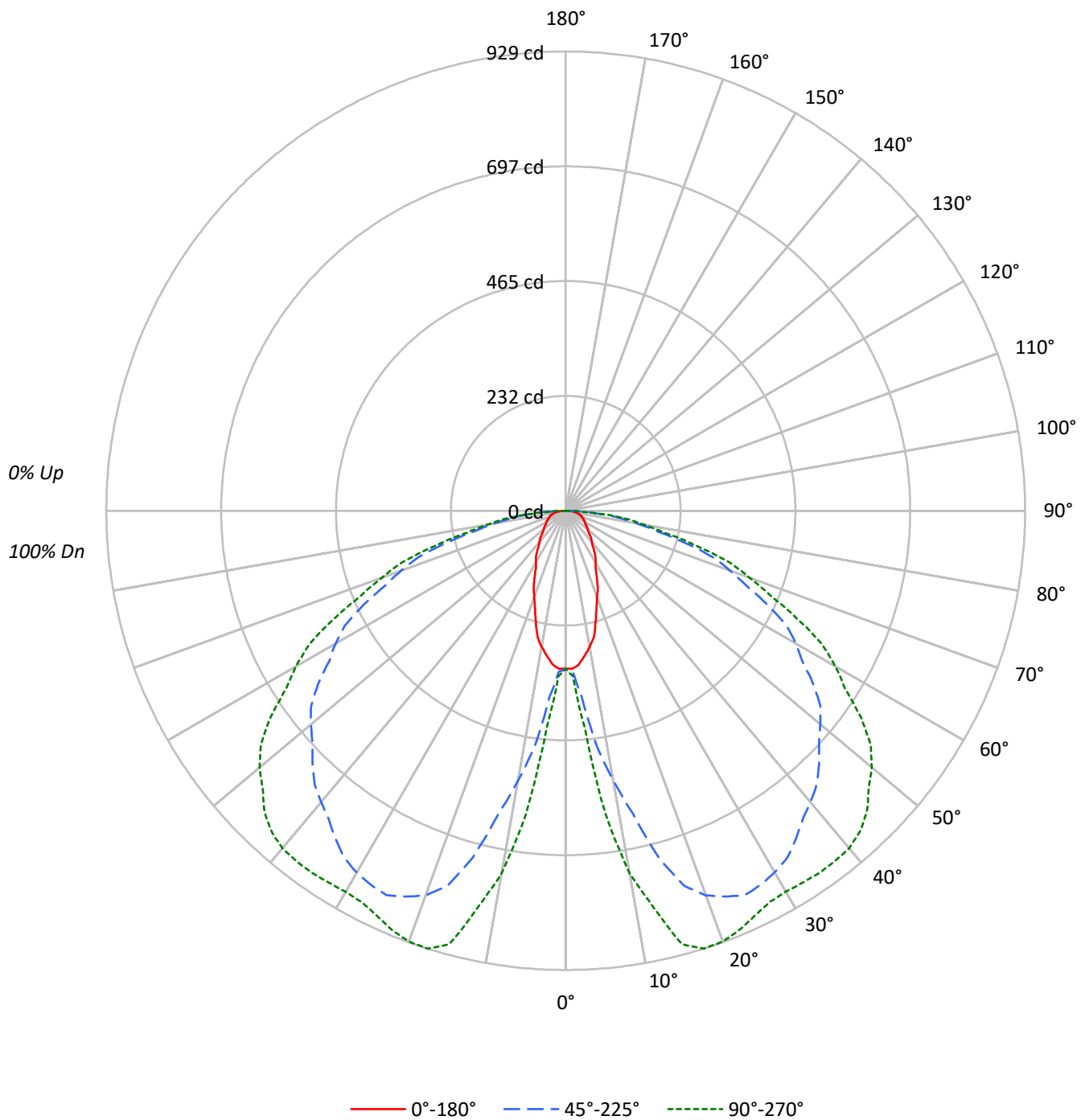
Lumens per Lamp: N/A
Luminaire Lumens: 2474.0 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1966	1966	1966
5°	1923	2339	2723
10°	1746	3460	4648
15°	1486	4625	5780
20°	1211	5420	6069
25°	1011	5822	6132
30°	854	6001	6322
35°	756	6090	6715
40°	660	6178	7156
45°	599	6299	7493
50°	551	6433	7732
55°	529	6553	7815
60°	544	6613	7751
65°	569	6560	7524
70°	610	6359	7118
75°	684	5900	6523
80°	765	5097	5682
85°	727	4245	4862

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	1.7
10°-20°	182.6	7.4
20°-30°	320.0	12.9
30°-40°	412.1	16.7
40°-50°	460.1	18.6
50°-60°	441.2	17.8
60°-70°	351.1	14.2
70°-80°	206.9	8.4
80°-90°	58.0	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°	544.6	22.0
0°-40°	956.7	38.7
0°-60°	1858.0	75.1
0°-90°	2474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	320	320	320	320	320	
5°	312	334	379	427	441	29
15°	233	429	726	878	908	65
25°	149	486	858	902	904	69
35°	101	456	811	860	894	63
45°	69	358	724	823	861	53
55°	49	239	611	707	729	45
65°	39	156	451	509	517	39
75°	29	98	248	271	274	30
85°	10	27	60	68	69	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	319.7	319.7	319.7	319.7	319.7	319.7	319.7	319.7	319.7	319.7
2.5°	319.7	319.7	321.3	323.8	324.6	327.9	332.8	335.3	337.0	335.3
5°	311.5	315.6	328.9	348.5	368.0	389.6	417.3	430.7	438.9	441.0
7.5°	295.2	306.5	344.6	395.5	452.3	508.6	557.3	596.8	619.8	620.9
10°	279.6	299.1	357.7	435.8	514.0	594.1	661.0	702.1	735.0	744.2
12.5°	262.3	291.7	371.7	476.1	583.0	673.1	747.3	792.5	818.8	822.3
15°	233.3	276.5	391.6	539.7	672.3	780.2	851.1	887.1	903.6	907.7
17.5°	206.4	262.9	409.1	589.4	746.5	843.7	897.6	920.2	928.4	928.8
20°	185.0	249.8	417.3	624.0	784.3	871.7	910.7	925.1	929.2	927.2
22.5°	169.4	235.8	422.3	647.0	807.3	882.4	911.6	918.6	920.2	918.1
25°	149.0	212.8	422.5	677.4	830.6	885.0	900.5	902.5	904.6	903.6
27.5°	131.0	187.1	416.3	697.6	833.9	872.5	879.7	884.8	891.2	892.7
30°	120.3	170.6	408.1	704.1	830.6	859.3	866.5	875.8	887.1	890.2
32.5°	112.0	155.0	395.8	705.0	822.3	843.7	853.4	870.9	887.1	891.8
35°	100.7	131.6	375.2	699.0	803.8	818.2	838.8	867.6	889.2	894.3
37.5°	89.6	114.7	347.2	686.9	779.6	794.6	828.5	863.3	887.3	893.7
40°	82.2	104.8	325.9	675.3	760.7	778.1	820.3	858.3	884.0	891.2
42.5°	76.5	96.6	302.8	660.5	739.3	763.3	810.4	850.9	875.0	880.5
45°	68.9	84.3	266.2	633.2	706.2	742.2	793.6	832.6	855.2	861.4
47.5°	61.7	75.7	228.0	602.0	672.5	716.5	769.1	806.1	826.9	831.0
50°	57.6	69.9	202.5	579.8	648.6	695.9	749.4	786.4	803.8	808.0
52.5°	54.3	65.0	178.7	554.3	624.0	674.5	725.5	759.2	775.1	776.7
55°	49.3	58.6	147.0	515.0	584.9	637.3	686.7	713.4	724.7	728.8
57.5°	46.7	53.9	122.1	472.4	540.9	593.5	638.3	659.1	668.2	669.6
60°	44.2	51.4	109.0	442.0	512.9	562.3	601.3	618.8	627.0	630.1
62.5°	41.7	49.8	99.1	410.8	480.0	527.7	561.9	576.9	583.5	584.1
65°	39.1	47.3	87.4	362.9	428.6	472.8	499.6	511.9	515.0	517.0
67.5°	36.4	44.8	78.9	314.5	375.6	412.2	431.9	442.6	443.2	447.6
70°	33.9	43.2	74.0	281.7	336.1	371.1	387.5	395.8	394.7	395.8
72.5°	32.3	40.7	70.7	247.9	298.3	325.9	340.7	346.4	347.0	347.2
75°	28.8	36.0	65.8	196.3	236.4	260.1	271.4	270.3	273.4	274.5
77.5°	24.9	31.0	54.1	144.7	177.2	192.8	201.9	204.8	203.7	203.9
80°	21.6	27.8	44.2	111.0	137.7	150.1	158.3	160.4	159.3	160.4
82.5°	17.5	22.8	34.3	82.2	103.2	113.1	118.8	119.2	119.9	121.7
85°	10.3	13.4	20.6	45.2	57.6	62.7	66.8	67.8	68.9	68.9
87.5°	4.1	5.8	10.7	18.9	23.8	25.5	25.5	23.8	25.5	23.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)