

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-F-075U-100D-927-1D-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 (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

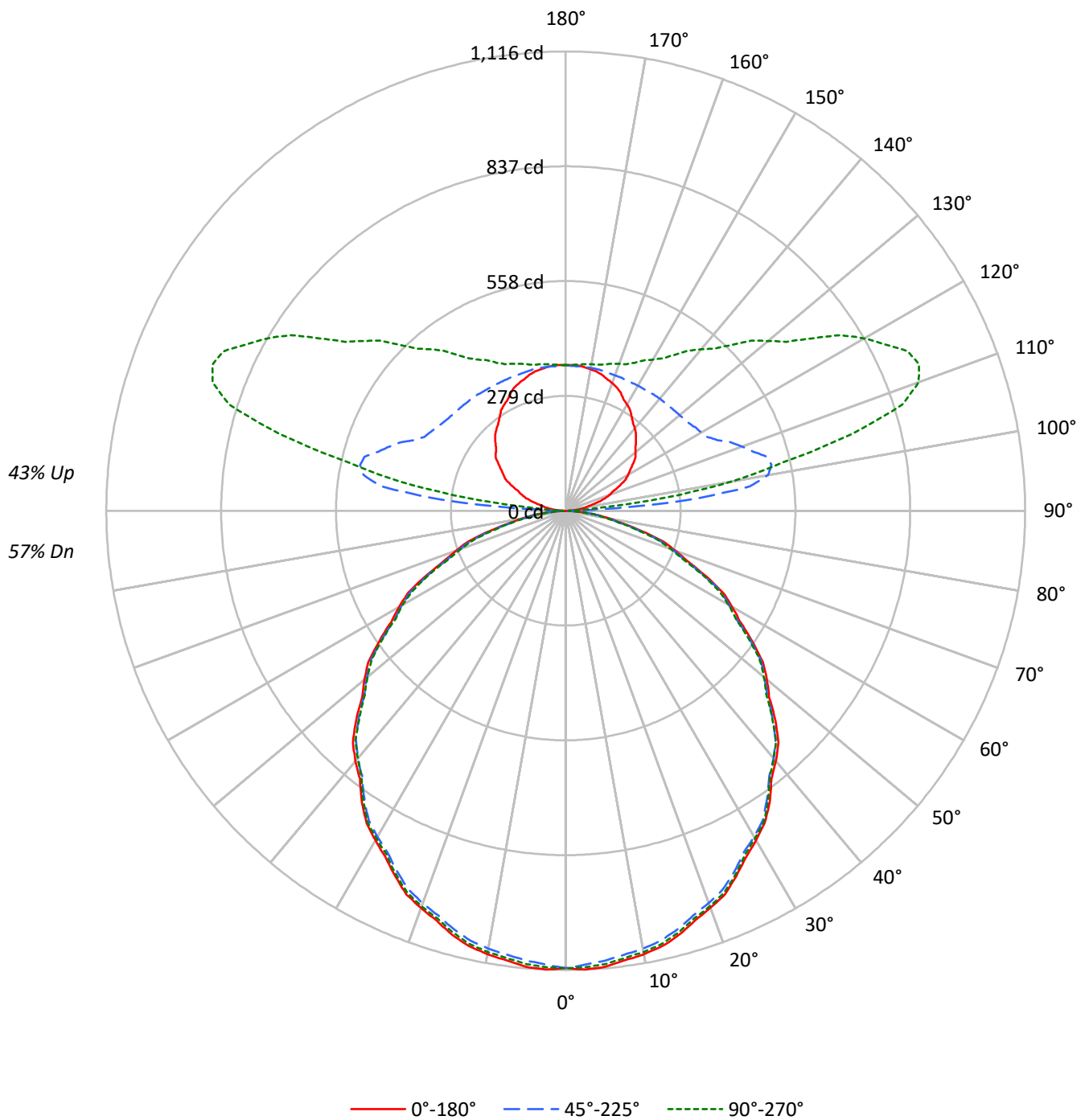
Lumens per Lamp: N/A
Luminaire Lumens: 5338.3 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10257	10257	10257
5°	10303	10162	10239
10°	10251	10123	10200
15°	10189	10050	10130
20°	10083	9964	10046
25°	9973	9857	9935
30°	9852	9747	9796
35°	9729	9609	9659
40°	9567	9457	9465
45°	9398	9269	9239
50°	9156	9047	9024
55°	8886	8787	8726
60°	8617	8462	8435
65°	8195	8012	7947
70°	7615	7432	7286
75°	6802	6584	6445
80°	5595	5393	5148
85°	3313	3631	3716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9398 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	2.0
10°-20°	298.8	5.6
20°-30°	448.7	8.4
30°-40°	535.5	10.0
40°-50°	548.9	10.3
50°-60°	488.8	9.2
60°-70°	364.4	6.8
70°-80°	197.3	3.7
80°-90°	45.8	0.9
90°-100°	166.9	3.1
100°-110°	459.2	8.6
110°-120°	473.9	8.9
120°-130°	379.7	7.1
130°-140°	298.2	5.6
140°-150°	228.6	4.3
150°-160°	164.3	3.1
160°-170°	100.5	1.9
170°-180°	33.9	0.6
0°-30°	852.4	16.0
0°-40°	1388.0	26.0
0°-60°	2425.6	45.4
0°-90°	3033.1	56.8
90°-120°	1100.0	20.6
90°-150°	2006.5	37.6
90°-180°	2305.0	43.2
0°-180°	5338.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1110	1097	1107	1106	105
15°	1067	1063	1052	1061	1061	301
25°	980	978	968	974	976	451
35°	864	860	853	855	858	539
45°	720	717	710	707	708	554
55°	552	553	546	541	542	494
65°	375	374	367	363	364	371
75°	191	188	185	181	181	203
85°	31	34	34	35	35	44
90°	1	3	5	7	7	2
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111.7	1111.7	1111.7	1111.7	1111.7
2.5°	1116.0	1113.6	1103.8	1111.7	1110.5
5°	1112.5	1110.3	1097.2	1107.1	1105.6
7.5°	1102.1	1099.9	1088.4	1097.5	1096.2
10°	1094.2	1091.9	1080.5	1089.6	1088.8
12.5°	1083.8	1081.6	1070.1	1079.2	1078.5
15°	1066.7	1063.0	1052.2	1060.6	1060.6
17.5°	1044.1	1041.3	1031.3	1038.3	1038.5
20°	1027.0	1024.8	1014.8	1022.5	1023.2
22.5°	1009.9	1007.7	996.5	1003.6	1004.9
25°	979.7	977.5	968.3	973.7	975.9
27.5°	948.6	945.3	936.2	941.0	942.6
30°	924.8	923.3	914.9	917.2	919.5
32.5°	899.8	898.3	891.1	892.2	896.3
35°	863.8	860.0	853.1	854.7	857.6
37.5°	821.2	819.4	812.6	811.8	814.6
40°	794.3	791.3	785.2	783.7	785.9
42.5°	765.0	762.0	754.6	753.2	756.0
45°	720.3	716.6	710.4	706.6	708.1
47.5°	670.2	670.2	663.8	659.5	661.7
50°	637.9	637.9	630.3	626.5	628.7
52.5°	604.3	604.9	596.7	594.7	593.9
55°	552.4	553.2	546.3	541.0	542.5
57.5°	502.4	500.7	492.8	489.3	490.0
60°	467.0	464.7	458.6	453.3	457.1
62.5°	431.0	429.9	423.8	417.8	417.4
65°	375.4	373.9	367.0	363.2	364.0
67.5°	320.2	318.4	312.1	306.6	308.6
70°	282.3	282.3	275.5	272.4	270.1
72.5°	247.5	244.5	239.4	235.1	233.5
75°	190.8	188.5	184.7	180.8	180.8
77.5°	138.9	136.9	134.4	131.8	131.1
80°	105.3	104.6	101.5	100.6	96.9
82.5°	74.2	74.0	72.2	70.2	70.0
85°	31.3	34.3	34.3	35.1	35.1
87.5°	5.6	9.7	9.6	8.7	8.7
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)