

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-125U-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 (G3-1910-536-24, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

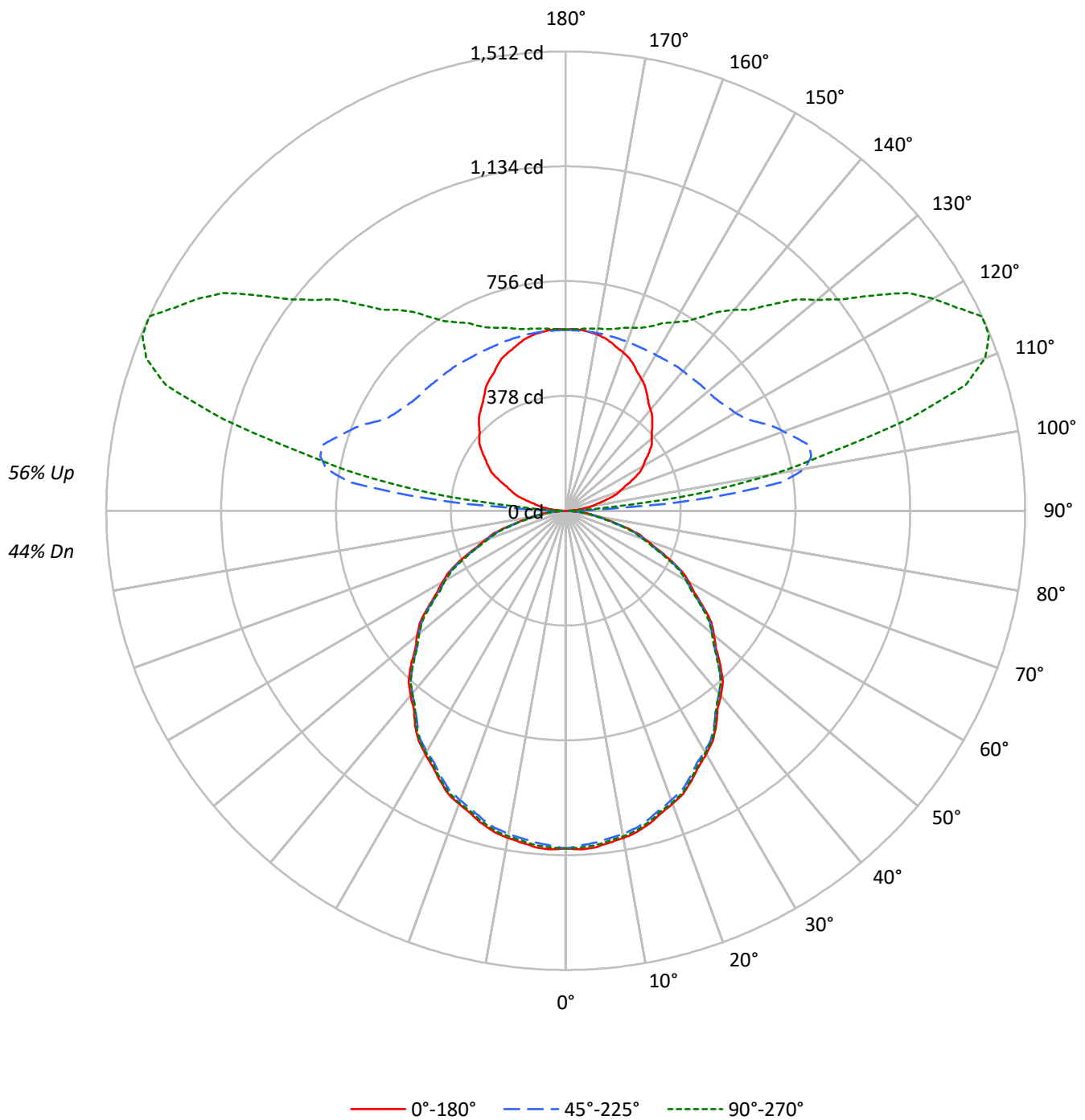
Lumens per Lamp: N/A
Luminaire Lumens: 6883.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.5
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13

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	1.5
10°-20°	298.8	4.3
20°-30°	448.7	6.5
30°-40°	535.5	7.8
40°-50°	548.9	8.0
50°-60°	488.8	7.1
60°-70°	364.4	5.3
70°-80°	197.3	2.9
80°-90°	46.3	0.7
90°-100°	278.9	4.1
100°-110°	751.4	10.9
110°-120°	788.6	11.5
120°-130°	639.9	9.3
130°-140°	501.9	7.3
140°-150°	385.3	5.6
150°-160°	277.0	4.0
160°-170°	169.3	2.5
170°-180°	57.1	0.8
0°-30°	852.4	12.4
0°-40°	1388.0	20.2
0°-60°	2425.6	35.2
0°-90°	3033.6	44.1
90°-120°	1819.0	26.4
90°-150°	3346.1	48.6
90°-180°	3849.0	55.9
0°-180°	6883.0	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°	2	4	9	10	10	4
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

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°	5.8	10.0	10.4	9.3	9.3
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)