

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-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 (G3-1910-536-24, 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-6
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

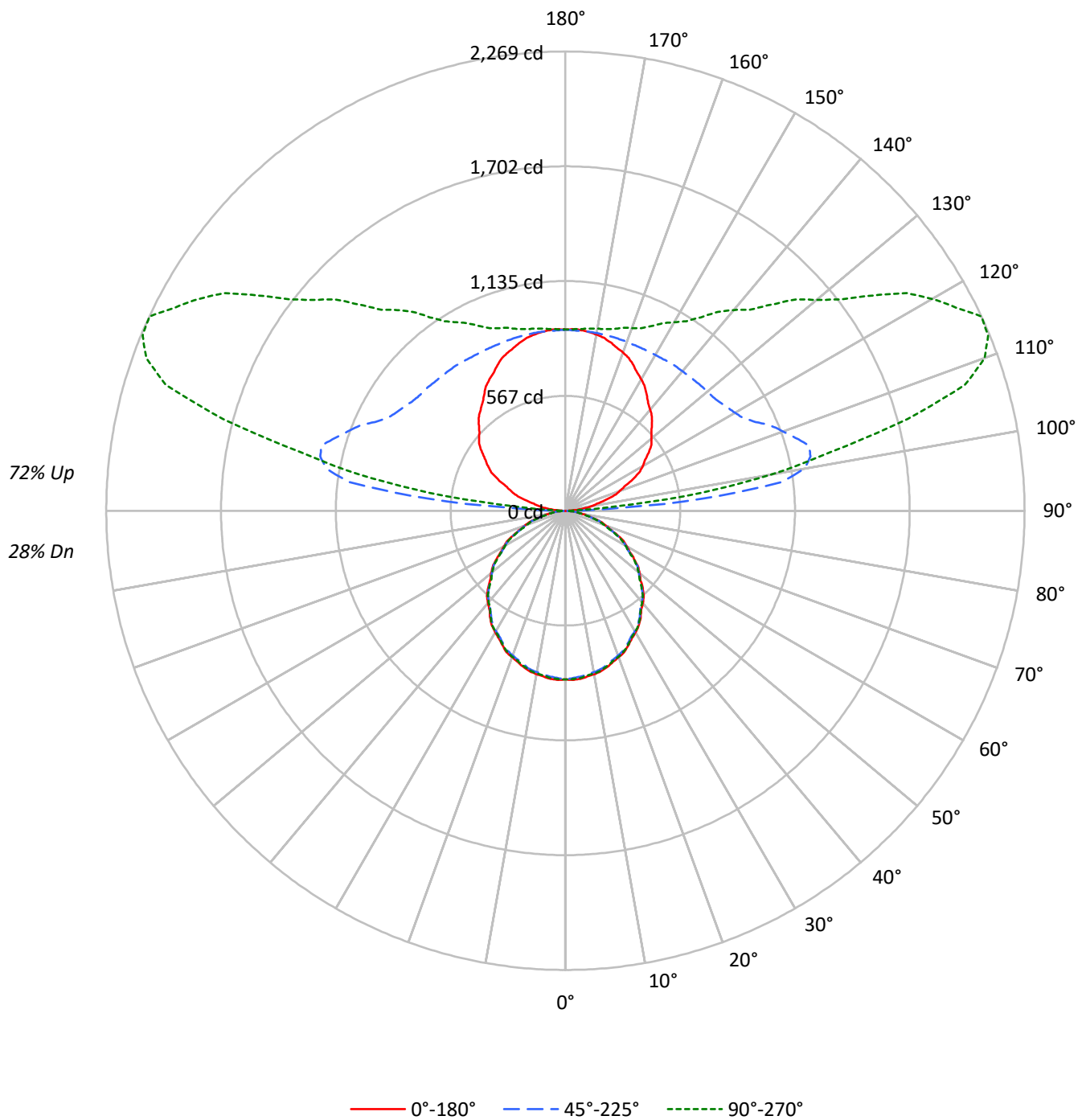
Lumens per Lamp: N/A
Luminaire Lumens: 8050.4 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 102.8
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	0		
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28		
1	93	89	85	82	83	80	76	74	62	60	58	46	45	44	32	31	30	24		
2	85	77	71	66	75	69	64	60	55	51	48	41	39	37	28	27	26	20		
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17		
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14		
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	12		
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11		
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10		
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9		
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	14	12	10	8		
10	44	32	25	20	39	29	23	19	23	19	16	18	15	12	13	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5129	5129	5129
5°	5152	5081	5120
10°	5125	5061	5100
15°	5094	5025	5066
20°	5042	4982	5023
25°	4987	4928	4967
30°	4926	4874	4898
35°	4864	4804	4830
40°	4783	4728	4732
45°	4699	4635	4620
50°	4578	4523	4513
55°	4443	4393	4363
60°	4308	4231	4217
65°	4098	4007	3973
70°	3807	3715	3644
75°	3401	3291	3223
80°	2798	2696	2575
85°	1658	1821	1856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	1.0
10°-20°	224.1	2.8
20°-30°	336.5	4.2
30°-40°	401.6	5.0
40°-50°	411.7	5.1
50°-60°	366.6	4.6
60°-70°	273.3	3.4
70°-80°	148.0	1.8
80°-90°	35.8	0.4
90°-100°	418.4	5.2
100°-110°	1127.1	14.0
110°-120°	1182.9	14.7
120°-130°	959.9	11.9
130°-140°	752.8	9.4
140°-150°	578.0	7.2
150°-160°	415.6	5.2
160°-170°	253.9	3.2
170°-180°	85.6	1.1
0°-30°	639.3	7.9
0°-40°	1041.0	12.9
0°-60°	1819.3	22.6
0°-90°	2276.3	28.3
90°-120°	2728.4	33.9
90°-150°	5019.1	62.3
90°-180°	5774.0	71.7
0°-180°	8050.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	834	833	823	830	829	79
15°	800	797	789	796	796	225
25°	735	733	726	730	732	339
35°	648	645	640	641	643	404
45°	540	537	533	530	531	416
55°	414	415	410	406	407	371
65°	282	280	275	272	273	278
75°	143	141	138	136	136	152
85°	24	26	26	26	26	33
90°	2	7	14	15	15	5
95°	64	228	686	351	243	67
105°	208	324	1246	1865	1750	219
115°	368	450	1038	2006	2269	362
125°	502	577	932	1575	1854	449
135°	605	675	906	1271	1439	467
145°	700	754	894	1087	1167	439
155°	794	823	886	975	1006	366
165°	861	871	890	925	930	243
175°	896	894	891	904	901	85
180°	894	894	894	894	894	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.8	833.8	833.8	833.8	833.8
2.5°	837.0	835.2	827.8	833.8	832.9
5°	834.4	832.7	822.9	830.3	829.2
7.5°	826.6	824.9	816.3	823.1	822.1
10°	820.6	819.0	810.3	817.2	816.6
12.5°	812.9	811.2	802.6	809.4	808.9
15°	800.0	797.2	789.2	795.5	795.5
17.5°	783.1	781.0	773.5	778.8	778.9
20°	770.3	768.6	761.1	766.9	767.4
22.5°	757.5	755.8	747.4	752.7	753.7
25°	734.8	733.1	726.2	730.3	731.9
27.5°	711.4	709.0	702.2	705.8	707.0
30°	693.6	692.5	686.2	687.9	689.6
32.5°	674.8	673.7	668.3	669.2	672.2
35°	647.8	645.0	639.8	641.0	643.2
37.5°	615.9	614.5	609.5	608.8	611.0
40°	595.7	593.5	588.9	587.8	589.4
42.5°	573.8	571.5	566.0	564.9	567.0
45°	540.2	537.4	532.8	529.9	531.1
47.5°	502.7	502.7	497.9	494.6	496.3
50°	478.4	478.4	472.7	469.9	471.6
52.5°	453.2	453.7	447.5	446.0	445.5
55°	414.3	414.9	409.7	405.8	406.9
57.5°	376.8	375.6	369.6	367.0	367.5
60°	350.2	348.6	343.9	340.0	342.8
62.5°	323.2	322.4	317.8	313.4	313.0
65°	281.6	280.4	275.3	272.4	273.0
67.5°	240.1	238.8	234.1	230.0	231.4
70°	211.7	211.7	206.6	204.3	202.6
72.5°	185.6	183.4	179.6	176.3	175.1
75°	143.1	141.4	138.5	135.6	135.6
77.5°	104.2	102.7	100.8	98.9	98.3
80°	79.0	78.4	76.1	75.5	72.7
82.5°	55.6	55.5	54.1	52.6	52.5
85°	23.5	25.7	25.8	26.3	26.3
87.5°	4.6	8.2	9.1	8.5	8.5
90°	2.3	6.7	13.7	14.8	14.8
92.5°	27.8	98.2	194.2	93.5	64.9
95°	63.8	227.6	685.9	350.8	242.7
97.5°	101.9	260.5	1075.8	898.8	677.7
100°	131.0	273.6	1199.8	1255.3	1041.4
102.5°	159.3	292.1	1240.8	1522.4	1346.8
105°	208.5	324.4	1246.5	1864.9	1750.2
107.5°	255.0	358.4	1193.4	2040.9	2070.6
110°	286.0	384.0	1145.1	2095.6	2203.7

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	318.8	409.7	1098.6	2083.5	2261.1
115°	368.0	450.5	1038.0	2005.7	2268.6
117.5°	412.9	490.2	991.1	1881.5	2174.3
120°	442.1	516.7	967.4	1792.3	2093.1
122.5°	467.6	541.4	950.1	1701.1	2001.1
125°	502.5	577.1	932.1	1575.3	1853.8
127.5°	536.0	609.5	920.7	1464.3	1713.0
130°	556.0	629.6	916.1	1400.8	1619.1
132.5°	576.1	648.7	911.5	1344.8	1545.3
135°	605.0	675.2	905.8	1270.9	1439.1
137.5°	632.6	699.9	902.9	1208.2	1346.3
140°	651.8	716.4	900.1	1169.6	1294.4
142.5°	671.8	732.0	898.3	1133.6	1238.8
145°	699.6	754.2	894.5	1086.6	1166.8
147.5°	729.7	777.2	890.6	1047.0	1110.0
150°	749.7	791.0	888.8	1022.1	1074.5
152.5°	768.0	803.8	887.8	1001.8	1044.4
155°	794.2	823.1	886.5	974.9	1006.1
157.5°	817.2	839.7	886.7	956.0	976.9
160°	831.8	850.7	887.6	944.9	960.5
162.5°	844.5	859.9	888.5	935.7	946.9
165°	861.4	871.4	889.9	925.3	929.8
167.5°	875.1	880.9	891.0	917.3	919.1
170°	884.2	886.4	891.0	912.7	912.7
172.5°	889.7	890.1	891.9	908.1	908.1
175°	895.6	894.5	891.0	903.5	901.3
177.5°	898.1	896.3	891.7	899.0	897.2
180°	894.5	894.5	894.5	894.5	894.5

(END OF REPORT)