

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-PW1-125U-050D-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-125U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

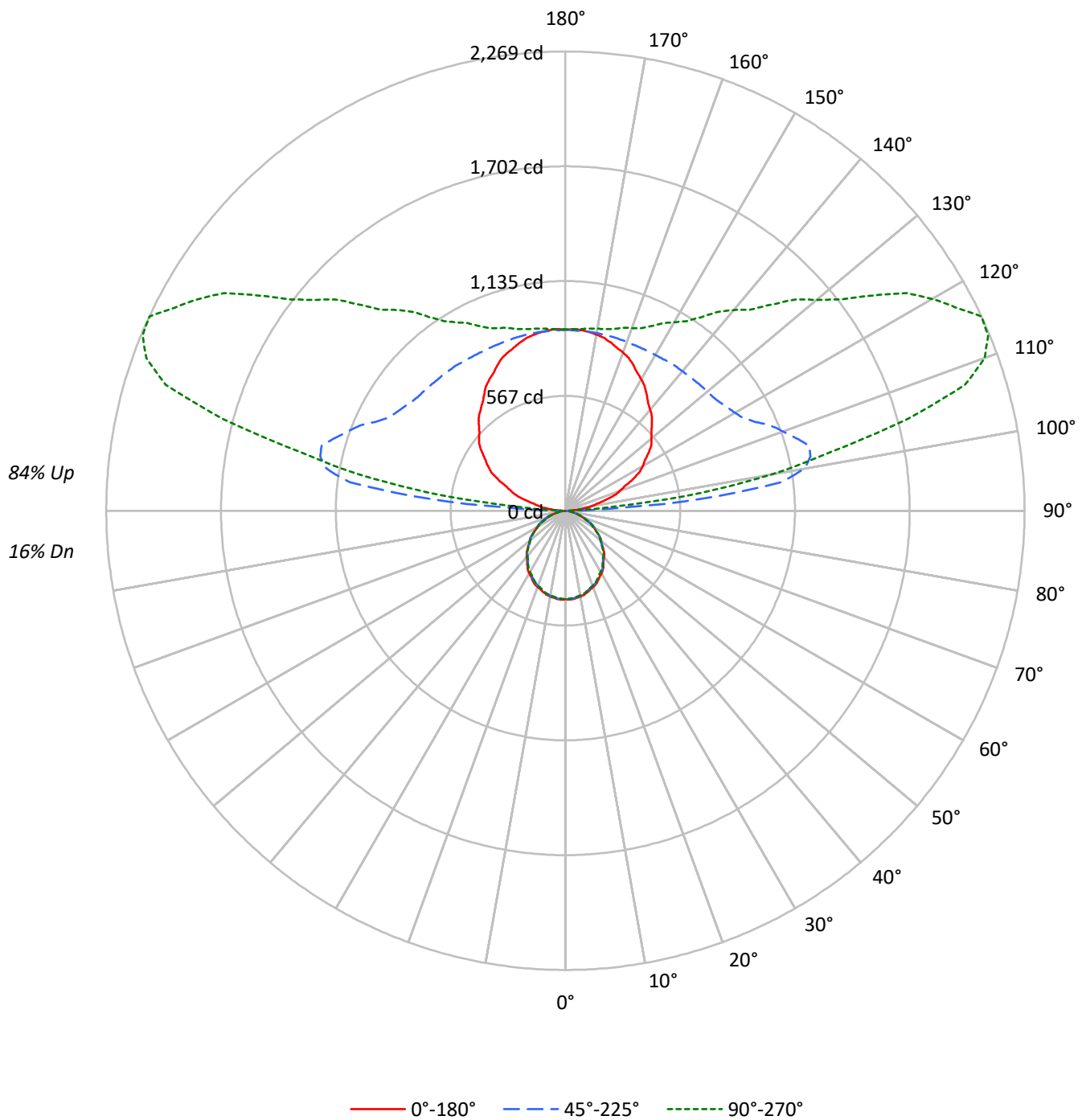
Lumens per Lamp: N/A
Luminaire Lumens: 6889.5 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25
1	90	86	82	79	79	76	73	70	56	54	53	39	37	36	22	22	21
2	82	75	69	65	72	66	61	57	49	46	44	34	32	30	19	19	18
3	75	66	59	54	65	58	52	48	43	40	37	30	28	26	17	16	15
4	68	58	51	45	60	51	45	40	39	34	31	27	24	22	15	14	13
5	63	52	44	38	55	46	39	34	34	30	27	24	21	19	14	12	11
6	57	46	38	33	50	41	34	30	31	26	23	21	18	16	13	11	10
7	53	41	34	29	46	37	30	26	28	23	20	19	16	14	11	10	9
8	49	37	30	25	43	33	27	23	25	21	18	18	15	13	10	9	8
9	45	34	27	22	40	30	24	20	23	19	16	16	13	11	10	8	7
10	42	31	24	20	37	27	22	18	21	17	14	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2691	2691	2691
5°	2709	2687	2675
10°	2687	2666	2651
15°	2659	2629	2619
20°	2627	2586	2582
25°	2590	2543	2535
30°	2536	2497	2481
35°	2464	2428	2414
40°	2386	2349	2340
45°	2294	2263	2254
50°	2199	2180	2165
55°	2096	2096	2063
60°	1968	2006	1935
65°	1800	1891	1757
70°	1588	1741	1547
75°	1357	1557	1319
80°	1052	1311	1066
85°	677	1009	896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2294 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	0.6
10°-20°	116.3	1.7
20°-30°	172.5	2.5
30°-40°	201.9	2.9
40°-50°	201.0	2.9
50°-60°	173.6	2.5
60°-70°	124.9	1.8
70°-80°	65.5	1.0
80°-90°	18.3	0.3
90°-100°	418.4	6.1
100°-110°	1127.1	16.4
110°-120°	1182.9	17.2
120°-130°	959.9	13.9
130°-140°	752.8	10.9
140°-150°	578.0	8.4
150°-160°	415.6	6.0
160°-170°	253.9	3.7
170°-180°	85.6	1.2
0°-30°	330.1	4.8
0°-40°	532.0	7.7
0°-60°	906.5	13.2
0°-90°	1115.3	16.2
90°-120°	2728.4	39.6
90°-150°	5019.1	72.9
90°-180°	5774.0	83.8
0°-180°	6889.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	439	434	435	434	433	42
15°	418	412	413	412	411	118
25°	382	375	375	372	374	175
35°	328	324	323	320	322	205
45°	264	261	260	259	259	203
55°	196	195	196	193	192	174
65°	124	128	130	125	121	123
75°	57	62	66	61	56	61
85°	10	13	14	14	13	13
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°	437.5	437.5	437.5	437.5	437.5
2.5°	440.0	436.4	437.5	436.6	434.5
5°	438.7	433.8	435.2	434.1	433.3
7.5°	434.2	429.7	430.8	429.5	429.1
10°	430.2	425.7	426.8	425.2	424.4
12.5°	425.6	420.8	421.8	420.3	419.8
15°	417.5	412.2	412.9	412.1	411.3
17.5°	408.1	402.7	402.9	401.6	401.5
20°	401.3	395.7	395.1	393.6	394.4
22.5°	393.9	388.0	387.4	385.3	386.4
25°	381.6	375.2	374.7	372.4	373.6
27.5°	367.5	361.1	361.1	357.9	359.1
30°	357.0	350.9	351.6	347.8	349.3
32.5°	345.9	340.4	340.8	337.0	338.5
35°	328.1	323.5	323.4	320.4	321.5
37.5°	309.9	305.9	305.2	303.5	303.8
40°	297.2	293.8	292.6	291.4	291.4
42.5°	284.0	280.9	279.6	278.8	278.5
45°	263.7	261.4	260.2	259.4	259.1
47.5°	243.6	241.5	240.5	239.9	239.6
50°	229.8	228.3	227.8	226.7	226.3
52.5°	215.9	215.0	214.6	213.1	212.7
55°	195.5	195.1	195.5	192.7	192.4
57.5°	174.2	174.8	176.0	172.4	171.5
60°	160.0	161.5	163.1	158.8	157.3
62.5°	145.5	147.9	150.1	145.2	143.1
65°	123.7	127.5	129.9	124.8	120.7
67.5°	102.8	107.4	110.3	104.8	100.2
70°	88.3	93.6	96.8	91.2	86.0
72.5°	75.6	81.5	84.1	78.9	73.6
75°	57.1	62.3	65.5	61.2	55.5
77.5°	40.5	45.5	48.1	44.3	39.6
80°	29.7	35.0	37.0	33.8	30.1
82.5°	21.0	25.4	26.8	24.9	22.4
85°	9.6	12.7	14.3	13.5	12.7
87.5°	2.9	5.9	8.6	8.8	9.1
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

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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)