

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-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-125U-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

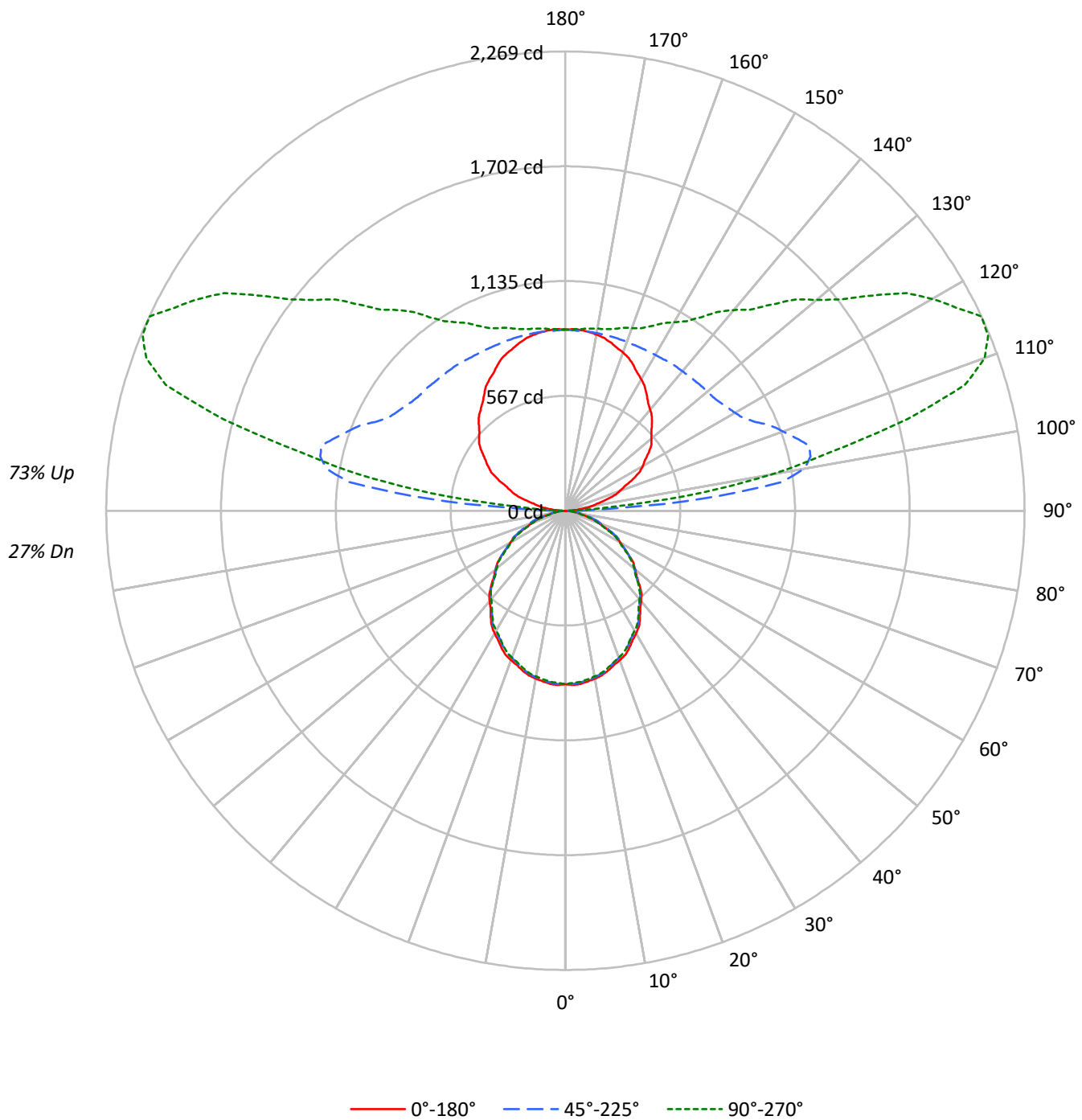
Lumens per Lamp: N/A
Luminaire Lumens: 7956.4 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	93	89	85	82	83	79	76	73	62	60	58	46	45	44	31	31	30
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	28	26	25
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	24	23	22
4	70	60	52	47	63	54	48	43	42	38	34	32	29	26	22	20	19
5	64	53	46	40	57	48	41	36	38	33	29	28	25	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5271	5271	5271
5°	5304	5262	5240
10°	5262	5220	5191
15°	5206	5149	5129
20°	5144	5065	5055
25°	5072	4980	4964
30°	4965	4890	4858
35°	4824	4756	4728
40°	4674	4601	4582
45°	4492	4433	4413
50°	4306	4270	4241
55°	4105	4105	4040
60°	3854	3928	3789
65°	3526	3703	3439
70°	3109	3408	3028
75°	2655	3049	2583
80°	2058	2568	2086
85°	1334	1969	1757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4492 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.0
10°-20°	227.8	2.9
20°-30°	337.9	4.2
30°-40°	395.4	5.0
40°-50°	393.6	4.9
50°-60°	339.9	4.3
60°-70°	244.7	3.1
70°-80°	128.3	1.6
80°-90°	33.9	0.4
90°-100°	418.4	5.3
100°-110°	1127.1	14.2
110°-120°	1182.9	14.9
120°-130°	959.9	12.1
130°-140°	752.8	9.5
140°-150°	578.0	7.3
150°-160°	415.6	5.2
160°-170°	253.9	3.2
170°-180°	85.6	1.1
0°-30°	646.4	8.1
0°-40°	1041.8	13.1
0°-60°	1775.3	22.3
0°-90°	2182.2	27.4
90°-120°	2728.4	34.3
90°-150°	5019.1	63.1
90°-180°	5774.0	72.6
0°-180°	7956.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	859	850	852	850	849	81
15°	818	807	809	807	806	230
25°	747	735	734	729	732	344
35°	642	634	633	627	630	402
45°	516	512	510	508	507	398
55°	383	382	383	378	377	342
65°	242	250	254	244	236	240
75°	112	122	128	120	109	120
85°	19	25	28	26	25	25
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:

CATALOG NUMBER: SQ4-PW1-125U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.9	856.9	856.9	856.9	856.9
2.5°	861.7	854.6	856.9	855.0	850.8
5°	859.1	849.5	852.3	850.0	848.6
7.5°	850.4	841.5	843.6	841.1	840.3
10°	842.5	833.7	835.7	832.7	831.2
12.5°	833.5	824.0	826.1	823.0	822.1
15°	817.6	807.3	808.6	807.0	805.5
17.5°	799.2	788.7	788.9	786.5	786.2
20°	785.9	774.8	773.8	770.8	772.3
22.5°	771.4	759.7	758.7	754.5	756.6
25°	747.4	734.9	733.8	729.3	731.5
27.5°	719.6	707.2	707.2	701.0	703.3
30°	699.1	687.3	688.5	681.0	684.0
32.5°	677.3	666.7	667.4	659.9	662.8
35°	642.5	633.6	633.4	627.4	629.6
37.5°	606.8	599.0	597.8	594.3	594.9
40°	582.1	575.4	573.0	570.7	570.7
42.5°	556.1	550.0	547.6	546.0	545.4
45°	516.4	512.0	509.6	508.1	507.3
47.5°	477.1	473.0	470.9	469.9	469.1
50°	450.0	447.0	446.2	443.9	443.2
52.5°	422.8	421.0	420.2	417.3	416.6
55°	382.8	382.0	382.8	377.5	376.7
57.5°	341.1	342.3	344.7	337.6	335.8
60°	313.3	316.3	319.3	311.0	308.0
62.5°	284.9	289.6	294.0	284.4	280.2
65°	242.3	249.7	254.4	244.4	236.3
67.5°	201.3	210.4	216.1	205.3	196.1
70°	172.9	183.2	189.5	178.7	168.4
72.5°	148.1	159.6	164.7	154.5	144.2
75°	111.7	122.1	128.3	119.8	108.7
77.5°	79.3	89.0	94.2	86.8	77.6
80°	58.1	68.5	72.5	66.3	58.9
82.5°	41.2	49.8	52.5	48.8	43.8
85°	18.9	24.8	27.9	26.4	24.9
87.5°	5.3	10.3	14.2	14.5	15.0
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)