

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-075D-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, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

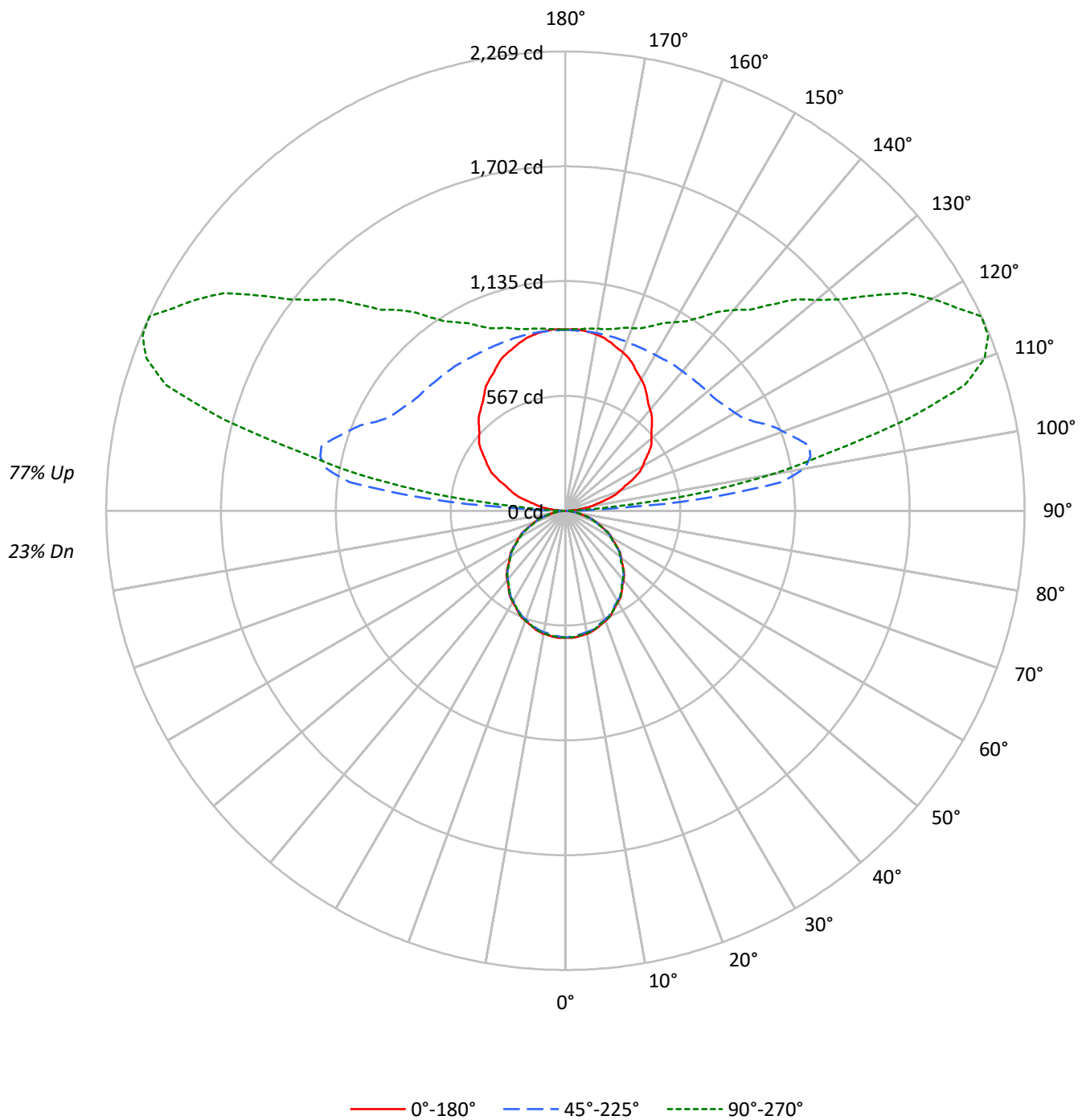
Lumens per Lamp: N/A
Luminaire Lumens: 7487.5 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 87.9
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26
2	83	76	70	66	74	68	63	59	52	49	46	38	36	34	24	23	22
3	76	67	60	54	67	60	54	49	46	42	39	33	31	28	21	20	19
4	69	59	52	46	61	53	46	41	41	36	33	29	27	24	19	17	16
5	64	52	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14
6	58	47	39	34	52	42	35	30	32	28	24	24	21	18	15	14	12
7	54	42	34	29	48	38	31	26	29	25	21	21	18	16	14	12	11
8	50	38	31	26	44	34	28	23	27	22	19	19	16	14	13	11	10
9	46	35	27	23	41	31	25	21	24	20	16	18	15	13	12	10	9
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3856	3856	3856
5°	3871	3821	3849
10°	3855	3805	3834
15°	3825	3778	3810
20°	3791	3746	3775
25°	3749	3710	3737
30°	3701	3661	3681
35°	3653	3615	3631
40°	3592	3555	3551
45°	3530	3486	3495
50°	3431	3405	3405
55°	3352	3309	3279
60°	3244	3189	3160
65°	3068	3011	2969
70°	2883	2811	2739
75°	2593	2498	2445
80°	2072	2033	2012
85°	1242	1404	1447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3530 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	0.8
10°-20°	168.4	2.2
20°-30°	253.1	3.4
30°-40°	302.0	4.0
40°-50°	309.7	4.1
50°-60°	276.0	3.7
60°-70°	205.8	2.7
70°-80°	111.6	1.5
80°-90°	27.7	0.4
90°-100°	418.4	5.6
100°-110°	1127.1	15.1
110°-120°	1182.9	15.8
120°-130°	959.9	12.8
130°-140°	752.8	10.1
140°-150°	578.0	7.7
150°-160°	415.6	5.5
160°-170°	253.9	3.4
170°-180°	85.6	1.1
0°-30°	480.7	6.4
0°-40°	782.7	10.5
0°-60°	1368.3	18.3
0°-90°	1713.4	22.9
90°-120°	2728.4	36.4
90°-150°	5019.1	67.0
90°-180°	5774.0	77.1
0°-180°	7487.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	627	626	619	624	623	59
15°	601	600	593	598	598	169
25°	552	552	547	550	551	254
35°	486	485	481	481	484	304
45°	406	404	401	401	402	312
55°	313	312	309	306	306	279
65°	211	211	207	205	204	210
75°	109	107	105	103	103	115
85°	18	19	20	20	20	24
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°	626.9	626.9	626.9	626.9	626.9
2.5°	629.1	627.8	622.3	626.8	626.4
5°	626.9	625.7	618.9	624.0	623.4
7.5°	621.7	620.5	613.8	618.9	618.8
10°	617.2	615.5	609.2	614.3	613.8
12.5°	611.3	609.6	603.3	608.4	607.9
15°	600.7	599.6	593.3	597.9	598.4
17.5°	588.7	586.6	580.9	585.4	585.9
20°	579.1	577.4	572.3	576.3	576.8
22.5°	569.1	567.4	562.3	566.3	566.8
25°	552.4	551.8	546.7	549.6	550.7
27.5°	534.3	532.8	528.6	530.8	531.9
30°	521.1	520.0	515.5	517.2	518.3
32.5°	507.5	506.8	502.7	503.6	505.1
35°	486.5	485.4	481.4	481.4	483.6
37.5°	463.2	462.0	458.6	458.1	459.0
40°	447.3	445.6	442.7	442.2	442.2
42.5°	430.9	429.7	425.9	424.9	426.2
45°	405.8	404.1	400.7	400.7	401.8
47.5°	378.6	377.9	374.0	372.1	372.6
50°	358.6	359.7	355.8	353.5	355.8
52.5°	341.3	340.7	337.1	334.9	335.8
55°	312.6	312.0	308.6	305.8	305.8
57.5°	283.7	282.3	278.7	276.6	278.2
60°	263.7	263.1	259.2	255.2	256.9
62.5°	243.7	242.7	238.7	236.1	237.3
65°	210.8	210.8	206.9	204.6	204.0
67.5°	182.1	179.4	177.2	174.5	173.7
70°	160.3	158.0	156.3	154.0	152.3
72.5°	138.9	137.6	134.9	132.6	132.3
75°	109.1	106.9	105.1	103.4	102.9
77.5°	77.6	77.2	75.6	74.7	75.0
80°	58.5	58.5	57.4	57.4	56.8
82.5°	41.3	41.7	41.5	40.6	40.5
85°	17.6	18.7	19.9	19.9	20.5
87.5°	3.6	6.8	7.7	8.0	8.0
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

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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)