

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-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, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

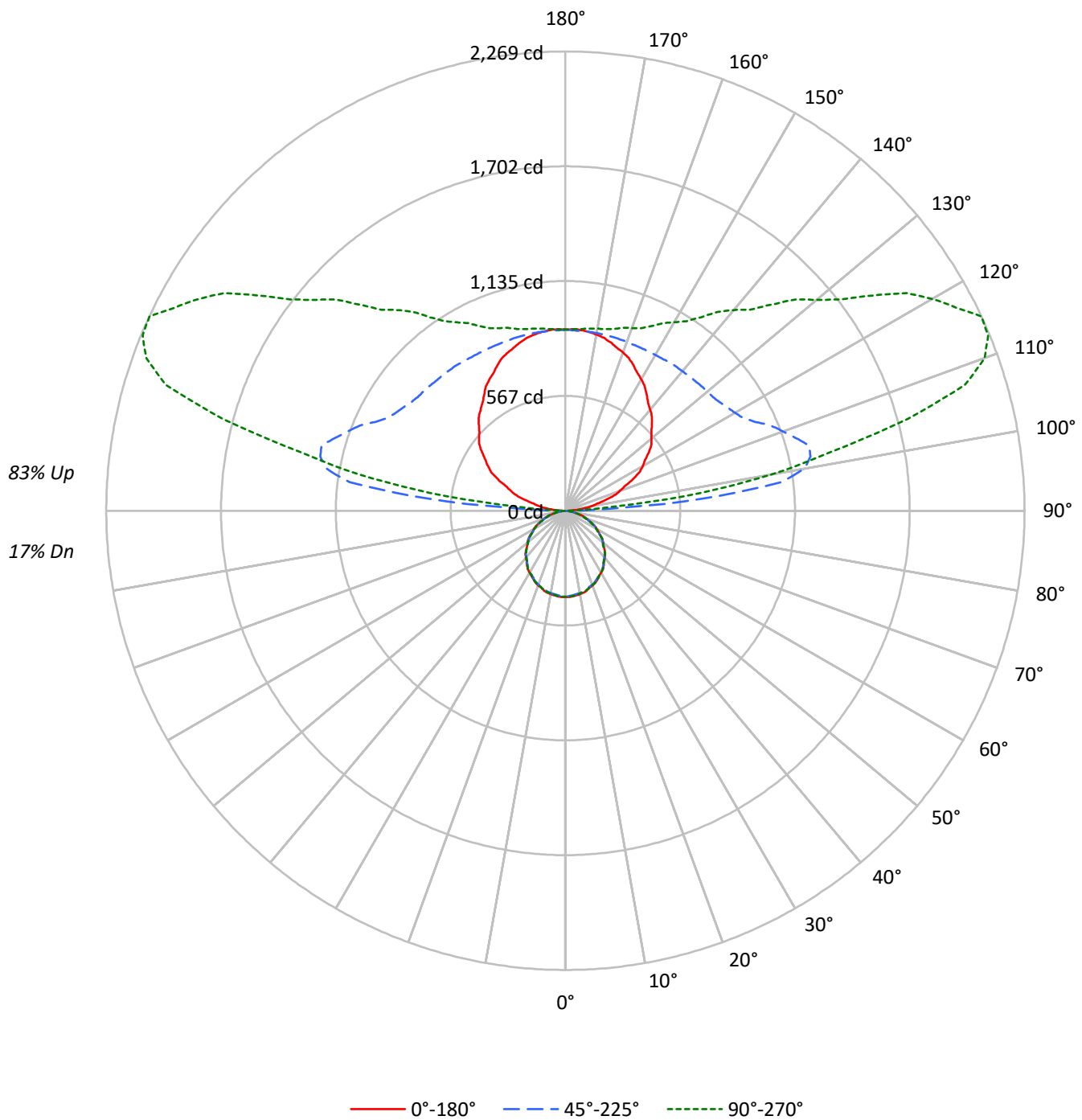
Lumens per Lamp: N/A
Luminaire Lumens: 6937.3 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	26	26	26
1	90	86	83	79	79	76	73	70	57	55	53	39	38	37	23	22	22
2	82	75	69	65	72	66	61	57	50	46	44	34	32	31	20	19	18
3	75	66	59	54	66	58	52	48	44	40	37	30	28	26	17	16	15
4	68	58	51	45	60	51	45	40	39	34	31	27	24	22	16	14	13
5	63	52	44	38	55	46	39	34	34	30	26	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	22	25	21	17	18	15	13	10	9	8
9	45	34	27	22	40	30	24	20	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	22	18	21	17	14	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2617	2617	2617
5°	2623	2591	2612
10°	2614	2582	2600
15°	2596	2564	2585
20°	2572	2542	2561
25°	2543	2512	2535
30°	2508	2487	2504
35°	2480	2450	2463
40°	2432	2410	2414
45°	2383	2363	2363
50°	2332	2310	2299
55°	2278	2248	2235
60°	2192	2158	2144
65°	2089	2048	2022
70°	1946	1904	1863
75°	1747	1692	1652
80°	1413	1392	1353
85°	847	967	1002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 2388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.6
10°-20°	114.3	1.6
20°-30°	171.7	2.5
30°-40°	204.9	3.0
40°-50°	210.0	3.0
50°-60°	187.3	2.7
60°-70°	139.5	2.0
70°-80°	75.7	1.1
80°-90°	19.6	0.3
90°-100°	418.4	6.0
100°-110°	1127.1	16.2
110°-120°	1182.9	17.1
120°-130°	959.9	13.8
130°-140°	752.8	10.9
140°-150°	578.0	8.3
150°-160°	415.6	6.0
160°-170°	253.9	3.7
170°-180°	85.6	1.2
0°-30°	326.1	4.7
0°-40°	531.0	7.7
0°-60°	928.3	13.4
0°-90°	1163.1	16.8
90°-120°	2728.4	39.3
90°-150°	5019.1	72.4
90°-180°	5774.0	83.2
0°-180°	6937.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	425	424	420	424	423	40
15°	408	407	403	406	406	115
25°	375	374	370	372	374	173
35°	330	329	326	326	328	206
45°	274	274	272	271	272	211
55°	212	212	210	208	208	189
65°	144	143	141	139	139	142
75°	74	73	71	70	70	78
85°	12	13	14	14	14	17
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°	425.4	425.4	425.4	425.4	425.4
2.5°	426.7	425.9	422.2	425.4	424.9
5°	424.8	424.3	419.7	423.7	423.1
7.5°	421.7	420.6	416.2	420.0	419.5
10°	418.5	417.4	413.4	416.8	416.3
12.5°	414.4	413.8	409.3	412.7	412.6
15°	407.7	406.6	402.6	406.0	406.0
17.5°	398.8	398.2	394.3	397.6	397.1
20°	392.9	391.8	388.4	391.2	391.2
22.5°	385.6	385.0	381.5	383.9	384.4
25°	374.7	373.6	370.1	372.4	373.6
27.5°	362.6	361.7	358.9	360.4	361.1
30°	353.1	353.1	350.2	350.8	352.5
32.5°	344.4	344.4	341.1	341.7	342.5
35°	330.3	329.2	326.3	326.3	328.0
37.5°	313.9	313.3	311.5	311.2	311.6
40°	302.9	302.4	300.1	300.7	300.7
42.5°	292.0	291.5	289.2	288.4	289.3
45°	273.9	274.5	271.6	271.1	271.6
47.5°	256.0	256.0	253.7	252.2	253.1
50°	243.7	243.7	241.4	240.3	240.3
52.5°	231.0	231.4	228.7	227.1	227.6
55°	212.4	212.4	209.6	207.9	208.4
57.5°	191.9	191.9	189.1	187.4	188.4
60°	178.2	178.2	175.4	173.7	174.3
62.5°	164.6	164.6	161.7	160.0	160.1
65°	143.5	142.9	140.7	138.9	138.9
67.5°	123.2	121.8	120.0	117.8	117.8
70°	108.2	107.6	105.9	103.6	103.6
72.5°	94.5	93.5	91.8	90.0	90.0
75°	73.5	72.9	71.2	70.0	69.5
77.5°	52.6	52.2	52.0	50.5	50.9
80°	39.9	39.9	39.3	38.2	38.2
82.5°	28.5	28.9	27.9	27.7	27.2
85°	12.0	13.1	13.7	14.2	14.2
87.5°	2.7	5.0	5.9	6.6	6.6
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)