

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-PC3-050U-125D-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-050U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

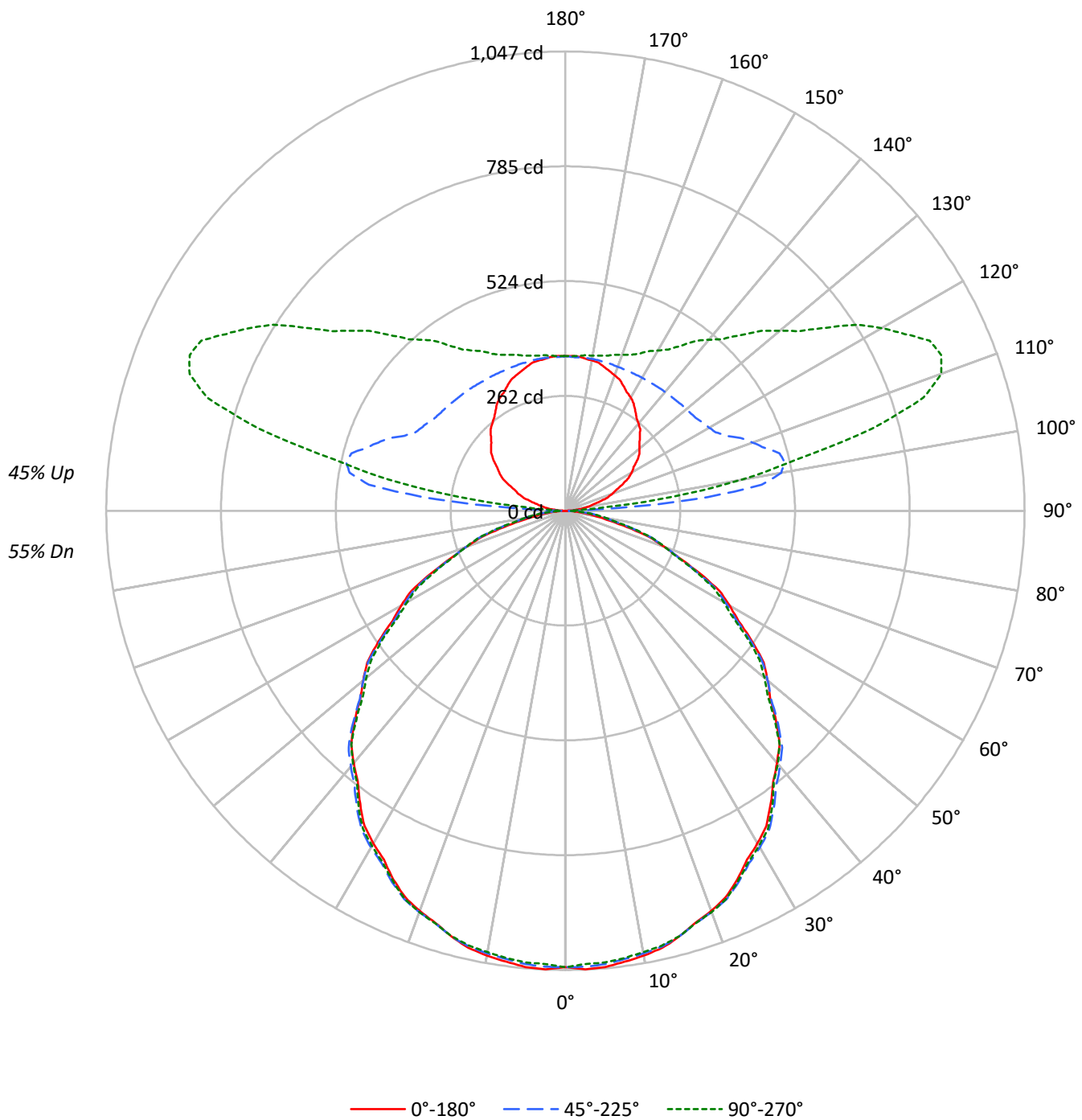
Lumens per Lamp: N/A
Luminaire Lumens: 5141.8 lumens
Efficiency: N/A
Efficacy: 58.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.8
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	82	76	73	71	64	63	61	54	53	52
2	90	83	77	71	83	77	72	67	66	62	59	57	54	51	48	45	43
3	82	73	65	59	76	68	61	56	59	54	49	50	46	43	42	39	37
4	75	64	56	50	70	60	53	47	52	46	42	45	40	37	38	34	32
5	69	57	49	43	64	54	46	41	47	41	36	40	35	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	32	27	35	29	25	30	25	22	26	22	19
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6400	6400	6400
5°	6448	6406	6383
10°	6432	6402	6384
15°	6399	6399	6393
20°	6356	6375	6375
25°	6297	6342	6322
30°	6220	6296	6268
35°	6127	6222	6178
40°	6026	6111	6049
45°	5917	5959	5866
50°	5761	5761	5670
55°	5579	5507	5424
60°	5309	5202	5120
65°	4908	4810	4768
70°	4296	4332	4314
75°	3458	3824	3848
80°	2458	3241	3276
85°	1496	2717	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 5959 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.9
10°-20°	282.6	5.5
20°-30°	427.9	8.3
30°-40°	513.0	10.0
40°-50°	523.1	10.2
50°-60°	456.7	8.9
60°-70°	326.9	6.4
70°-80°	168.4	3.3
80°-90°	43.9	0.9
90°-100°	169.1	3.3
100°-110°	459.5	8.9
110°-120°	472.4	9.2
120°-130°	377.7	7.3
130°-140°	296.8	5.8
140°-150°	227.6	4.4
150°-160°	163.7	3.2
160°-170°	100.1	1.9
170°-180°	33.7	0.7
0°-30°	809.0	15.7
0°-40°	1322.1	25.7
0°-60°	2301.9	44.8
0°-90°	2841.1	55.3
90°-120°	1101.1	21.4
90°-150°	2003.2	39.0
90°-180°	2301.0	44.8
0°-180°	5141.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1044	1034	1038	1035	1034	99
15°	1005	996	1005	1005	1004	283
25°	928	921	934	932	932	427
35°	816	814	829	823	823	510
45°	680	678	685	676	674	524
55°	520	514	514	506	506	464
65°	337	330	330	328	328	334
75°	146	152	161	162	162	157
85°	21	32	38	40	38	29
90°	1	4	8	10	10	3
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1046.7	1037.6	1040.5	1038.1	1034.3
5°	1044.4	1034.0	1037.6	1034.7	1033.8
7.5°	1036.9	1026.5	1031.3	1029.3	1028.4
10°	1029.9	1019.6	1025.1	1023.1	1022.2
12.5°	1020.7	1011.1	1017.4	1015.5	1015.3
15°	1004.9	996.4	1004.9	1004.8	1003.9
17.5°	985.0	977.3	986.4	986.9	986.4
20°	971.1	962.7	974.0	973.1	974.0
22.5°	954.2	947.2	959.4	956.9	957.8
25°	927.8	921.2	934.5	931.6	931.6
27.5°	896.6	891.9	906.4	903.3	903.3
30°	875.8	871.1	886.4	882.5	882.5
32.5°	852.6	849.4	864.0	859.4	859.4
35°	816.0	814.1	828.6	822.8	822.8
37.5°	778.3	776.6	789.6	782.6	780.4
40°	750.5	749.6	761.1	753.4	753.4
42.5°	722.8	721.8	731.8	722.6	722.6
45°	680.2	678.3	685.0	676.3	674.4
47.5°	633.7	631.9	636.1	626.6	625.7
50°	602.1	600.3	602.1	593.5	592.5
52.5°	569.8	566.4	566.7	558.0	557.8
55°	520.3	513.7	513.5	505.8	505.8
57.5°	467.8	459.2	459.9	453.4	452.4
60°	431.6	422.2	422.9	417.1	416.2
62.5°	396.2	385.2	387.5	380.9	380.8
65°	337.2	329.7	330.5	327.6	327.6
67.5°	280.6	273.6	278.6	276.3	276.1
70°	238.9	234.2	240.9	240.8	239.9
72.5°	200.4	200.2	208.5	208.5	209.1
75°	145.5	152.1	160.9	161.9	161.9
77.5°	97.1	108.8	118.5	118.9	118.7
80°	69.4	82.6	91.5	93.4	92.5
82.5°	47.0	61.0	68.4	70.3	69.4
85°	21.2	32.5	38.5	39.5	38.5
87.5°	6.4	13.8	17.0	17.4	15.9
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)