

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-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

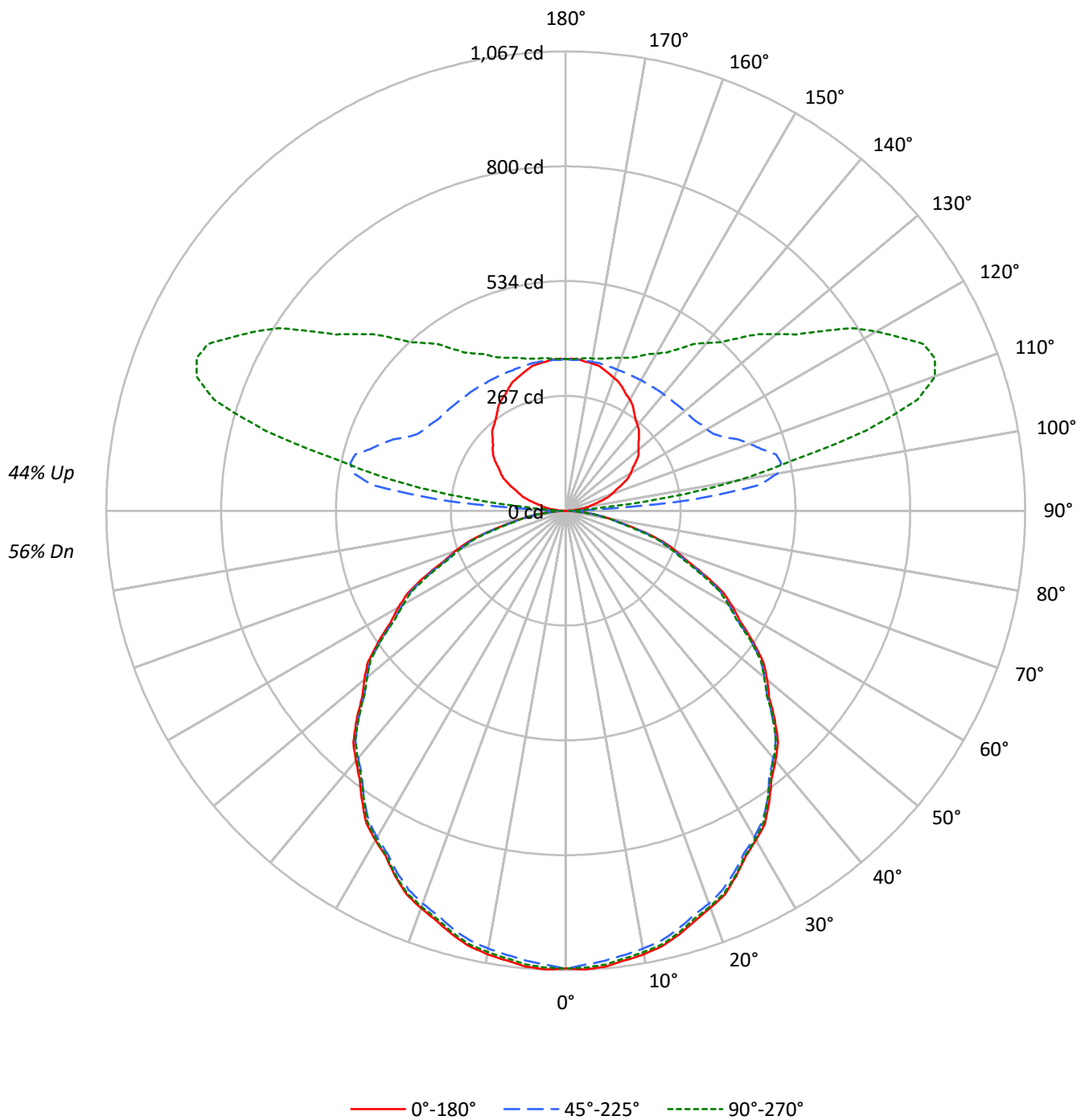
Lumens per Lamp: N/A
Luminaire Lumens: 5203.7 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52
2	90	83	76	71	84	77	72	67	66	62	59	57	54	51	48	45	44
3	82	73	65	59	76	68	61	56	59	53	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	53	46	41	46	41	36	40	35	32	34	30	28
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21
8	54	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	17
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6542	6542	6542
5°	6563	6480	6534
10°	6533	6452	6504
15°	6489	6411	6463
20°	6429	6356	6406
25°	6356	6289	6340
30°	6278	6224	6256
35°	6189	6135	6140
40°	6086	6020	6040
45°	5972	5906	5917
50°	5842	5775	5758
55°	5693	5612	5599
60°	5509	5386	5357
65°	5222	5111	5043
70°	4863	4737	4674
75°	4325	4228	4104
80°	3524	3422	3400
85°	2110	2392	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5972 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	1.9
10°-20°	285.8	5.5
20°-30°	429.4	8.3
30°-40°	512.3	9.8
40°-50°	525.2	10.1
50°-60°	468.1	9.0
60°-70°	348.4	6.7
70°-80°	188.8	3.6
80°-90°	44.7	0.9
90°-100°	169.1	3.3
100°-110°	459.5	8.8
110°-120°	472.4	9.1
120°-130°	377.7	7.3
130°-140°	296.8	5.7
140°-150°	227.6	4.4
150°-160°	163.7	3.1
160°-170°	100.1	1.9
170°-180°	33.7	0.6
0°-30°	815.5	15.7
0°-40°	1327.9	25.5
0°-60°	2321.1	44.6
0°-90°	2903.1	55.8
90°-120°	1101.1	21.2
90°-150°	2003.2	38.5
90°-180°	2301.0	44.2
0°-180°	5203.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1061	1050	1059	1058	101
15°	1019	1017	1007	1016	1015	287
25°	936	935	927	932	934	431
35°	824	824	817	817	818	515
45°	687	685	679	678	680	529
55°	531	529	523	519	522	474
65°	359	356	351	349	346	355
75°	182	182	178	174	173	193
85°	30	34	34	34	34	41
90°	1	4	8	10	10	2
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:

CATALOG NUMBER: SQ4-F-050U-125D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1066.8	1065.0	1055.6	1063.5	1062.2
5°	1063.0	1061.3	1049.5	1058.9	1058.3
7.5°	1054.0	1051.8	1041.1	1049.8	1048.8
10°	1046.0	1044.3	1033.1	1041.9	1041.3
12.5°	1036.2	1034.5	1023.3	1032.1	1032.0
15°	1019.1	1016.8	1006.8	1015.6	1015.0
17.5°	998.6	996.0	986.1	993.0	994.1
20°	982.2	980.5	971.1	977.5	978.7
22.5°	965.3	963.2	953.3	960.7	961.8
25°	936.5	934.8	926.6	931.9	934.2
27.5°	904.9	904.9	897.3	901.1	902.5
30°	883.9	883.9	876.3	878.6	880.9
32.5°	861.4	859.6	852.4	854.3	856.6
35°	824.2	823.6	817.1	817.1	817.7
37.5°	785.6	784.0	777.0	777.5	780.3
40°	758.0	756.9	749.8	749.9	752.2
42.5°	729.9	728.8	722.7	721.7	722.7
45°	686.6	684.9	679.0	677.9	680.2
47.5°	640.5	640.9	633.9	632.3	633.6
50°	610.5	610.5	603.5	600.0	601.7
52.5°	579.1	578.2	571.2	567.3	571.3
55°	530.9	529.2	523.3	519.3	522.1
57.5°	481.5	478.9	473.0	468.5	470.1
60°	447.8	443.8	437.8	434.3	435.5
62.5°	412.7	410.5	404.1	398.8	401.3
65°	358.8	356.5	351.2	348.8	346.5
67.5°	306.0	304.5	298.5	296.0	294.5
70°	270.4	267.6	263.4	260.5	259.9
72.5°	235.8	232.5	228.3	225.8	224.3
75°	182.0	182.0	177.9	174.4	172.7
77.5°	130.9	131.3	128.0	126.8	126.0
80°	99.5	99.5	96.6	95.4	96.0
82.5°	69.5	70.9	69.9	68.2	67.4
85°	29.9	33.9	33.9	34.5	33.9
87.5°	5.4	9.2	10.5	10.0	9.1
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:

CATALOG NUMBER: SQ4-F-050U-125D-927-1D-UNV-STD-W-6

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)