

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-075U-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 (G3-1910-536-22, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

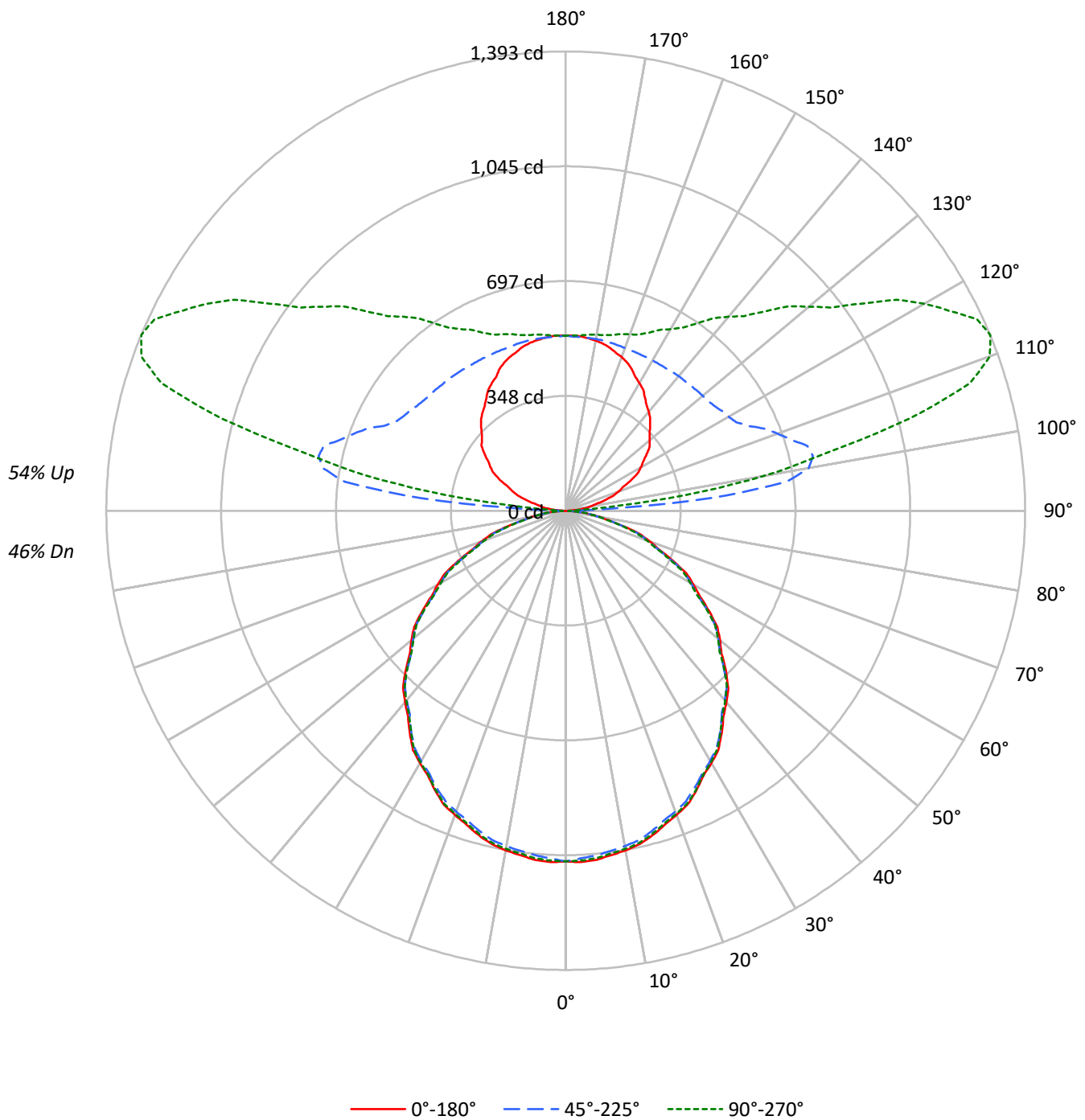
Lumens per Lamp: N/A
Luminaire Lumens: 6360.8 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 97.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	92	89	85	89	85	82	79	71	69	66	58	56	55	46	45	44
2	88	81	75	69	81	74	69	64	62	58	55	51	48	46	40	39	37
3	80	71	64	58	73	65	59	54	55	50	46	45	41	39	36	33	31
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21
7	57	45	37	31	52	42	35	30	35	30	26	29	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	19	22	19	16
9	49	37	30	25	45	34	28	23	29	24	20	25	20	17	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	15	13

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	1.6
10°-20°	285.8	4.5
20°-30°	429.4	6.8
30°-40°	512.3	8.1
40°-50°	525.2	8.3
50°-60°	468.1	7.4
60°-70°	348.4	5.5
70°-80°	188.8	3.0
80°-90°	44.7	0.7
90°-100°	250.3	3.9
100°-110°	688.7	10.8
110°-120°	710.9	11.2
120°-130°	569.6	9.0
130°-140°	447.4	7.0
140°-150°	342.8	5.4
150°-160°	246.5	3.9
160°-170°	150.7	2.4
170°-180°	50.8	0.8
0°-30°	815.5	12.8
0°-40°	1327.9	20.9
0°-60°	2321.1	36.5
0°-90°	2903.1	45.6
90°-120°	1650.0	25.9
90°-150°	3009.8	47.3
90°-180°	3458.0	54.4
0°-180°	6360.8	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	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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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	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)