

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-PR1-100U-075D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

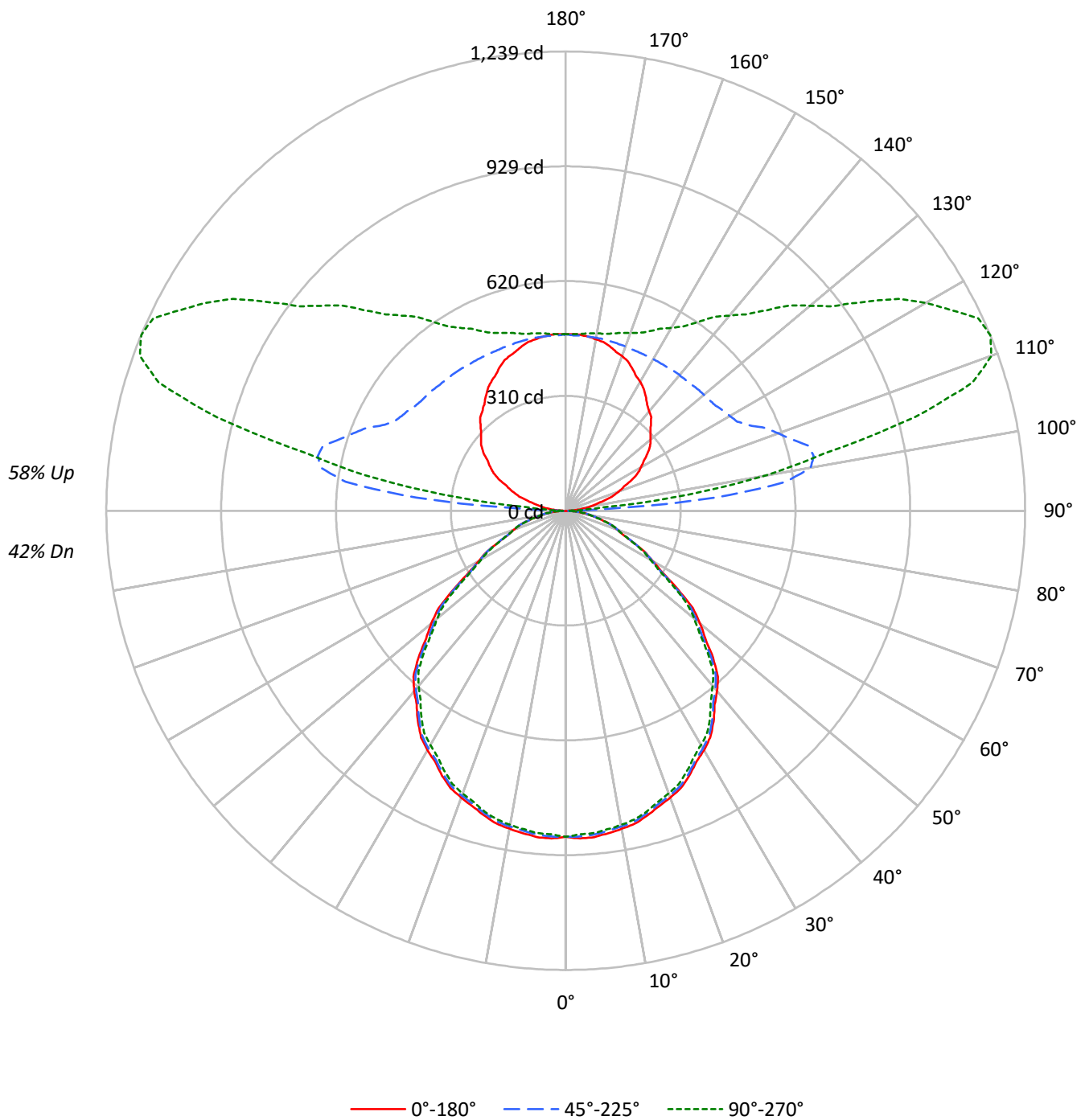
Lumens per Lamp: N/A
Luminaire Lumens: 5292.7 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41
2	88	81	75	70	80	74	69	64	61	57	54	49	47	44	38	37	35
3	80	71	64	58	73	65	59	54	54	49	46	44	40	38	34	32	30
4	73	63	55	49	67	58	51	46	48	43	39	39	35	33	31	28	26
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23
6	62	50	42	37	56	46	39	34	39	33	29	32	28	25	25	22	20
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	34	28	48	38	31	27	32	27	23	26	22	20	21	18	16
9	49	38	30	25	45	35	28	24	29	24	21	24	20	18	19	17	15
10	46	34	27	23	42	32	25	21	27	22	19	22	19	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8116	8116	8116
5°	8189	8126	8084
10°	8164	8107	8064
15°	8128	8077	8034
20°	8086	8034	7975
25°	8030	7976	7883
30°	7943	7887	7774
35°	7826	7758	7647
40°	7648	7565	7429
45°	7335	7208	7059
50°	6786	6623	6492
55°	5923	5789	5667
60°	4991	4949	4851
65°	4318	4333	4301
70°	3965	3987	3987
75°	3807	3807	3836
80°	3581	3624	3581
85°	2890	3208	3208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7335 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	1.6
10°-20°	238.0	4.5
20°-30°	359.0	6.8
30°-40°	427.7	8.1
40°-50°	421.7	8.0
50°-60°	322.3	6.1
60°-70°	199.4	3.8
70°-80°	113.3	2.1
80°-90°	35.4	0.7
90°-100°	222.9	4.2
100°-110°	615.3	11.6
110°-120°	634.6	12.0
120°-130°	510.0	9.6
130°-140°	400.8	7.6
140°-150°	307.4	5.8
150°-160°	220.9	4.2
160°-170°	135.1	2.6
170°-180°	45.5	0.9
0°-30°	680.2	12.9
0°-40°	1107.9	20.9
0°-60°	1852.0	35.0
0°-90°	2200.1	41.6
90°-120°	1472.8	27.8
90°-150°	2691.0	50.8
90°-180°	3093.0	58.4
0°-180°	5292.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	884	875	877	874	873	84
15°	851	842	846	842	841	240
25°	789	779	784	775	774	363
35°	695	687	689	680	679	434
45°	562	555	552	542	541	431
55°	368	362	360	354	352	330
65°	198	196	198	197	197	200
75°	107	107	107	108	108	113
85°	27	29	30	30	30	32
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.7	879.7	879.7	879.7	879.7
2.5°	885.1	877.4	879.7	877.8	873.6
5°	884.2	874.6	877.4	874.4	872.9
7.5°	877.4	867.9	870.8	867.7	866.8
10°	871.4	862.5	865.3	862.2	860.8
12.5°	864.7	855.2	858.6	855.0	853.5
15°	850.9	842.0	845.6	842.5	841.1
17.5°	835.7	826.3	829.8	826.3	824.4
20°	823.6	814.7	818.3	813.0	812.3
22.5°	810.3	801.4	805.0	797.9	797.7
25°	788.8	779.1	783.5	775.1	774.4
27.5°	763.2	754.3	757.9	749.3	748.5
30°	745.6	736.7	740.3	731.2	729.7
32.5°	725.6	717.3	720.3	711.2	710.3
35°	694.8	686.7	688.8	679.6	678.9
37.5°	659.8	652.4	653.6	643.6	642.8
40°	635.0	627.5	628.1	617.5	616.8
42.5°	607.7	600.3	599.6	589.0	588.3
45°	562.2	554.8	552.4	542.5	541.0
47.5°	510.4	503.0	498.4	490.4	489.3
50°	472.8	465.4	461.4	454.6	452.3
52.5°	432.2	424.8	421.4	415.2	412.9
55°	368.2	362.3	359.9	353.8	352.3
57.5°	307.5	303.5	302.8	296.9	296.3
60°	270.5	268.3	268.2	262.9	262.9
62.5°	239.0	237.3	238.5	235.0	234.4
65°	197.8	196.3	198.5	197.0	197.0
67.5°	165.2	165.2	166.5	165.9	165.9
70°	147.0	147.0	147.8	147.8	147.8
72.5°	130.6	130.0	132.0	132.0	131.4
75°	106.8	106.8	106.8	107.6	107.6
77.5°	83.2	83.3	84.0	83.8	83.2
80°	67.4	68.2	68.2	67.4	67.4
82.5°	51.7	52.4	52.4	52.3	51.7
85°	27.3	28.8	30.3	30.3	30.3
87.5°	8.2	10.9	13.3	13.5	13.0
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)