

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-PR1-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

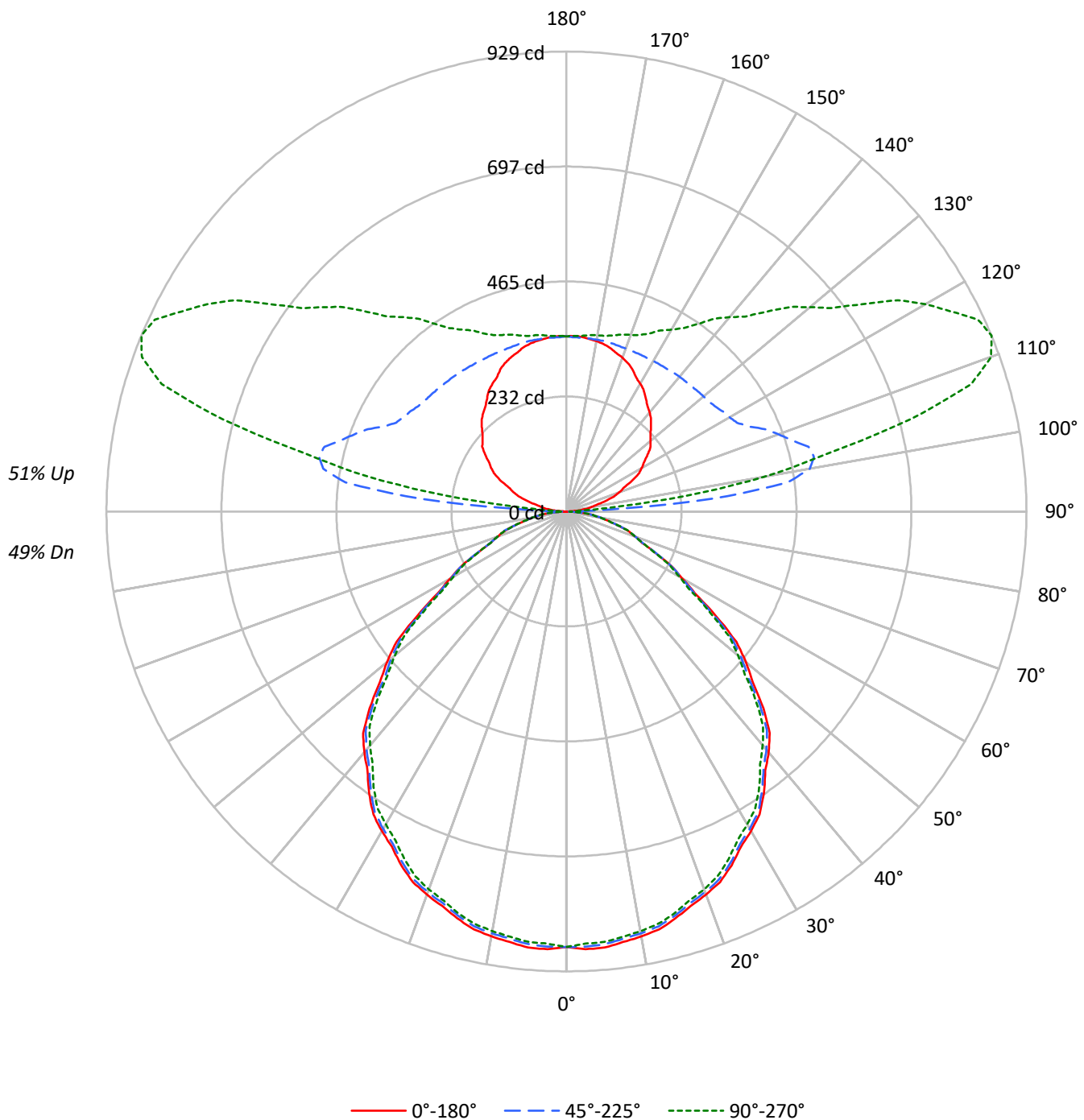
Lumens per Lamp: N/A
Luminaire Lumens: 4505.3 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	68	60	59	57	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	42	39	36	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	25	23
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	21
8	54	42	35	29	50	39	32	28	34	28	25	29	25	21	24	21	18
9	51	39	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	21	17	15

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	1.8
10°-20°	238.0	5.3
20°-30°	359.0	8.0
30°-40°	427.7	9.5
40°-50°	421.7	9.4
50°-60°	322.3	7.2
60°-70°	199.4	4.4
70°-80°	113.3	2.5
80°-90°	35.4	0.8
90°-100°	166.9	3.7
100°-110°	459.2	10.2
110°-120°	473.9	10.5
120°-130°	379.7	8.4
130°-140°	298.2	6.6
140°-150°	228.6	5.1
150°-160°	164.3	3.6
160°-170°	100.5	2.2
170°-180°	33.9	0.8
0°-30°	680.2	15.1
0°-40°	1107.9	24.6
0°-60°	1852.0	41.1
0°-90°	2200.0	48.8
90°-120°	1100.0	24.4
90°-150°	2006.5	44.5
90°-180°	2305.0	51.2
0°-180°	4505.3	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°	1	3	5	7	7	3
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

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°	8.0	10.8	13.2	13.5	12.9
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)