

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-PR1-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

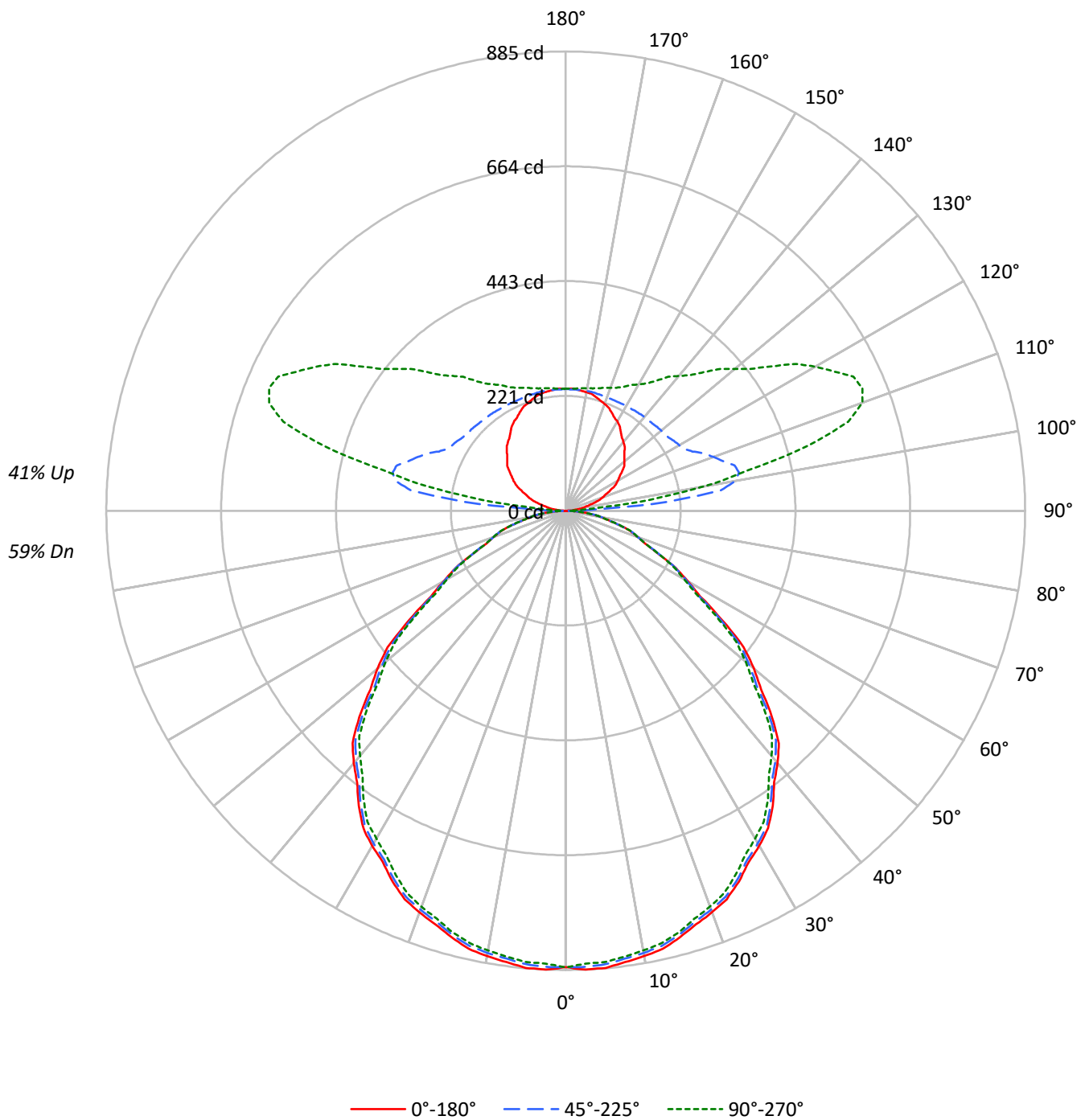
Lumens per Lamp: N/A
Luminaire Lumens: 3733.9 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18

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	2.2
10°-20°	238.0	6.4
20°-30°	359.0	9.6
30°-40°	427.7	11.5
40°-50°	421.7	11.3
50°-60°	322.3	8.6
60°-70°	199.4	5.3
70°-80°	113.3	3.0
80°-90°	35.4	0.9
90°-100°	112.8	3.0
100°-110°	306.3	8.2
110°-120°	315.0	8.4
120°-130°	251.8	6.7
130°-140°	197.9	5.3
140°-150°	151.7	4.1
150°-160°	109.1	2.9
160°-170°	66.7	1.8
170°-180°	22.5	0.6
0°-30°	680.2	18.2
0°-40°	1107.9	29.7
0°-60°	1852.0	49.6
0°-90°	2200.0	58.9
90°-120°	734.1	19.7
90°-150°	1335.5	35.8
90°-180°	1534.0	41.1
0°-180°	3733.9	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	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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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°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)