

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: P521343

Luminaire Tested: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521343
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4095.5 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

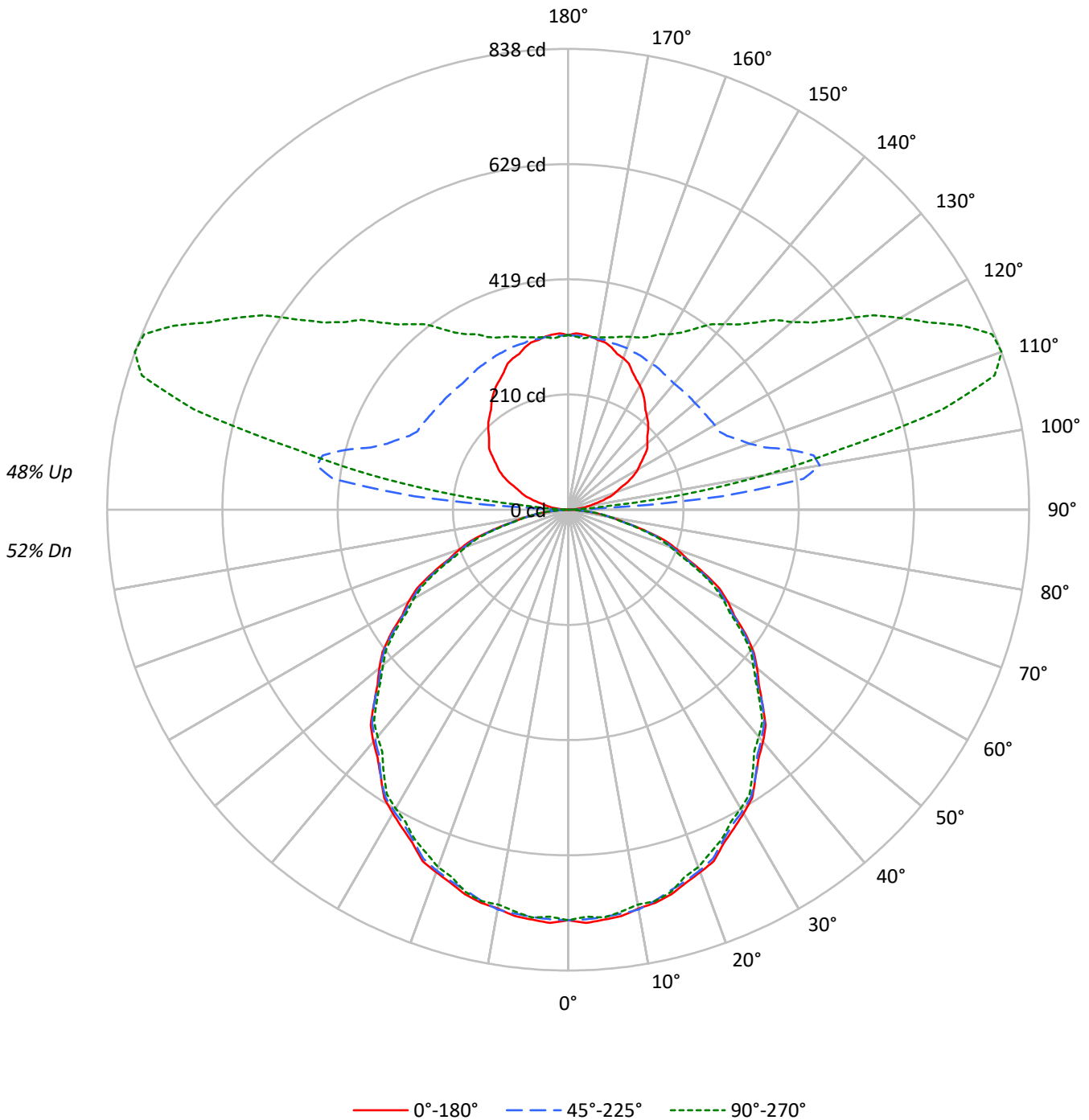
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	108	108	108	108	99	99	99	99	84	84	84		71	71	71		58	58	58	52
1	98	94	90	86	91	87	83	80	74	71	69		62	60	58		51	50	49	43
2	89	82	75	70	82	76	70	66	64	60	57		54	51	49		45	43	41	36
3	81	72	64	58	75	66	60	55	57	52	48		48	44	41		39	37	34	30
4	74	63	55	49	68	59	52	46	50	45	40		42	38	35		35	32	29	26
5	68	56	48	42	63	52	45	39	45	39	35		38	34	30		31	28	26	22
6	63	50	42	36	58	47	40	34	40	35	30		34	30	26		28	25	22	20
7	58	45	37	32	53	42	35	30	37	31	27		31	27	23		26	22	20	17
8	54	41	33	28	50	38	31	26	33	28	24		28	24	21		24	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21		26	22	18		22	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19		24	20	17		20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6886	6886	6886
5°	6931	6885	6894
10°	6897	6917	6831
15°	6915	6848	6876
20°	6889	6858	6788
25°	6810	6769	6728
30°	6792	6748	6683
35°	6687	6687	6583
40°	6635	6574	6488
45°	6511	6511	6417
50°	6430	6387	6300
55°	6323	6257	6159
60°	6182	6069	5975
65°	5936	5803	5691
70°	5659	5465	5328
75°	5044	4902	4827
80°	4166	4112	4059
85°	3017	3345	3345

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6511 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	1.7
10°-20°	202.5	4.9
20°-30°	305.9	7.5
30°-40°	368.4	9.0
40°-50°	382.0	9.3
50°-60°	346.3	8.5
60°-70°	263.3	6.4
70°-80°	146.6	3.6
80°-90°	37.8	0.9
90°-100°	144.7	3.5
100°-110°	411.6	10.1
110°-120°	394.4	9.6
120°-130°	312.1	7.6
130°-140°	250.5	6.1
140°-150°	196.1	4.8
150°-160°	143.5	3.5
160°-170°	88.9	2.2
170°-180°	30.2	0.7
0°-30°	579.0	14.1
0°-40°	947.4	23.1
0°-60°	1675.8	40.9
0°-90°	2123.4	51.8
90°-120°	950.7	23.2
90°-150°	1709.6	41.7
90°-180°	1972.0	48.2
0°-180°	4095.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	748	740	743	744	744	71
15°	724	717	717	717	720	204
25°	669	664	665	661	661	310
35°	594	588	594	586	584	372
45°	499	496	499	490	492	386
55°	393	392	389	385	383	351
65°	272	271	266	263	261	269
75°	142	140	138	135	135	151
85°	28	30	32	33	32	35
90°	0	0	0	0	0	2
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.4	746.4	746.4	746.4	746.4
2.5°	752.1	744.1	745.6	746.3	740.7
5°	748.4	739.5	743.4	744.4	744.4
7.5°	745.2	738.2	740.7	737.6	737.2
10°	736.2	733.2	738.3	731.1	729.1
12.5°	732.2	727.6	728.5	727.1	729.1
15°	724.0	717.0	716.9	716.9	719.9
17.5°	711.4	702.4	708.3	702.0	701.2
20°	701.6	692.6	698.5	691.4	691.4
22.5°	691.8	681.3	687.1	677.5	675.1
25°	669.0	664.0	664.9	660.9	660.9
27.5°	652.9	642.0	645.6	639.9	640.3
30°	637.5	626.5	633.4	625.3	627.3
32.5°	622.0	615.0	618.7	609.8	613.4
35°	593.7	587.7	593.7	586.5	584.5
37.5°	568.8	562.6	564.5	559.9	555.0
40°	550.9	543.9	545.8	539.7	538.7
42.5°	531.3	526.8	527.1	521.8	522.4
45°	499.0	496.0	499.0	489.8	491.8
47.5°	470.0	466.5	466.2	460.1	462.5
50°	448.0	446.1	445.0	438.9	438.9
52.5°	425.2	423.2	422.2	417.7	416.9
55°	393.1	392.1	389.0	384.9	382.9
57.5°	357.8	355.8	354.2	349.8	348.3
60°	335.0	333.0	328.9	323.8	323.8
62.5°	309.8	307.8	302.8	300.9	297.7
65°	271.9	270.9	265.8	262.7	260.7
67.5°	234.2	231.0	228.7	224.8	222.8
70°	209.8	205.8	202.6	199.5	197.5
72.5°	182.9	179.7	176.6	175.1	172.3
75°	141.5	139.6	137.5	135.4	135.4
77.5°	102.8	102.3	100.2	100.2	99.2
80°	78.4	79.4	77.4	77.4	76.4
82.5°	56.4	57.4	57.0	57.8	56.8
85°	28.5	30.5	31.6	32.6	31.6
87.5°	8.1	10.5	12.2	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)