

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

(formerly Eaton)

Brand: CORELITE

Report Number: P519896

Luminaire Tested: **SQ4-F-050U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519896
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

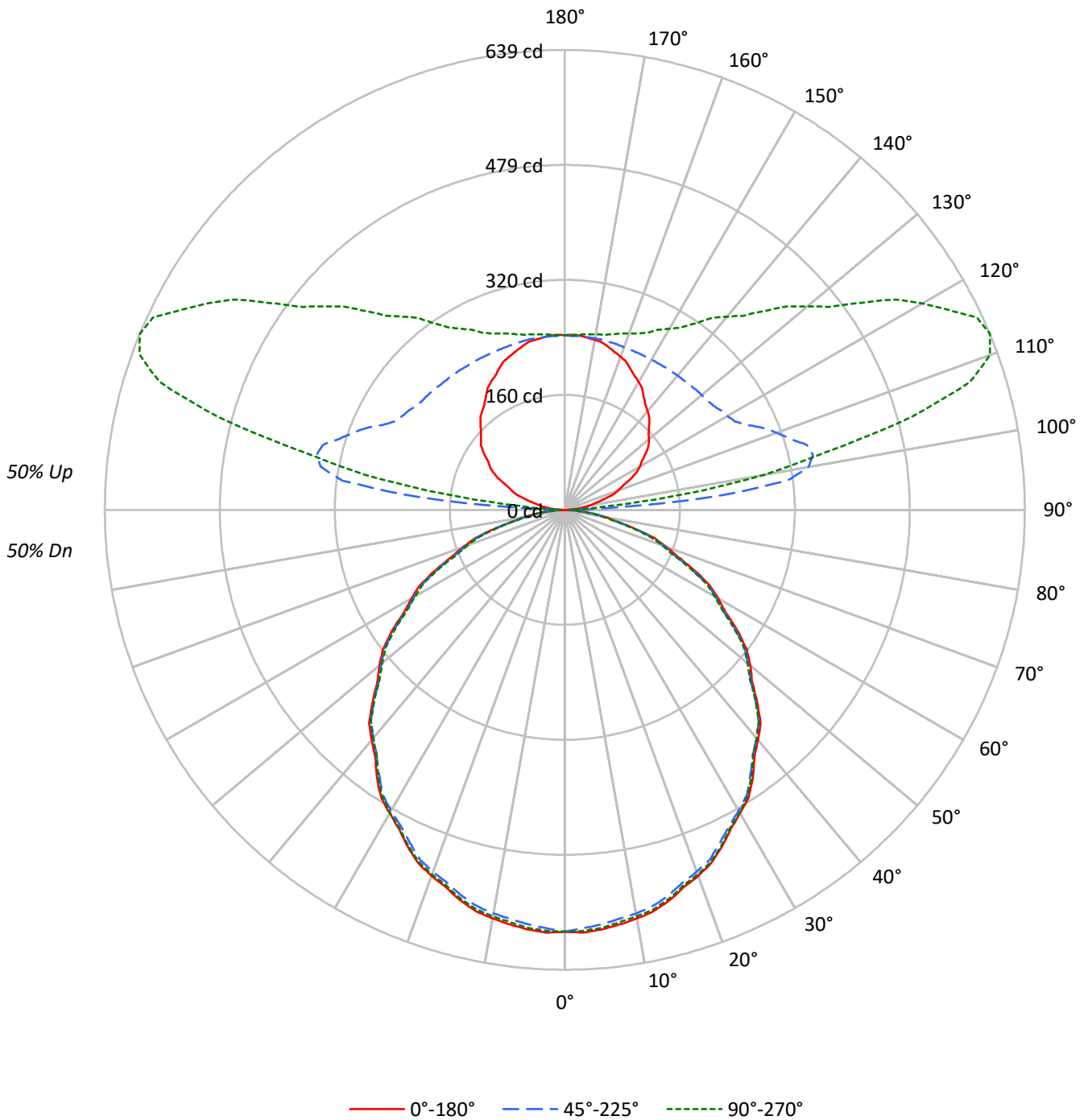
Lumens per Lamp: N/A
Luminaire Lumens: 3185.8 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5407	5407	5407
5°	5421	5356	5399
10°	5403	5336	5374
15°	5367	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5027	4981	4990
45°	4926	4884	4884
50°	4821	4775	4752
55°	4708	4644	4618
60°	4532	4460	4430
65°	4316	4233	4181
70°	4022	3936	3852
75°	3611	3497	3411
80°	2917	2874	2795
85°	1747	1990	2075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	1.7
10°-20°	157.5	4.9
20°-30°	236.5	7.4
30°-40°	282.4	8.9
40°-50°	289.4	9.1
50°-60°	258.1	8.1
60°-70°	192.2	6.0
70°-80°	104.3	3.3
80°-90°	25.1	0.8
90°-100°	116.5	3.7
100°-110°	316.6	9.9
110°-120°	325.5	10.2
120°-130°	260.2	8.2
130°-140°	204.5	6.4
140°-150°	156.8	4.9
150°-160°	112.7	3.5
160°-170°	69.0	2.2
170°-180°	23.2	0.7
0°-30°	449.3	14.1
0°-40°	731.7	23.0
0°-60°	1279.1	40.2
0°-90°	1600.7	50.2
90°-120°	758.6	23.8
90°-150°	1380.1	43.3
90°-180°	1585.0	49.8
0°-180°	3185.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	585	585	578	584	583	56
15°	562	560	555	560	560	158
25°	516	515	510	513	515	238
35°	455	454	450	450	452	284
45°	378	378	374	374	374	291
55°	293	293	289	286	287	261
65°	198	197	194	192	192	196
75°	101	100	98	96	96	107
85°	16	18	19	20	20	23
90°	1	3	6	7	7	2
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	165	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.1	586.1	586.1	586.1	586.1
2.5°	588.0	586.8	581.8	586.1	585.5
5°	585.3	584.6	578.3	583.7	583.0
7.5°	581.1	579.6	573.4	578.7	578.0
10°	576.7	575.2	569.6	574.4	573.6
12.5°	571.0	570.1	564.0	568.8	568.6
15°	561.9	560.3	554.8	559.5	559.5
17.5°	549.5	548.6	543.3	547.9	547.3
20°	541.4	539.9	535.1	539.1	539.1
22.5°	531.4	530.5	525.8	529.0	529.6
25°	516.3	514.7	510.0	513.2	514.7
27.5°	499.6	498.5	494.5	496.6	497.7
30°	486.5	486.5	482.6	483.4	485.7
32.5°	474.6	474.6	470.1	470.8	471.9
35°	455.1	453.6	449.6	449.6	452.0
37.5°	432.5	431.7	429.2	428.7	429.3
40°	417.4	416.7	413.6	414.3	414.3
42.5°	402.4	401.6	398.5	397.4	398.6
45°	377.5	378.2	374.3	373.5	374.3
47.5°	352.8	352.8	349.7	347.5	348.7
50°	335.9	335.9	332.7	331.1	331.1
52.5°	318.3	318.9	315.1	313.0	313.6
55°	292.7	292.7	288.7	286.4	287.1
57.5°	264.5	264.5	260.5	258.1	259.5
60°	245.6	245.6	241.7	239.3	240.1
62.5°	226.8	226.8	222.8	220.5	220.7
65°	197.7	197.0	193.9	191.5	191.5
67.5°	169.8	167.8	165.4	162.3	162.3
70°	149.1	148.3	145.9	142.8	142.8
72.5°	130.3	128.9	126.5	123.9	123.9
75°	101.3	100.5	98.1	96.5	95.7
77.5°	72.5	71.9	71.7	69.5	70.1
80°	54.9	54.9	54.1	52.6	52.6
82.5°	39.2	39.8	38.5	38.2	37.5
85°	16.5	18.0	18.8	19.6	19.6
87.5°	3.3	5.6	5.5	6.4	6.4
90°	0.8	3.0	5.5	7.1	7.1
92.5°	7.1	31.9	55.4	23.8	20.1
95°	17.2	63.7	202.9	88.3	59.4
97.5°	28.5	70.4	311.2	242.1	170.1
100°	35.9	74.9	344.2	348.9	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.2	530.1	498.8
107.5°	69.5	97.1	328.0	580.9	589.7
110°	78.8	104.0	313.0	590.9	628.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	86.9	110.9	298.0	582.7	639.0
115°	99.9	121.3	278.7	554.4	631.5
117.5°	112.1	132.6	266.3	514.4	601.2
120°	120.2	140.0	260.7	487.5	573.8
122.5°	127.1	146.9	257.0	460.6	543.7
125°	137.4	156.4	252.1	424.8	501.1
127.5°	146.6	165.5	249.4	397.7	463.2
130°	152.2	170.5	248.3	380.7	439.5
132.5°	157.8	176.1	247.0	366.2	418.2
135°	165.4	183.8	245.1	346.0	390.3
137.5°	173.8	190.4	244.1	328.2	365.4
140°	178.8	194.8	243.6	316.9	350.5
142.5°	183.8	198.5	243.0	308.0	336.1
145°	191.3	205.0	242.0	294.0	316.2
147.5°	199.7	211.5	241.2	283.0	300.4
150°	205.3	215.2	241.2	276.6	290.4
152.5°	209.7	218.3	240.6	270.9	282.2
155°	216.2	223.8	240.4	264.0	271.6
157.5°	222.7	228.5	240.4	259.3	265.0
160°	226.4	231.7	240.4	256.1	260.7
162.5°	230.1	234.2	241.0	253.6	257.0
165°	234.1	237.3	241.2	251.4	252.1
167.5°	238.4	239.9	242.0	248.8	249.3
170°	239.6	241.2	242.0	247.5	247.5
172.5°	240.9	241.8	242.0	246.2	246.2
175°	242.8	243.6	242.0	245.1	244.3
177.5°	243.4	243.4	241.5	243.9	242.8
180°	242.8	242.8	242.8	242.8	242.8

(END OF REPORT)