

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521453

Luminaire Tested: **SQ4-F-075U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521453
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

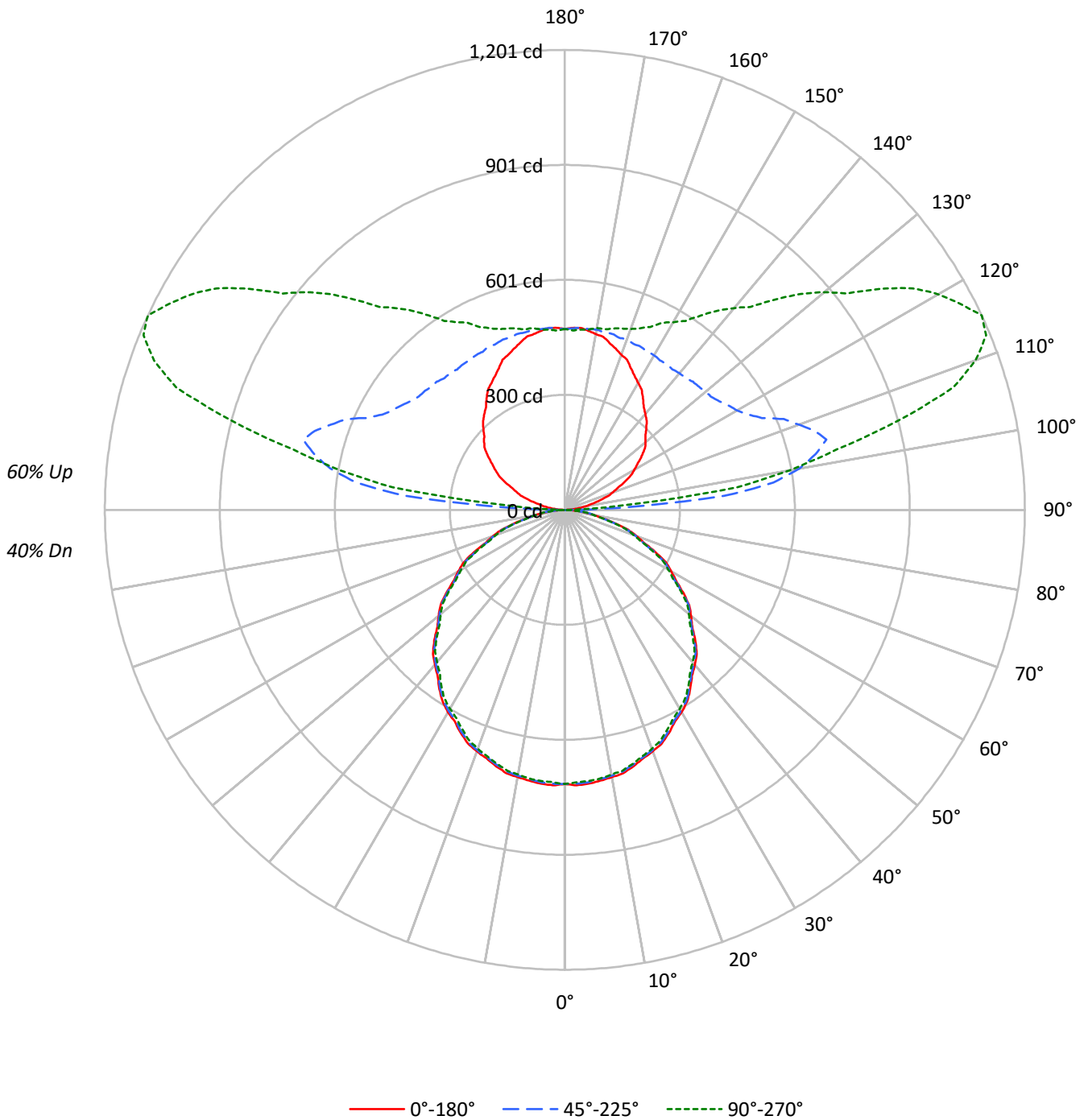
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5095.3 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 44.5
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	50	30	10	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	95	91	87	84	87	83	80	77	68	66	64	54	53	51	41	40	39	33				
2	87	79	73	68	79	72	67	63	59	56	52	47	45	42	36	34	33	28				
3	79	70	62	57	72	64	57	52	52	48	44	42	38	36	32	30	28	23				
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24	20				
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17				
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15				
7	56	44	36	31	51	40	33	28	34	28	24	27	23	20	21	18	16	13				
8	52	40	32	27	47	37	30	25	30	25	21	25	21	18	19	16	14	12				
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	16	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6606	6606	6606
5°	6650	6613	6585
10°	6642	6605	6577
15°	6619	6581	6552
20°	6588	6559	6519
25°	6546	6505	6444
30°	6499	6456	6392
35°	6431	6397	6330
40°	6359	6311	6251
45°	6289	6224	6172
50°	6172	6129	6071
55°	6064	6000	5936
60°	5923	5831	5757
65°	5698	5545	5480
70°	5341	5206	5152
75°	4848	4705	4634
80°	4038	4091	3985
85°	2858	3387	3387



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	1.3
10°-20°	194.1	3.8
20°-30°	293.3	5.8
30°-40°	353.2	6.9
40°-50°	366.8	7.2
50°-60°	332.8	6.5
60°-70°	252.4	5.0
70°-80°	140.7	2.8
80°-90°	37.2	0.7
90°-100°	243.4	4.8
100°-110°	588.2	11.5
110°-120°	627.4	12.3
120°-130°	508.1	10.0
130°-140°	393.4	7.7
140°-150°	300.1	5.9
150°-160°	217.3	4.3
160°-170°	133.8	2.6
170°-180°	45.3	0.9
0°-30°	555.1	10.9
0°-40°	908.3	17.8
0°-60°	1607.9	31.6
0°-90°	2038.2	40.0
90°-120°	1459.0	28.6
90°-150°	2660.7	52.2
90°-180°	3057.0	60.0
0°-180°	5095.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	712	714	712	711	68
15°	693	685	689	687	686	196
25°	643	636	639	633	633	296
35°	571	565	568	561	562	357
45°	482	477	477	472	473	371
55°	377	376	373	369	369	337
65°	261	258	254	251	251	258
75°	136	134	132	130	130	144
85°	27	30	32	32	32	34
90°	0	0	0	0	0	2
95°	24	122	417	271	190	27
105°	94	162	707	915	903	99
115°	172	220	568	1077	1201	170
125°	245	282	493	856	1006	219
135°	301	336	473	675	777	232
145°	356	382	464	574	619	223
155°	408	426	470	508	527	188
165°	451	458	476	483	490	127
175°	477	475	477	473	472	45
180°	472	472	472	472	472	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.0	716.0	716.0	716.0	716.0
2.5°	720.0	714.5	716.0	715.1	712.0
5°	718.0	712.1	714.0	712.0	711.0
7.5°	713.0	706.9	709.0	707.0	707.6
10°	709.0	702.2	705.0	703.0	702.0
12.5°	704.2	696.6	699.4	696.6	697.2
15°	693.0	685.2	689.0	687.0	686.0
17.5°	680.6	673.8	677.6	674.4	674.4
20°	671.0	664.2	668.0	664.0	664.0
22.5°	660.6	653.0	656.8	652.0	652.0
25°	643.0	636.2	639.0	633.0	633.0
27.5°	622.8	615.8	619.6	613.6	613.6
30°	610.0	602.2	606.0	600.0	600.0
32.5°	594.0	588.5	590.8	584.8	584.8
35°	571.0	565.1	568.0	561.0	562.0
37.5°	545.6	541.5	541.6	535.4	536.6
40°	528.0	523.1	524.0	517.0	519.0
42.5°	509.6	505.5	505.6	500.2	501.4
45°	482.0	477.1	477.0	472.0	473.0
47.5°	450.8	448.3	447.8	442.0	443.0
50°	430.0	429.0	427.0	422.0	423.0
52.5°	409.2	408.2	406.2	401.2	402.2
55°	377.0	376.0	373.0	369.0	369.0
57.5°	343.4	342.4	339.2	335.2	335.2
60°	321.0	320.0	316.0	312.0	312.0
62.5°	297.8	296.0	292.0	288.8	288.8
65°	261.0	258.1	254.0	251.0	251.0
67.5°	222.8	220.8	217.8	215.0	215.0
70°	198.0	196.0	193.0	191.0	191.0
72.5°	173.2	171.2	168.2	166.2	166.2
75°	136.0	134.0	132.0	130.0	130.0
77.5°	99.2	98.6	98.6	96.6	96.6
80°	76.0	77.0	77.0	75.0	75.0
82.5°	54.4	56.2	57.0	56.6	56.6
85°	27.0	29.9	32.0	32.0	32.0
87.5°	8.0	10.3	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	65.9	155.2	75.4	51.2
95°	24.0	121.8	417.0	271.2	190.0
97.5°	42.6	134.9	549.2	529.1	454.2
100°	57.0	143.0	622.0	656.6	595.0
102.5°	70.6	150.4	670.0	762.8	726.2
105°	94.0	162.4	707.0	914.7	903.0
107.5°	117.0	176.6	685.2	1036.6	1064.2
110°	133.0	188.7	650.0	1089.2	1141.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.0	200.8	618.8	1102.0	1190.6
115°	172.0	219.9	568.0	1076.8	1201.0
117.5°	194.8	240.0	538.2	1018.9	1164.4
120°	210.0	252.0	519.0	973.5	1126.0
122.5°	226.0	264.9	507.0	927.0	1077.2
125°	245.0	282.2	493.0	856.4	1006.0
127.5°	263.8	298.8	483.2	796.6	928.0
130°	275.0	309.2	480.0	754.9	884.0
132.5°	285.4	321.2	475.2	724.9	834.4
135°	301.0	336.2	473.0	675.3	777.0
137.5°	315.8	351.2	466.0	641.7	718.4
140°	327.0	359.3	466.0	617.6	688.0
142.5°	338.2	370.5	462.0	596.6	656.0
145°	356.0	382.4	464.0	574.0	619.0
147.5°	372.6	398.2	462.8	548.0	585.2
150°	383.0	405.5	466.0	536.7	566.0
152.5°	394.2	415.9	465.2	524.6	550.8
155°	408.0	425.6	470.0	508.4	527.0
157.5°	424.6	439.7	469.0	502.2	513.2
160°	431.0	443.7	473.0	494.2	502.0
162.5°	441.4	452.5	471.4	491.7	496.4
165°	451.0	457.8	476.0	483.2	490.0
167.5°	462.8	467.3	474.8	482.6	482.8
170°	466.0	468.9	478.0	477.1	482.0
172.5°	471.6	473.8	475.6	477.7	474.8
175°	477.0	475.0	477.0	473.0	472.0
177.5°	476.0	476.0	474.4	472.7	468.8
180°	472.0	472.0	472.0	472.0	472.0

(END OF REPORT)