

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: P521454

Luminaire Tested: **SQ4-F-075U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521454
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

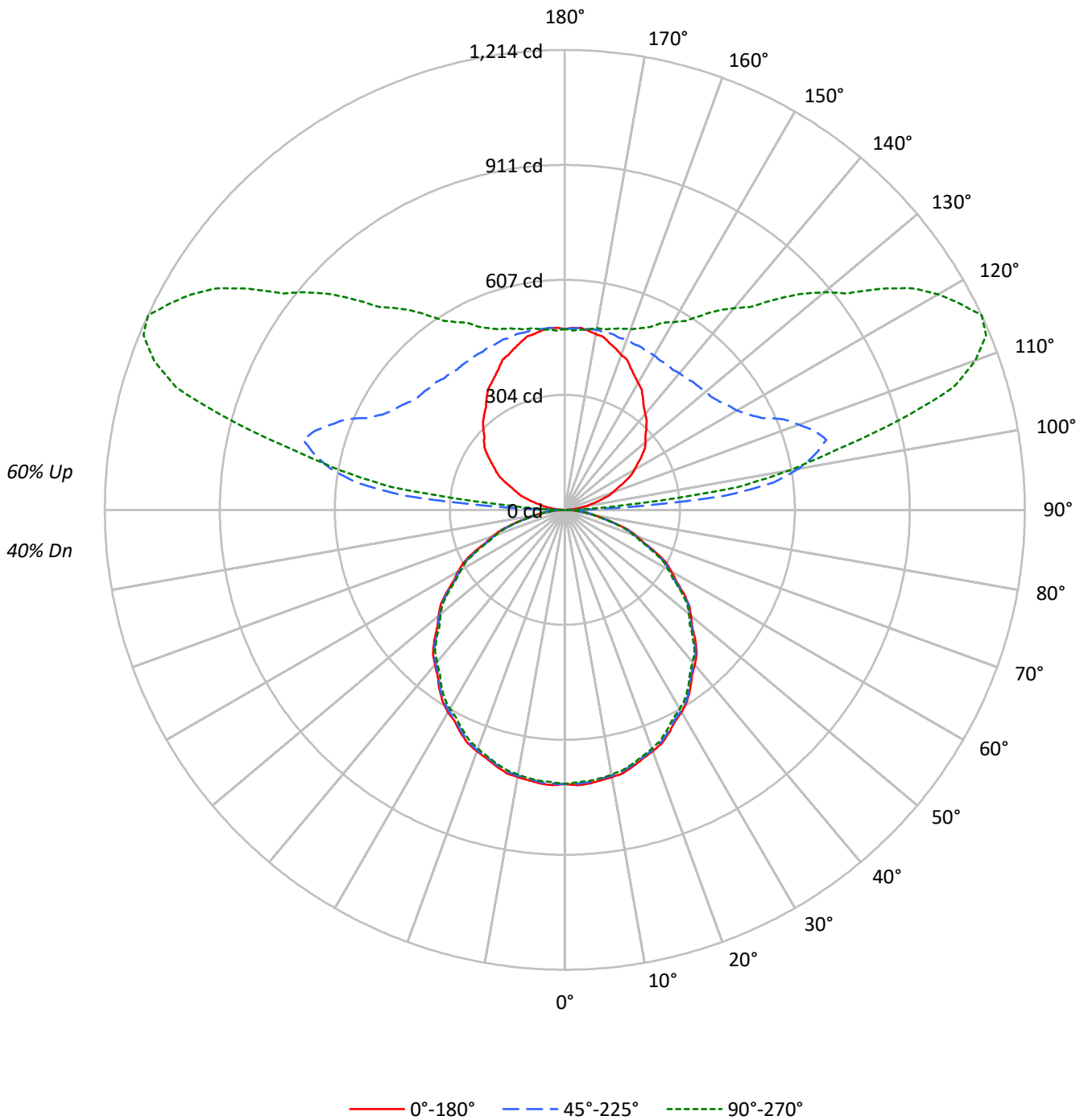
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5149.5 lumens
Efficiency: N/A
Efficacy: 115.7 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°	6676	6676	6676
5°	6720	6683	6655
10°	6713	6675	6647
15°	6690	6651	6622
20°	6658	6628	6589
25°	6615	6574	6512
30°	6568	6524	6460
35°	6500	6465	6397
40°	6427	6378	6317
45°	6356	6290	6237
50°	6238	6194	6136
55°	6129	6064	5998
60°	5986	5894	5818
65°	5759	5604	5539
70°	5398	5263	5206
75°	4898	4755	4684
80°	4081	4134	4027
85°	2890	3419	3419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	1.3
10°-20°	196.1	3.8
20°-30°	296.4	5.8
30°-40°	357.0	6.9
40°-50°	370.7	7.2
50°-60°	336.3	6.5
60°-70°	255.0	5.0
70°-80°	142.2	2.8
80°-90°	37.6	0.7
90°-100°	246.0	4.8
100°-110°	594.5	11.5
110°-120°	634.1	12.3
120°-130°	513.5	10.0
130°-140°	397.6	7.7
140°-150°	303.3	5.9
150°-160°	219.6	4.3
160°-170°	135.2	2.6
170°-180°	45.8	0.9
0°-30°	561.0	10.9
0°-40°	918.0	17.8
0°-60°	1625.1	31.6
0°-90°	2059.9	40.0
90°-120°	1474.5	28.6
90°-150°	2689.0	52.2
90°-180°	3090.0	60.0
0°-180°	5149.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	726	720	722	720	719	69
15°	700	692	696	694	693	198
25°	650	643	646	640	640	299
35°	577	571	574	567	568	361
45°	487	482	482	477	478	375
55°	381	380	377	373	373	340
65°	264	261	257	254	254	260
75°	137	136	133	131	131	145
85°	27	30	32	32	32	34
90°	0	0	0	0	0	2
95°	24	123	421	274	192	27
105°	95	164	714	924	913	100
115°	174	222	574	1088	1214	172
125°	248	285	498	866	1017	221
135°	304	340	478	682	785	235
145°	360	386	469	580	626	225
155°	412	430	475	514	533	190
165°	456	463	481	488	495	129
175°	482	480	482	478	477	46
180°	477	477	477	477	477	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.6	723.6	723.6	723.6	723.6
2.5°	727.7	722.1	723.6	722.7	719.6
5°	725.6	719.7	721.6	719.6	718.6
7.5°	720.6	714.5	716.5	714.5	715.1
10°	716.5	709.6	712.5	710.5	709.5
12.5°	711.7	704.0	706.8	704.0	704.6
15°	700.4	692.5	696.3	694.3	693.3
17.5°	687.8	680.9	684.8	681.6	681.6
20°	678.1	671.2	675.1	671.1	671.1
22.5°	667.6	659.9	663.8	658.9	658.9
25°	649.8	642.9	645.8	639.7	639.7
27.5°	629.4	622.3	626.2	620.1	620.1
30°	616.5	608.6	612.4	606.4	606.4
32.5°	600.3	594.8	597.1	591.0	591.0
35°	577.1	571.1	574.0	567.0	568.0
37.5°	551.4	547.3	547.4	541.1	542.3
40°	533.6	528.7	529.6	522.5	524.5
42.5°	515.0	510.9	511.0	505.5	506.7
45°	487.1	482.2	482.1	477.0	478.0
47.5°	455.6	453.0	452.6	446.7	447.7
50°	434.6	433.6	431.5	426.5	427.5
52.5°	413.6	412.6	410.5	405.5	406.5
55°	381.0	380.0	377.0	372.9	372.9
57.5°	347.1	346.1	342.8	338.8	338.8
60°	324.4	323.4	319.4	315.3	315.3
62.5°	301.0	299.2	295.1	291.9	291.9
65°	263.8	260.8	256.7	253.7	253.7
67.5°	225.2	223.2	220.1	217.3	217.3
70°	200.1	198.1	195.1	193.0	193.0
72.5°	175.0	173.1	170.0	168.0	168.0
75°	137.4	135.5	133.4	131.4	131.4
77.5°	100.3	99.7	99.6	97.6	97.6
80°	76.8	77.8	77.8	75.8	75.8
82.5°	55.0	56.8	57.6	57.2	57.2
85°	27.3	30.3	32.3	32.3	32.3
87.5°	8.1	10.5	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	66.6	156.9	76.3	51.7
95°	24.3	123.1	421.4	274.0	192.0
97.5°	43.1	136.3	555.0	534.7	459.0
100°	57.6	144.6	628.6	663.6	601.3
102.5°	71.4	152.0	677.1	770.9	733.9
105°	95.0	164.2	714.5	924.5	912.6
107.5°	118.2	178.5	692.5	1047.7	1075.5
110°	134.4	190.7	656.9	1100.8	1153.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.6	203.0	625.4	1113.7	1203.3
115°	173.8	222.3	574.0	1088.3	1213.8
117.5°	196.9	242.5	543.9	1029.8	1176.8
120°	212.2	254.7	524.5	983.8	1138.0
122.5°	228.4	267.7	512.4	936.9	1088.7
125°	247.6	285.2	498.2	865.5	1016.7
127.5°	266.6	302.0	488.3	805.1	937.9
130°	277.9	312.5	485.1	763.0	893.4
132.5°	288.4	324.6	480.3	732.6	843.3
135°	304.2	339.8	478.0	682.5	785.3
137.5°	319.2	354.9	471.0	648.6	726.0
140°	330.5	363.1	471.0	624.2	695.3
142.5°	341.8	374.4	466.9	602.9	663.0
145°	359.8	386.5	468.9	580.1	625.6
147.5°	376.6	402.5	467.7	553.9	591.4
150°	387.1	409.8	471.0	542.4	572.0
152.5°	398.4	420.3	470.2	530.2	556.7
155°	412.3	430.1	475.0	513.8	532.6
157.5°	429.1	444.3	474.0	507.6	518.7
160°	435.6	448.4	478.0	499.4	507.3
162.5°	446.1	457.4	476.4	496.9	501.7
165°	455.8	462.7	481.1	488.3	495.2
167.5°	467.7	472.3	479.9	487.7	487.9
170°	471.0	473.9	483.1	482.2	487.1
172.5°	476.6	478.8	480.7	482.8	479.9
175°	482.1	480.1	482.1	478.0	477.0
177.5°	481.1	481.1	479.4	477.7	473.8
180°	477.0	477.0	477.0	477.0	477.0

(END OF REPORT)