

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: P521402

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521402
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-050U-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

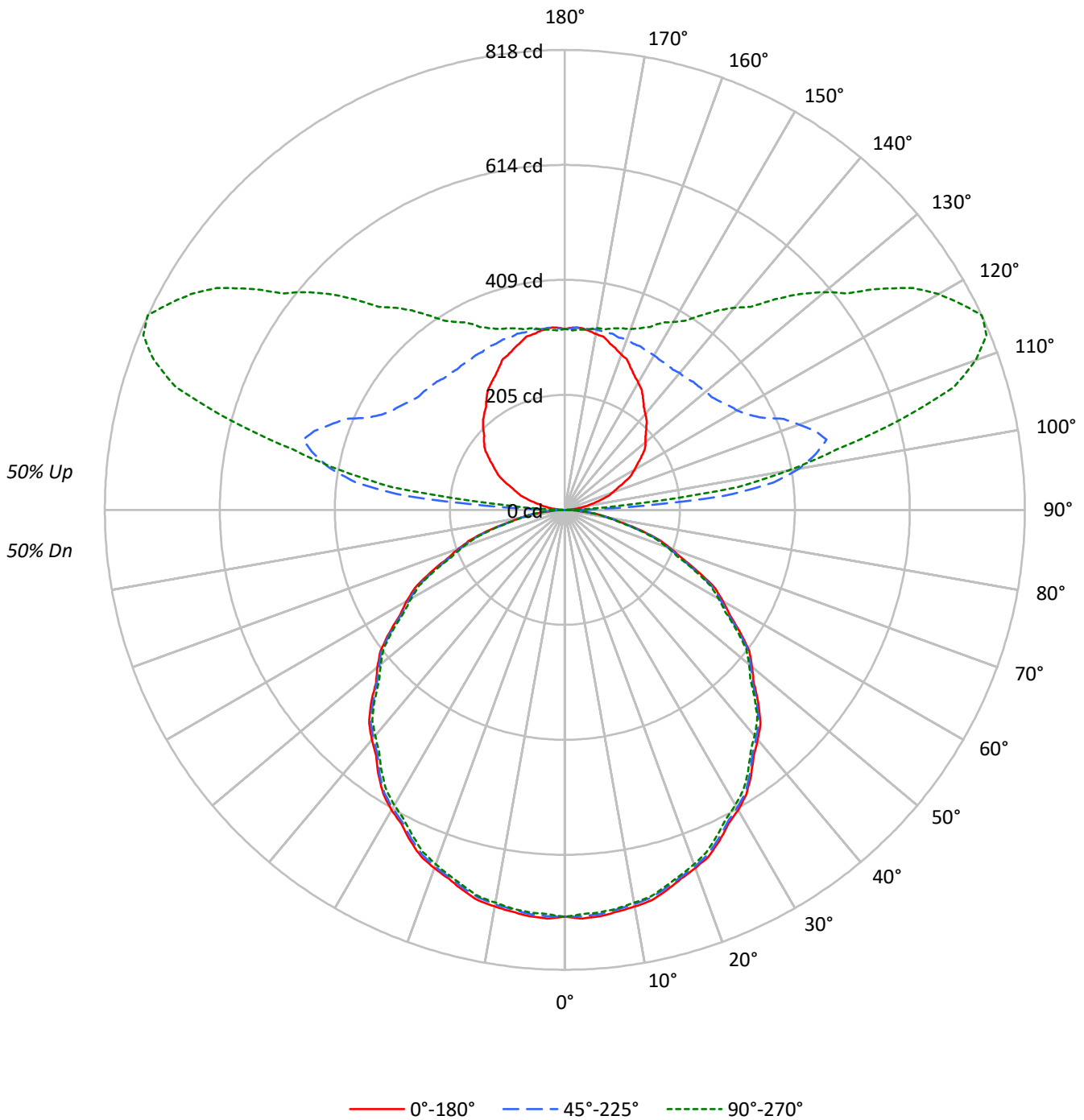
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4143.2 lumens
Efficiency: N/A
Efficacy: 112.3 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): 36.9
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	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	47	43	41	39	35
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	28	24	22	19
7	58	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	20	16	14	12

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	1.7
10°-20°	196.1	4.7
20°-30°	296.4	7.2
30°-40°	357.0	8.6
40°-50°	370.7	8.9
50°-60°	336.3	8.1
60°-70°	255.0	6.2
70°-80°	142.2	3.4
80°-90°	37.6	0.9
90°-100°	165.9	4.0
100°-110°	400.9	9.7
110°-120°	427.6	10.3
120°-130°	346.3	8.4
130°-140°	268.1	6.5
140°-150°	204.5	4.9
150°-160°	148.0	3.6
160°-170°	91.2	2.2
170°-180°	30.9	0.7
0°-30°	561.0	13.5
0°-40°	918.0	22.2
0°-60°	1625.1	39.2
0°-90°	2059.9	49.7
90°-120°	994.3	24.0
90°-150°	1813.2	43.8
90°-180°	2083.0	50.3
0°-180°	4143.2	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°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	

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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°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)