

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: P520076

Luminaire Tested: **SQ4-F-0U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520076
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (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-0U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

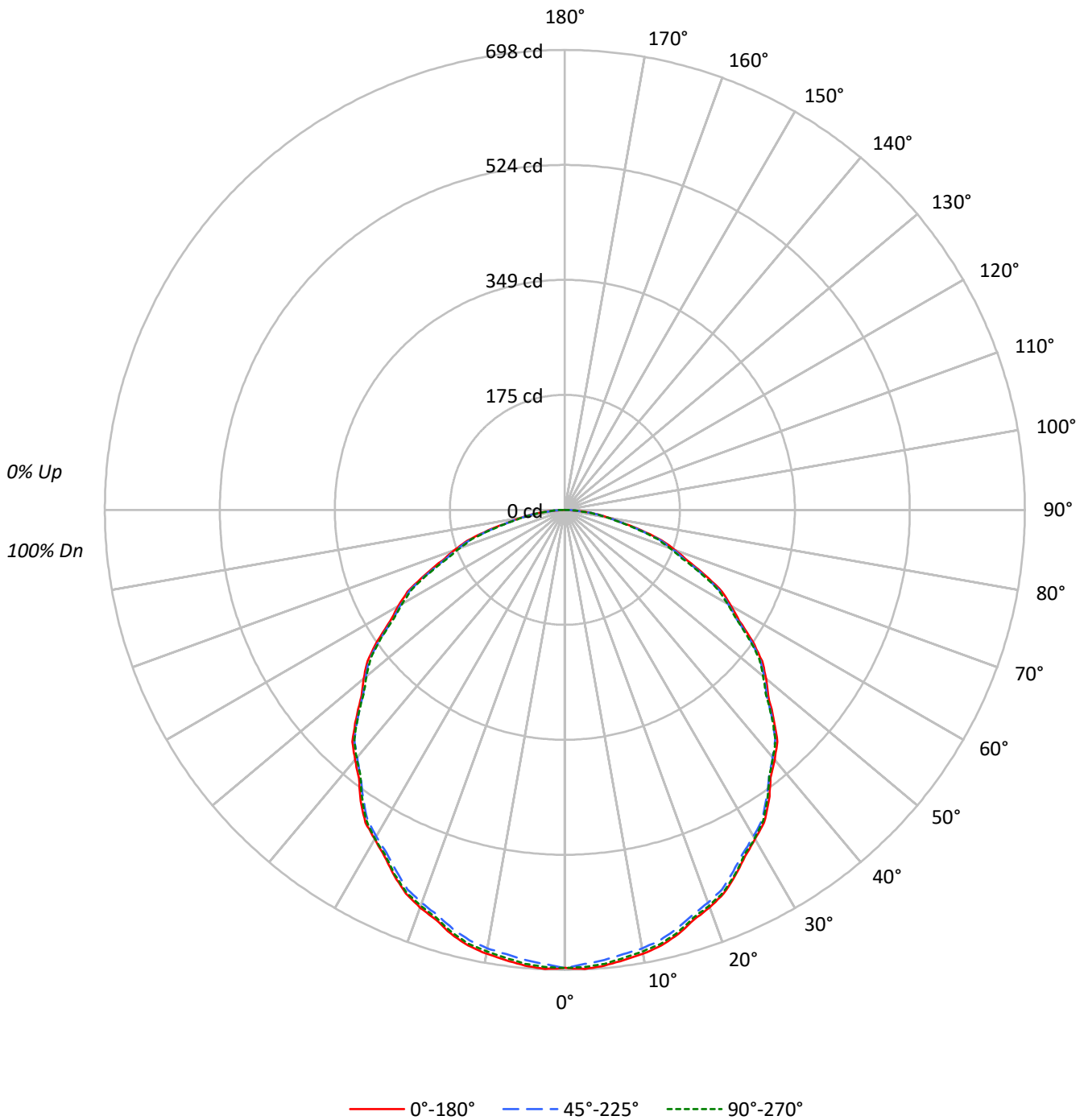
Lumens per Lamp: N/A
Luminaire Lumens: 1897.6 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6352	6404
10°	6409	6330	6374
15°	6365	6285	6338
20°	6305	6232	6279
25°	6234	6158	6216
30°	6147	6098	6139
35°	6081	6007	6038
40°	5963	5908	5920
45°	5842	5792	5792
50°	5718	5664	5637
55°	5585	5511	5480
60°	5375	5288	5255
65°	5122	5017	4958
70°	4769	4672	4570
75°	4281	4149	4050
80°	3464	3411	3310
85°	2064	2371	2467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	3.5
10°-20°	186.8	9.8
20°-30°	280.6	14.8
30°-40°	334.9	17.7
40°-50°	343.2	18.1
50°-60°	306.1	16.1
60°-70°	228.0	12.0
70°-80°	123.7	6.5
80°-90°	28.7	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	533.0	28.1
0°-40°	867.9	45.7
0°-60°	1517.2	80.0
0°-90°	1897.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	694	693	686	692	692	66
15°	666	665	658	664	664	188
25°	612	611	605	609	611	282
35°	540	538	533	533	536	337
45°	448	449	444	443	444	346
55°	347	347	343	340	341	309
65°	235	234	230	227	227	232
75°	120	119	116	114	114	127
85°	20	21	22	23	23	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.3	695.3	695.3	695.3	695.3
2.5°	697.5	696.1	690.0	695.3	694.5
5°	694.3	693.4	685.9	692.4	691.5
7.5°	689.3	687.5	680.2	686.5	685.6
10°	684.1	682.3	675.7	681.3	680.4
12.5°	677.4	676.3	669.0	674.6	674.4
15°	666.4	664.6	658.0	663.6	663.6
17.5°	651.9	650.8	644.5	649.8	649.1
20°	642.2	640.3	634.7	639.5	639.5
22.5°	630.3	629.2	623.6	627.5	628.2
25°	612.4	610.6	604.9	608.7	610.6
27.5°	592.7	591.2	586.5	589.0	590.3
30°	577.0	577.0	572.4	573.4	576.2
32.5°	562.9	562.9	557.5	558.5	559.8
35°	539.9	538.0	533.3	533.4	536.1
37.5°	513.0	512.1	509.1	508.6	509.3
40°	495.1	494.2	490.5	491.5	491.5
42.5°	477.3	476.4	472.6	471.3	472.8
45°	447.7	448.6	443.9	443.0	443.9
47.5°	418.5	418.5	414.7	412.2	413.7
50°	398.4	398.4	394.6	392.7	392.7
52.5°	377.5	378.3	373.8	371.2	371.9
55°	347.2	347.2	342.6	339.7	340.7
57.5°	313.7	313.7	309.0	306.3	307.8
60°	291.3	291.3	286.6	283.9	284.8
62.5°	269.0	269.0	264.4	261.5	261.7
65°	234.6	233.6	229.8	227.1	227.1
67.5°	201.5	199.1	196.2	192.5	192.5
70°	176.8	175.9	173.2	169.4	169.4
72.5°	154.5	152.8	150.1	147.0	147.0
75°	120.1	119.1	116.4	114.5	113.6
77.5°	86.0	85.3	85.1	82.4	83.2
80°	65.2	65.2	64.2	62.3	62.3
82.5°	46.5	47.2	45.7	45.3	44.5
85°	19.5	21.4	22.4	23.3	23.3
87.5°	3.7	5.9	5.2	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)