

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: P520172

Luminaire Tested: **SQ4-F-100U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520172
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

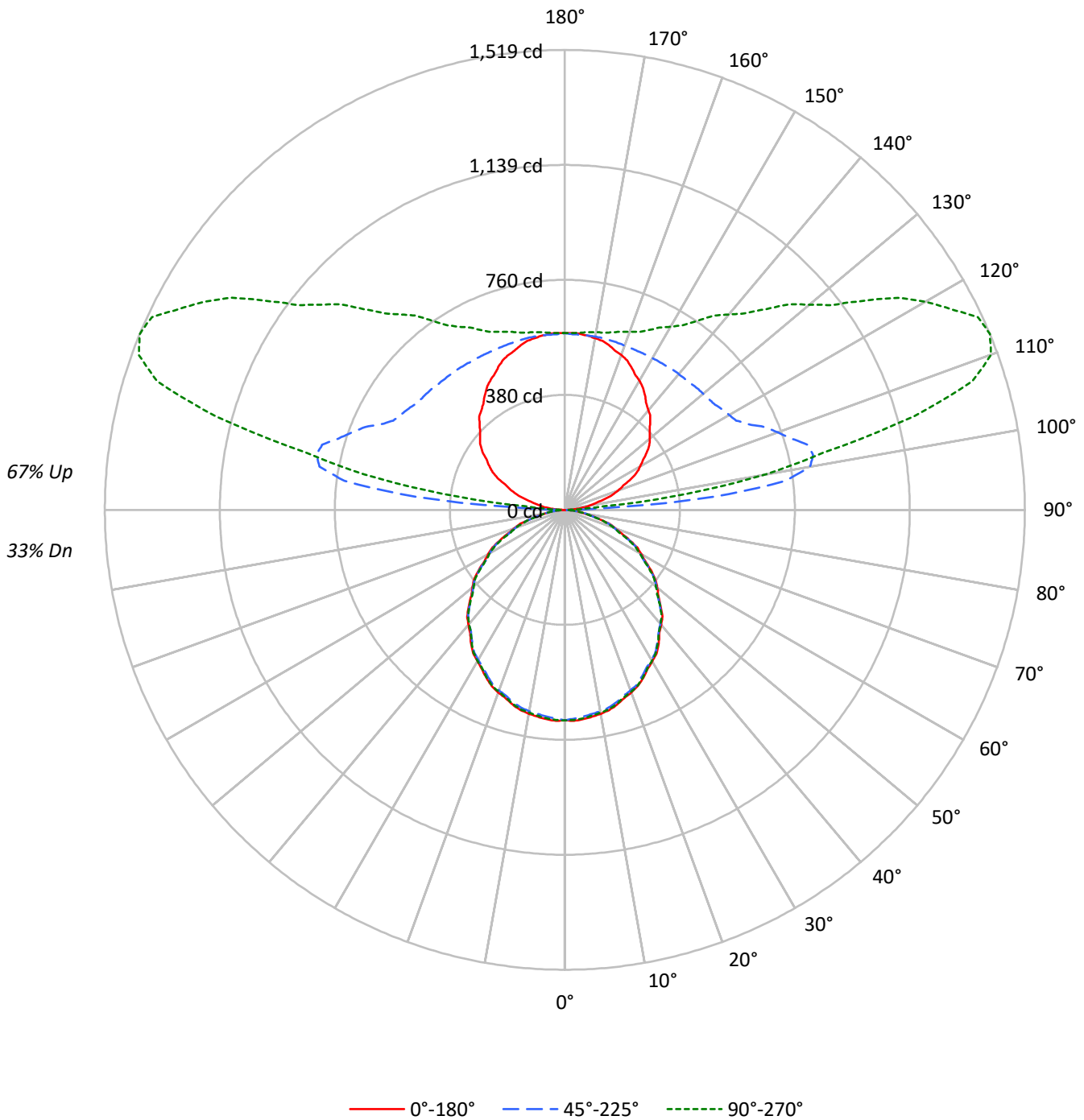
Lumens per Lamp: N/A
Luminaire Lumens: 5689.8 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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	1.2
10°-20°	186.8	3.3
20°-30°	280.6	4.9
30°-40°	334.9	5.9
40°-50°	343.2	6.0
50°-60°	306.1	5.4
60°-70°	228.0	4.0
70°-80°	123.7	2.2
80°-90°	29.9	0.5
90°-100°	273.2	4.8
100°-110°	754.3	13.3
110°-120°	777.9	13.7
120°-130°	625.1	11.0
130°-140°	491.3	8.6
140°-150°	376.8	6.6
150°-160°	270.8	4.8
160°-170°	165.6	2.9
170°-180°	55.8	1.0
0°-30°	533.0	9.4
0°-40°	867.9	15.3
0°-60°	1517.2	26.7
0°-90°	1898.8	33.4
90°-120°	1805.5	31.7
90°-150°	3298.7	58.0
90°-180°	3791.0	66.6
0°-180°	5689.8	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	27
90°	2	4	7	8	9	3
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	583	584	581	589	587	55
180°	583	583	583	583	583	

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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°	4.1	6.6	6.7	7.6	7.8
90°	1.9	3.7	7.4	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.2	147.9	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.3	822.4	828.3	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.5	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.9	291.0	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.6	336.8	626.4	1166.0	1374.1
122.5°	305.5	352.6	616.7	1106.7	1304.0
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.5	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.6	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.1
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.3	524.7	578.0	650.9	678.9
155°	519.9	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.3	556.1	577.8	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.3
165°	563.0	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.4
170°	576.0	579.7	580.7	595.6	595.6
172.5°	579.7	582.0	580.7	592.5	591.8
175°	583.4	584.3	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.6	584.2
180°	583.4	583.4	583.4	583.4	583.4

(END OF REPORT)