

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: P521557

Luminaire Tested: **SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521557
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-100U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

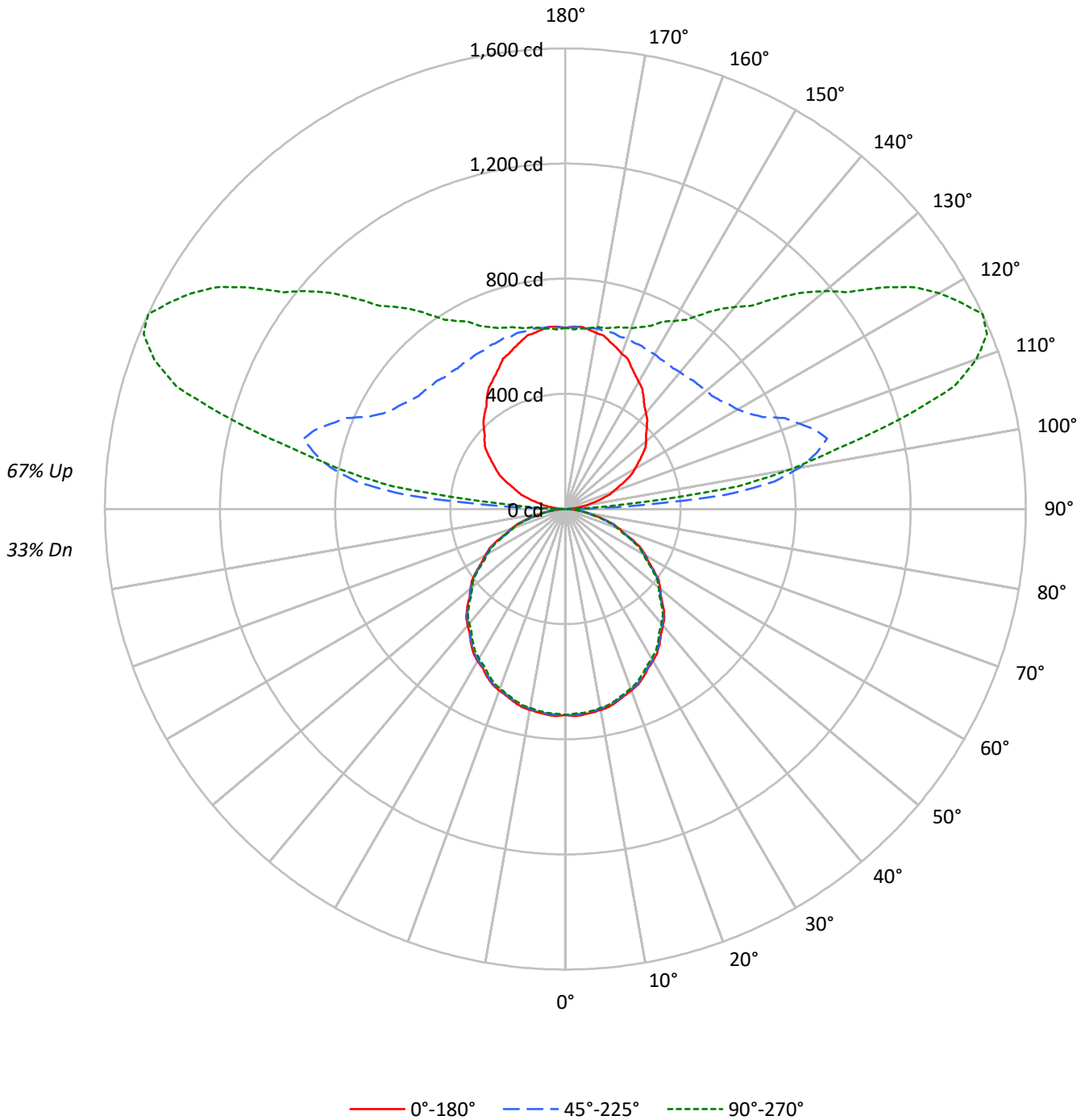
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6110.3 lumens
Efficiency: N/A
Efficacy: 114.9 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: Semi-Indirect

Input Watts (W): 53.2
Input Voltage (V): 120
Input Current (A_{in}): 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	82	85	81	78	75	65	63	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	61	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	35	30	50	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	14	12	10	8

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	1.1
10°-20°	194.1	3.2
20°-30°	293.3	4.8
30°-40°	353.2	5.8
40°-50°	366.8	6.0
50°-60°	332.8	5.4
60°-70°	252.4	4.1
70°-80°	140.7	2.3
80°-90°	37.2	0.6
90°-100°	324.2	5.3
100°-110°	783.5	12.8
110°-120°	835.7	13.7
120°-130°	676.8	11.1
130°-140°	524.0	8.6
140°-150°	399.8	6.5
150°-160°	289.4	4.7
160°-170°	178.2	2.9
170°-180°	60.4	1.0
0°-30°	555.1	9.1
0°-40°	908.3	14.9
0°-60°	1607.9	26.3
0°-90°	2038.2	33.4
90°-120°	1943.4	31.8
90°-150°	3544.1	58.0
90°-180°	4072.0	66.6
0°-180°	6110.3	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	3
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



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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°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)