

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: P520185

Luminaire Tested: **SQ4-F-100U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520185
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-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

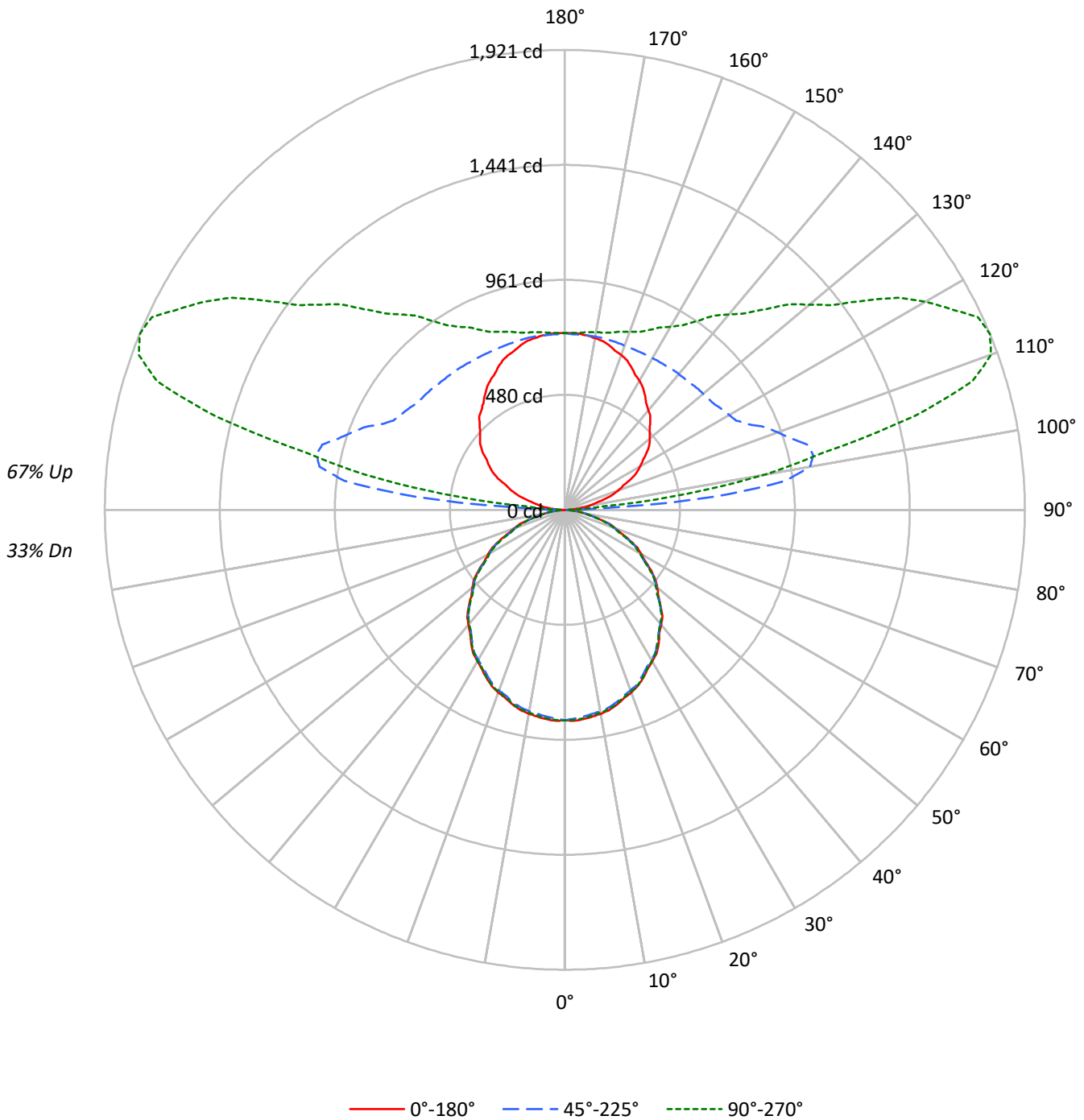
Lumens per Lamp: N/A
Luminaire Lumens: 7195.2 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64
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°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5373
15°	5366	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5183	5141	5175
35°	5125	5065	5090
40°	5027	4980	4989
45°	4924	4884	4884
50°	4821	4775	4753
55°	4708	4645	4620
60°	4532	4459	4431
65°	4317	4231	4178
70°	4021	3937	3852
75°	3610	3496	3413
80°	2919	2880	2795
85°	1750	1990	2075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	236.2	3.3
20°-30°	354.8	4.9
30°-40°	423.5	5.9
40°-50°	434.0	6.0
50°-60°	387.1	5.4
60°-70°	288.3	4.0
70°-80°	156.5	2.2
80°-90°	37.8	0.5
90°-100°	345.5	4.8
100°-110°	953.9	13.3
110°-120°	983.8	13.7
120°-130°	790.5	11.0
130°-140°	621.3	8.6
140°-150°	476.5	6.6
150°-160°	342.4	4.8
160°-170°	209.4	2.9
170°-180°	70.6	1.0
0°-30°	674.0	9.4
0°-40°	1097.5	15.3
0°-60°	1918.6	26.7
0°-90°	2401.2	33.4
90°-120°	2283.2	31.7
90°-150°	4171.5	58.0
90°-180°	4794.0	66.6
0°-180°	7195.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	878	877	867	876	874	83
15°	843	840	832	839	839	237
25°	774	772	765	770	772	357
35°	683	680	674	674	678	426
45°	566	567	562	560	562	437
55°	439	439	433	430	431	391
65°	297	295	291	287	287	294
75°	152	151	147	145	144	160
85°	25	27	28	29	29	35
90°	2	5	9	11	12	4
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.2	879.2	879.2	879.2	879.2
2.5°	882.0	880.2	872.7	879.2	878.3
5°	878.0	876.9	867.4	875.6	874.5
7.5°	871.7	869.4	860.1	868.1	866.9
10°	865.1	862.8	854.5	861.5	860.3
12.5°	856.6	855.2	846.0	853.0	852.8
15°	842.7	840.4	832.1	839.2	839.2
17.5°	824.3	823.0	815.0	821.8	820.8
20°	812.1	809.8	802.7	808.6	808.6
22.5°	797.0	795.6	788.5	793.6	794.5
25°	774.4	772.2	765.1	769.8	772.1
27.5°	749.5	747.6	741.7	744.9	746.4
30°	729.8	729.8	723.9	725.1	728.6
32.5°	711.8	711.8	705.0	706.2	707.8
35°	682.6	680.4	674.5	674.5	677.9
37.5°	648.7	647.6	643.8	643.1	644.1
40°	626.1	625.0	620.2	621.4	621.4
42.5°	603.6	602.4	597.6	596.1	597.9
45°	566.1	567.3	561.5	560.3	561.5
47.5°	529.2	529.2	524.5	521.2	523.0
50°	503.8	503.8	499.0	496.7	496.7
52.5°	477.4	478.3	472.7	469.4	470.3
55°	439.0	439.0	433.2	429.6	430.8
57.5°	396.7	396.7	390.8	387.3	389.4
60°	368.4	368.4	362.5	359.0	360.2
62.5°	340.2	340.2	334.3	330.7	330.9
65°	296.6	295.4	290.7	287.1	287.1
67.5°	254.7	251.7	248.1	243.4	243.4
70°	223.6	222.5	218.9	214.2	214.2
72.5°	195.3	193.3	189.7	186.0	186.0
75°	151.9	150.7	147.1	144.8	143.6
77.5°	108.8	107.9	107.6	104.3	105.2
80°	82.4	82.4	81.3	78.9	78.9
82.5°	58.9	59.8	57.7	57.2	56.3
85°	24.8	27.0	28.2	29.4	29.4
87.5°	5.2	8.4	8.5	9.7	9.9
90°	2.4	4.6	9.4	10.7	11.8
92.5°	21.3	88.2	157.7	57.6	44.8
95°	50.7	187.0	626.9	257.7	167.7
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.1	1047.4	851.1
102.5°	132.3	238.2	1061.7	1294.1	1108.0
105°	169.9	262.3	1049.5	1602.2	1508.8
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.8	1893.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	263.9	335.0	903.1	1757.5	1921.0
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	426.0	792.2	1474.5	1737.8
122.5°	386.3	445.8	779.9	1399.6	1648.9
125°	417.9	475.6	766.1	1296.6	1521.7
127.5°	444.9	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.5	1271.4
135°	502.9	557.1	744.9	1050.2	1184.1
137.5°	528.8	578.3	742.1	998.7	1113.0
140°	543.1	591.6	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.4
145°	583.1	623.6	735.5	894.1	962.1
147.5°	606.3	641.6	732.9	860.4	913.2
150°	623.3	652.2	731.9	840.3	883.1
152.5°	636.6	663.6	730.9	823.1	858.4
155°	657.5	679.5	729.5	802.2	827.6
157.5°	676.9	693.7	729.8	786.8	804.1
160°	688.2	703.2	730.7	778.2	791.0
162.5°	697.7	710.9	731.7	770.6	780.6
165°	711.8	721.0	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.1	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.3	748.4
175°	737.9	738.9	734.3	744.9	742.5
177.5°	739.7	738.7	734.0	740.6	738.7
180°	737.9	737.9	737.9	737.9	737.9

(END OF REPORT)