

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: P521585

Luminaire Tested: **SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521585
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-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

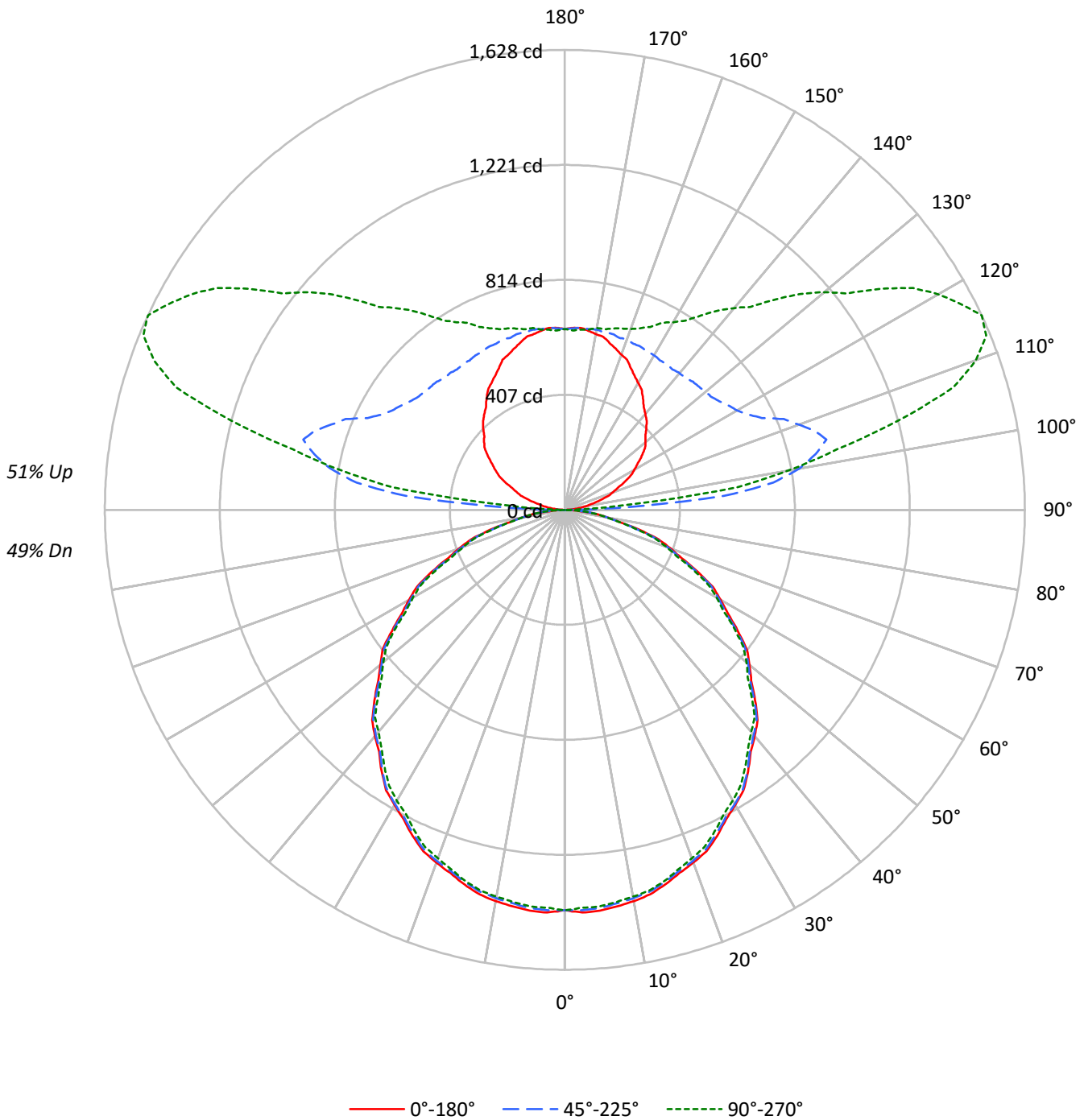
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8190.5 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.7
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	49
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	38	34	37	33	29	30	27	25	21
6	62	50	42	36	57	46	39	34	40	34	30	33	29	26	27	24	21	19
7	57	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	16
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	19	17	15
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13081	13081	13081
5°	13197	13102	13055
10°	13178	13082	13025
15°	13114	13036	12998
20°	13051	12991	12890
25°	12972	12899	12785
30°	12849	12816	12665
35°	12736	12690	12529
40°	12590	12528	12356
45°	12429	12364	12191
50°	12228	12154	12038
55°	12017	11902	11771
60°	11738	11607	11437
65°	11354	11132	10931
70°	10707	10461	10270
75°	9760	9432	9250
80°	8002	8002	8002
85°	5706	6468	6786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	1.6
10°-20°	384.4	4.7
20°-30°	581.5	7.1
30°-40°	700.3	8.6
40°-50°	727.3	8.9
50°-60°	660.1	8.1
60°-70°	503.6	6.1
70°-80°	281.5	3.4
80°-90°	73.3	0.9
90°-100°	330.0	4.0
100°-110°	797.5	9.7
110°-120°	850.5	10.4
120°-130°	688.9	8.4
130°-140°	533.4	6.5
140°-150°	406.9	5.0
150°-160°	294.5	3.6
160°-170°	181.4	2.2
170°-180°	61.4	0.7
0°-30°	1100.1	13.4
0°-40°	1800.4	22.0
0°-60°	3187.7	38.9
0°-90°	4046.1	49.4
90°-120°	1978.0	24.1
90°-150°	3607.1	44.0
90°-180°	4144.0	50.6
0°-180°	8190.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1425	1410	1415	1412	1410	135
15°	1373	1359	1365	1361	1361	387
25°	1274	1261	1267	1256	1256	587
35°	1131	1121	1127	1112	1112	707
45°	953	946	948	934	934	735
55°	747	745	740	732	732	668
65°	520	516	510	503	501	513
75°	274	270	265	260	260	288
85°	54	59	61	62	64	67
90°	0	0	0	0	0	4
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	

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CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.8	1417.8	1417.8	1417.8	1417.8
2.5°	1426.7	1414.8	1418.6	1416.8	1409.6
5°	1424.9	1410.0	1414.7	1411.6	1409.6
7.5°	1415.5	1400.6	1405.4	1401.3	1400.1
10°	1406.6	1391.6	1396.4	1392.3	1390.3
12.5°	1394.4	1380.2	1385.0	1380.1	1379.7
15°	1373.0	1359.1	1364.8	1360.8	1360.8
17.5°	1348.0	1335.0	1341.0	1335.1	1334.1
20°	1329.2	1316.3	1323.1	1313.9	1312.9
22.5°	1308.1	1295.9	1301.9	1291.2	1291.8
25°	1274.3	1261.3	1267.1	1255.9	1255.9
27.5°	1235.4	1222.6	1229.9	1216.4	1215.6
30°	1206.1	1194.1	1203.0	1188.8	1188.8
32.5°	1176.8	1166.4	1172.9	1159.4	1157.0
35°	1130.8	1120.8	1126.7	1112.4	1112.4
37.5°	1080.3	1072.1	1075.2	1062.0	1065.0
40°	1045.3	1036.3	1040.2	1026.9	1025.9
42.5°	1009.4	1001.3	1004.3	991.2	994.2
45°	952.6	945.7	947.6	934.3	934.3
47.5°	895.0	889.9	888.3	876.6	878.6
50°	851.9	849.9	846.8	836.7	838.7
52.5°	812.8	808.4	804.5	795.1	796.3
55°	747.1	745.1	739.9	731.8	731.8
57.5°	684.2	679.8	673.8	665.4	665.4
60°	636.1	634.1	629.0	619.8	619.8
62.5°	590.5	587.7	581.8	573.4	572.6
65°	520.1	516.1	509.9	502.7	500.7
67.5°	446.6	442.4	437.4	430.7	429.5
70°	396.9	392.0	387.8	382.6	380.7
72.5°	346.5	343.9	338.9	333.8	332.6
75°	273.8	269.8	264.6	260.5	259.5
77.5°	197.0	196.4	194.6	192.0	193.0
80°	150.6	151.6	150.6	149.6	150.6
82.5°	109.1	111.7	111.5	111.4	112.4
85°	53.9	58.9	61.1	62.1	64.1
87.5°	15.5	20.2	24.4	25.3	26.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)