

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: P521583

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521583
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 (3500K)
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

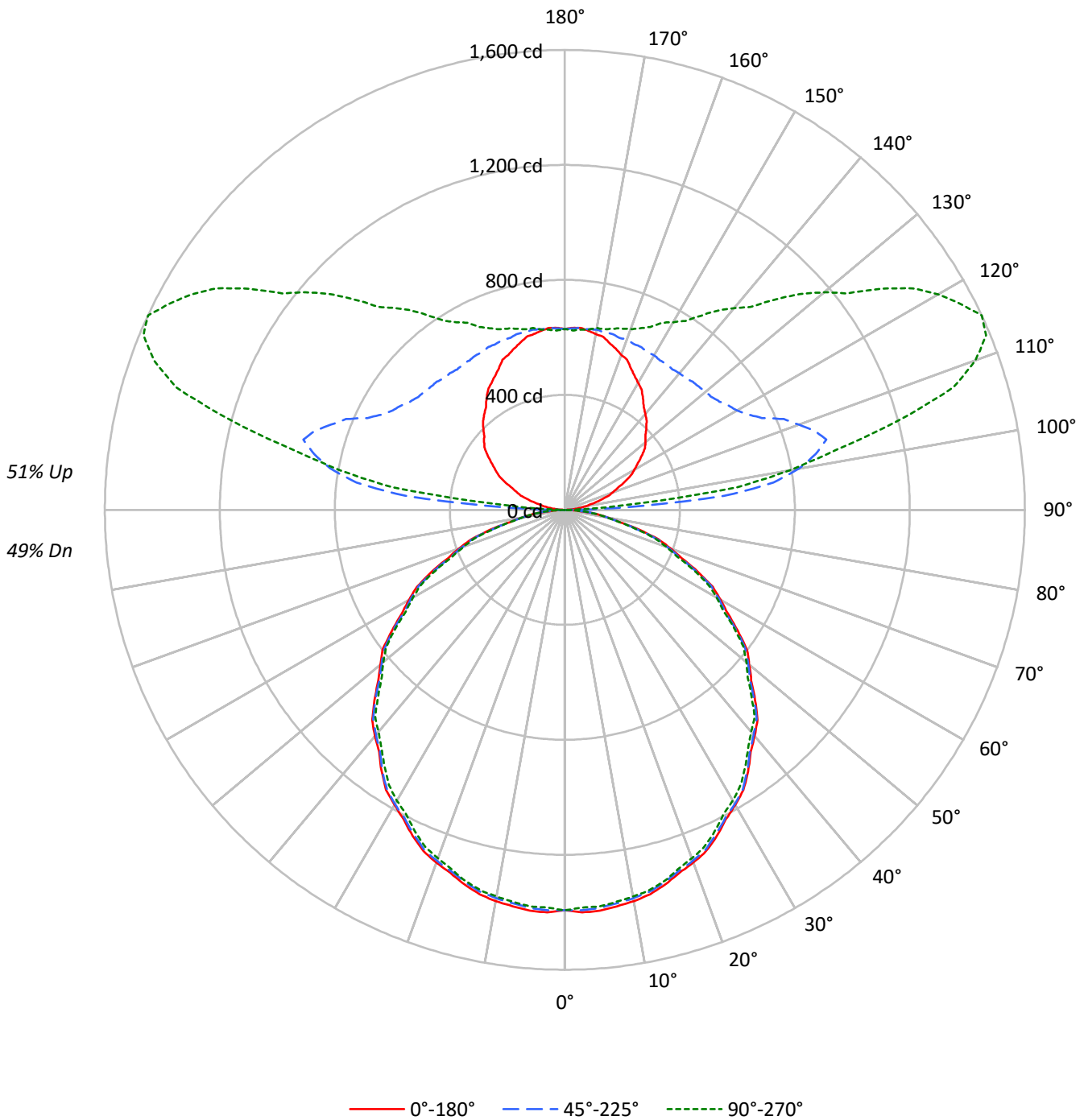
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8047.5 lumens
Efficiency: N/A
Efficacy: 107.6 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): 74.8
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°	12852	12852	12852
5°	12966	12873	12827
10°	12947	12854	12797
15°	12885	12809	12771
20°	12823	12764	12666
25°	12745	12674	12562
30°	12624	12592	12443
35°	12513	12468	12311
40°	12369	12309	12140
45°	12213	12148	11978
50°	12014	11942	11827
55°	11807	11694	11565
60°	11533	11404	11238
65°	11156	10937	10741
70°	10520	10278	10089
75°	9589	9268	9090
80°	7863	7863	7863
85°	5611	6352	6669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.6
10°-20°	377.7	4.7
20°-30°	571.3	7.1
30°-40°	688.1	8.5
40°-50°	714.6	8.9
50°-60°	648.5	8.1
60°-70°	494.8	6.1
70°-80°	276.6	3.4
80°-90°	72.0	0.9
90°-100°	324.2	4.0
100°-110°	783.5	9.7
110°-120°	835.7	10.4
120°-130°	676.8	8.4
130°-140°	524.0	6.5
140°-150°	399.8	5.0
150°-160°	289.4	3.6
160°-170°	178.2	2.2
170°-180°	60.4	0.7
0°-30°	1080.9	13.4
0°-40°	1768.9	22.0
0°-60°	3132.0	38.9
0°-90°	3975.4	49.4
90°-120°	1943.4	24.1
90°-150°	3544.1	44.0
90°-180°	4072.0	50.6
0°-180°	8047.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1400	1385	1390	1387	1385	133
15°	1349	1335	1341	1337	1337	381
25°	1252	1239	1245	1234	1234	576
35°	1111	1101	1107	1093	1093	694
45°	936	929	931	918	918	722
55°	734	732	727	719	719	657
65°	511	507	501	494	492	504
75°	269	265	260	256	255	283
85°	53	58	60	61	63	66
90°	0	0	0	0	0	4
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	

TEST NUMBER: P521583

CATALOG NUMBER: SQ4-F-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.0	1393.0	1393.0	1393.0	1393.0
2.5°	1401.8	1390.1	1393.8	1392.0	1385.0
5°	1400.0	1385.3	1390.0	1387.0	1385.0
7.5°	1390.8	1376.1	1380.8	1376.8	1375.6
10°	1382.0	1367.3	1372.0	1368.0	1366.0
12.5°	1370.0	1356.1	1360.8	1356.0	1355.6
15°	1349.0	1335.3	1341.0	1337.0	1337.0
17.5°	1324.4	1311.7	1317.6	1311.8	1310.8
20°	1306.0	1293.3	1300.0	1291.0	1290.0
22.5°	1285.2	1273.3	1279.2	1268.6	1269.2
25°	1252.0	1239.3	1245.0	1234.0	1234.0
27.5°	1213.8	1201.3	1208.4	1195.2	1194.4
30°	1185.0	1173.3	1182.0	1168.0	1168.0
32.5°	1156.2	1146.0	1152.4	1139.1	1136.8
35°	1111.0	1101.2	1107.0	1093.0	1093.0
37.5°	1061.4	1053.4	1056.4	1043.5	1046.4
40°	1027.0	1018.2	1022.0	1009.0	1008.0
42.5°	991.8	983.8	986.8	973.9	976.8
45°	936.0	929.2	931.0	918.0	918.0
47.5°	879.4	874.3	872.8	861.2	863.2
50°	837.0	835.0	832.0	822.0	824.0
52.5°	798.6	794.3	790.4	781.2	782.4
55°	734.0	732.0	727.0	719.0	719.0
57.5°	672.2	667.9	662.0	653.8	653.8
60°	625.0	623.0	618.0	609.0	609.0
62.5°	580.2	577.5	571.6	563.4	562.6
65°	511.0	507.1	501.0	494.0	492.0
67.5°	438.8	434.7	429.8	423.2	422.0
70°	390.0	385.1	381.0	376.0	374.0
72.5°	340.4	337.9	333.0	328.0	326.8
75°	269.0	265.1	260.0	256.0	255.0
77.5°	193.6	193.0	191.2	188.6	189.6
80°	148.0	149.0	148.0	147.0	148.0
82.5°	107.2	109.7	109.6	109.4	110.4
85°	53.0	57.9	60.0	61.0	63.0
87.5°	15.2	19.9	24.0	24.8	25.6
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)