

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: P519890

Luminaire Tested: **SQ4-F-050U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519890
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

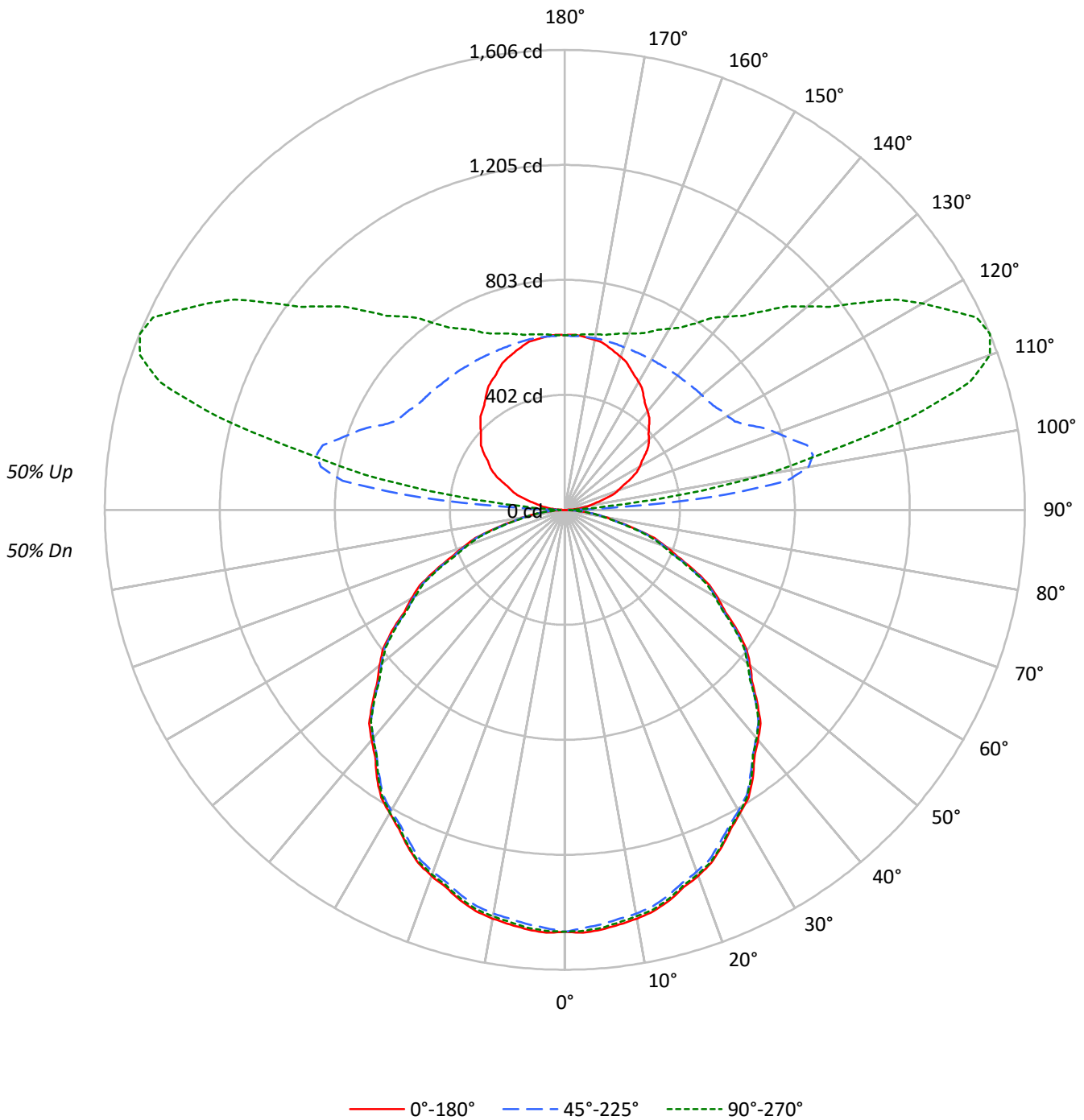
Lumens per Lamp: N/A
Luminaire Lumens: 8006.9 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6460	6502
35°	6441	6364	6397
40°	6318	6259	6271
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3666	3616	3509
85°	2191	2504	2609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	1.7
10°-20°	395.8	4.9
20°-30°	594.5	7.4
30°-40°	709.7	8.9
40°-50°	727.2	9.1
50°-60°	648.6	8.1
60°-70°	483.0	6.0
70°-80°	262.2	3.3
80°-90°	63.1	0.8
90°-100°	292.9	3.7
100°-110°	795.7	9.9
110°-120°	818.1	10.2
120°-130°	654.1	8.2
130°-140°	514.0	6.4
140°-150°	394.1	4.9
150°-160°	283.4	3.5
160°-170°	173.3	2.2
170°-180°	58.4	0.7
0°-30°	1129.3	14.1
0°-40°	1839.0	23.0
0°-60°	3214.8	40.2
0°-90°	4023.1	50.2
90°-120°	1906.7	23.8
90°-150°	3468.8	43.3
90°-180°	3984.0	49.8
0°-180°	8006.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1471	1469	1453	1467	1465	140
15°	1412	1408	1394	1406	1406	398
25°	1298	1294	1282	1290	1294	598
35°	1144	1140	1130	1130	1136	714
45°	949	951	941	939	941	732
55°	736	736	726	720	722	655
65°	497	495	487	481	481	492
75°	254	252	246	243	241	269
85°	41	45	47	49	49	58
90°	2	8	14	18	18	4
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	794	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.2	1473.2	1473.2	1473.2	1473.2
2.5°	1477.9	1474.8	1462.1	1473.2	1471.6
5°	1471.2	1469.2	1453.4	1467.3	1465.3
7.5°	1460.5	1456.7	1441.2	1454.6	1452.7
10°	1449.5	1445.7	1431.8	1443.6	1441.6
12.5°	1435.3	1433.0	1417.6	1429.4	1429.0
15°	1412.0	1408.2	1394.3	1406.1	1406.1
17.5°	1381.3	1379.0	1365.5	1376.9	1375.4
20°	1360.8	1356.9	1345.0	1354.8	1354.8
22.5°	1335.5	1333.2	1321.3	1329.6	1331.2
25°	1297.7	1293.8	1281.9	1289.9	1293.7
27.5°	1255.8	1252.8	1242.8	1248.1	1250.7
30°	1222.7	1222.7	1212.8	1214.9	1220.7
32.5°	1192.7	1192.7	1181.3	1183.4	1186.0
35°	1143.8	1140.0	1130.0	1130.1	1135.9
37.5°	1087.0	1085.1	1078.7	1077.6	1079.1
40°	1049.2	1047.2	1039.3	1041.3	1041.3
42.5°	1011.3	1009.3	1001.4	998.8	1001.8
45°	948.6	950.6	940.7	938.7	940.7
47.5°	886.7	886.7	878.8	873.4	876.4
50°	844.1	844.1	836.2	832.2	832.2
52.5°	799.9	801.5	792.0	786.5	788.1
55°	735.6	735.6	725.7	719.8	721.8
57.5°	664.6	664.6	654.7	648.9	652.4
60°	617.3	617.3	607.4	601.5	603.5
62.5°	569.9	569.9	560.1	554.2	554.6
65°	497.0	495.0	487.1	481.2	481.2
67.5°	426.8	421.7	415.7	407.8	407.8
70°	374.7	372.7	366.8	358.9	358.9
72.5°	327.4	323.9	317.9	311.6	311.6
75°	254.4	252.4	246.5	242.6	240.6
77.5°	182.2	180.6	180.3	174.7	176.3
80°	138.0	138.0	136.1	132.1	132.1
82.5°	98.6	100.2	96.6	95.8	94.3
85°	41.4	45.3	47.3	49.3	49.3
87.5°	8.3	14.1	13.8	16.2	16.2
90°	2.0	7.8	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.9	50.6
95°	43.2	160.1	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.3	188.1	865.2	877.1	708.3
102.5°	109.1	199.2	887.2	1084.7	935.9
105°	141.3	219.9	875.0	1332.3	1253.7
107.5°	174.6	244.0	824.4	1460.2	1482.0
110°	198.1	261.4	786.7	1485.4	1579.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	278.8	749.0	1464.5	1606.0
115°	251.1	304.8	700.4	1393.4	1587.1
117.5°	281.7	333.1	669.4	1292.7	1511.1
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.5	1366.6
125°	345.3	393.3	633.7	1067.7	1259.6
127.5°	368.5	416.1	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.9	1104.5
132.5°	396.7	442.8	620.8	920.3	1051.2
135°	416.0	462.0	616.1	869.7	981.0
137.5°	436.7	478.6	613.7	825.0	918.6
140°	449.2	489.6	612.1	796.5	880.9
142.5°	461.8	499.1	610.6	774.2	844.8
145°	480.6	515.2	608.2	738.9	794.5
147.5°	501.8	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.7	604.3	663.5	682.8
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.7	655.3
162.5°	578.4	588.8	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.5	607.7	608.2	618.8	618.8
175°	610.2	612.0	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.2
180°	610.2	610.2	610.2	610.2	610.2

(END OF REPORT)