

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: P519894

Luminaire Tested: **SQ4-F-050U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519894
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-840-1D-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

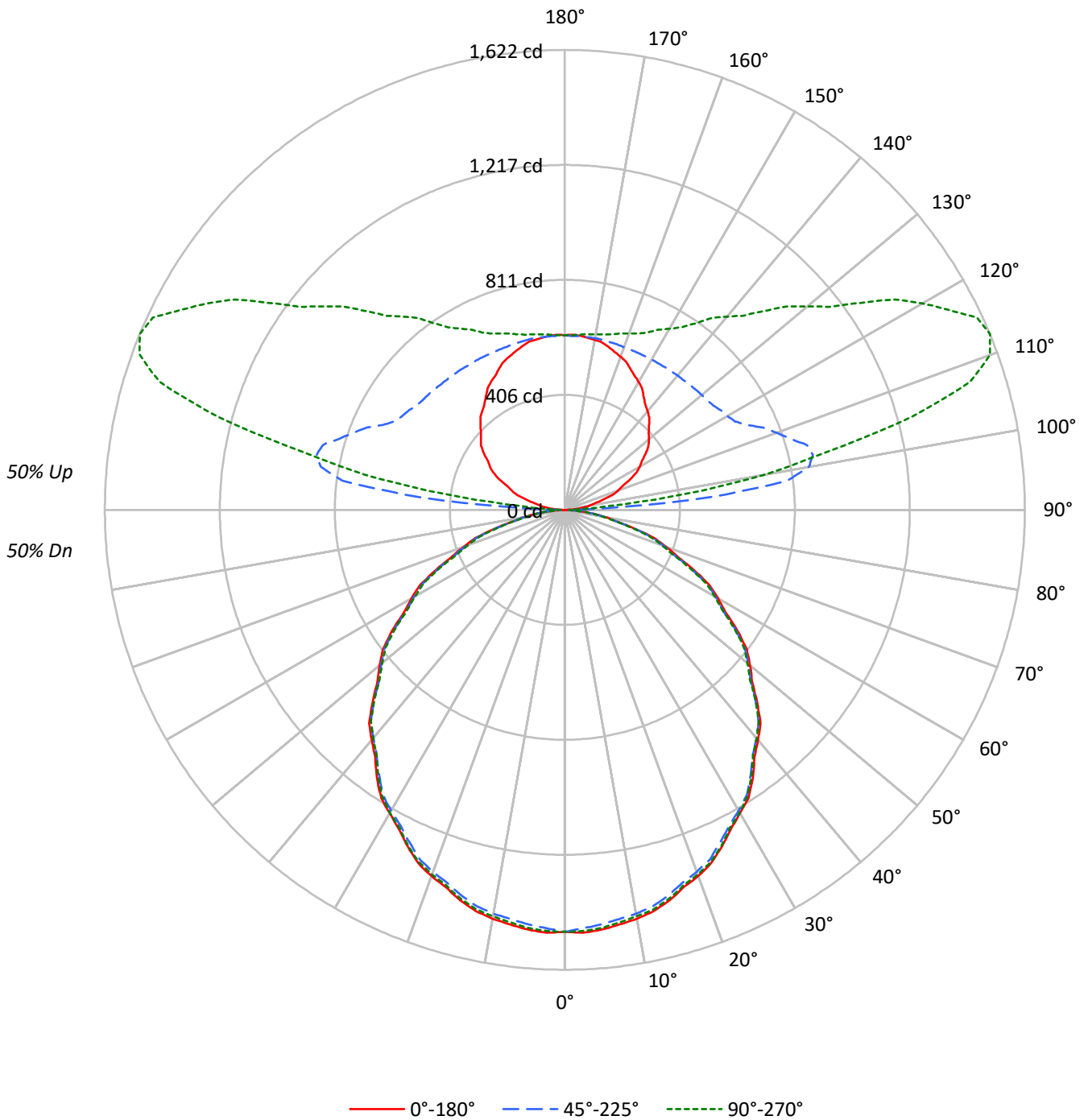
Lumens per Lamp: N/A
Luminaire Lumens: 8087.5 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	6864	6864	6864
5°	6881	6798	6854
10°	6858	6774	6821
15°	6811	6726	6783
20°	6748	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6507	6428	6462
40°	6381	6322	6333
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5895	5864
60°	5753	5660	5624
65°	5480	5370	5305
70°	5104	4997	4891
75°	4581	4438	4333
80°	3703	3653	3544
85°	2212	2530	2636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	1.7
10°-20°	399.8	4.9
20°-30°	600.5	7.4
30°-40°	716.8	8.9
40°-50°	734.5	9.1
50°-60°	655.1	8.1
60°-70°	487.9	6.0
70°-80°	264.8	3.3
80°-90°	63.7	0.8
90°-100°	295.9	3.7
100°-110°	803.7	9.9
110°-120°	826.3	10.2
120°-130°	660.7	8.2
130°-140°	519.1	6.4
140°-150°	398.0	4.9
150°-160°	286.2	3.5
160°-170°	175.1	2.2
170°-180°	59.0	0.7
0°-30°	1140.7	14.1
0°-40°	1857.5	23.0
0°-60°	3247.1	40.1
0°-90°	4063.5	50.2
90°-120°	1925.9	23.8
90°-150°	3503.7	43.3
90°-180°	4024.0	49.8
0°-180°	8087.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1486	1484	1468	1482	1480	141
15°	1426	1422	1408	1420	1420	402
25°	1311	1307	1295	1303	1307	604
35°	1155	1151	1141	1142	1147	721
45°	958	960	950	948	950	739
55°	743	743	733	727	729	662
65°	502	500	492	486	486	497
75°	257	255	249	245	243	272
85°	42	46	48	50	50	59
90°	2	8	14	18	18	4
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1408	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	1492.8	1489.6	1476.8	1488.0	1486.4
5°	1486.0	1484.0	1468.0	1481.9	1480.1
7.5°	1475.2	1471.4	1455.7	1469.2	1467.3
10°	1464.1	1460.2	1446.2	1458.1	1456.1
12.5°	1449.7	1447.4	1431.9	1443.8	1443.4
15°	1426.2	1422.4	1408.3	1420.2	1420.2
17.5°	1395.2	1392.8	1379.2	1390.7	1389.2
20°	1374.5	1370.5	1358.5	1368.4	1368.4
22.5°	1348.9	1346.7	1334.6	1343.0	1344.6
25°	1310.7	1306.8	1294.8	1302.8	1306.7
27.5°	1268.5	1265.4	1255.3	1260.6	1263.3
30°	1235.0	1235.0	1225.1	1227.1	1233.1
32.5°	1204.8	1204.8	1193.2	1195.2	1198.0
35°	1155.4	1151.4	1141.4	1141.6	1147.4
37.5°	1098.0	1096.0	1089.6	1088.4	1090.0
40°	1059.7	1057.7	1049.8	1051.7	1051.7
42.5°	1021.5	1019.5	1011.5	1008.8	1011.9
45°	958.2	960.1	950.2	948.2	950.2
47.5°	895.5	895.5	887.6	882.1	885.2
50°	852.5	852.5	844.6	840.6	840.6
52.5°	808.0	809.5	800.0	794.5	795.9
55°	743.0	743.0	733.0	727.1	729.1
57.5°	671.3	671.3	661.3	655.4	659.0
60°	623.5	623.5	613.5	607.6	609.6
62.5°	575.7	575.7	565.7	559.8	560.2
65°	502.0	500.0	492.0	486.0	486.0
67.5°	431.1	426.0	419.9	412.0	412.0
70°	378.4	376.5	370.5	362.6	362.6
72.5°	330.6	327.2	321.1	314.7	314.7
75°	257.0	255.0	249.0	244.9	243.1
77.5°	184.1	182.5	182.0	176.5	178.1
80°	139.4	139.4	137.5	133.4	133.4
82.5°	99.6	101.2	97.6	96.7	95.3
85°	41.8	45.8	47.8	49.8	49.8
87.5°	8.4	14.2	13.9	16.4	16.4
90°	2.0	7.8	13.8	17.9	17.9
92.5°	17.9	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.3	224.2	150.6
97.5°	72.1	178.7	789.8	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.3	896.1	1095.6	945.3
105°	142.7	222.2	883.8	1345.7	1266.3
107.5°	176.3	246.5	832.7	1474.9	1497.0
110°	200.2	264.1	794.6	1500.3	1595.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.7	307.9	707.4	1407.5	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.7	397.2	640.1	1078.4	1272.2
127.5°	372.1	420.2	633.3	1009.6	1175.9
130°	386.4	432.9	630.2	966.5	1115.6
132.5°	400.7	447.2	626.9	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.7	494.5	618.3	804.5	889.7
142.5°	466.5	504.1	616.6	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.8	612.3	718.4	762.6
150°	521.2	546.4	612.3	702.3	737.1
152.5°	532.2	554.3	610.8	687.9	716.5
155°	548.9	568.3	610.4	670.2	689.6
157.5°	565.1	580.2	610.4	658.2	673.0
160°	574.6	588.3	610.4	650.2	661.9
162.5°	584.2	594.7	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.2	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.2
180°	616.2	616.2	616.2	616.2	616.2

(END OF REPORT)