

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: P519893

Luminaire Tested: **SQ4-F-050U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519893
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-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

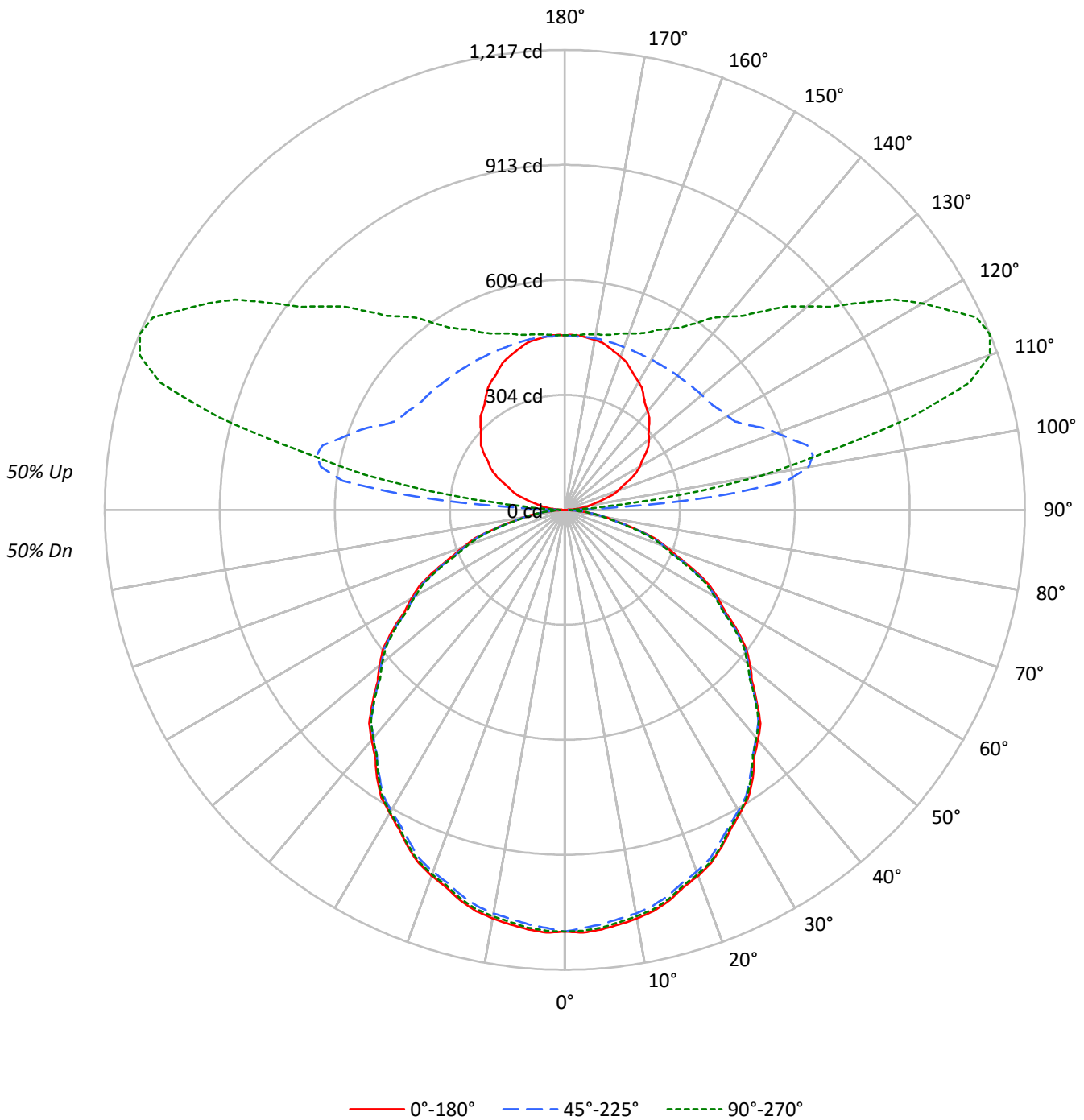
Lumens per Lamp: N/A
Luminaire Lumens: 6065.6 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 43.8
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	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	6853
10°	6858	6775	6821
15°	6812	6726	6783
20°	6747	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6506	6427	6461
40°	6382	6322	6334
45°	6251	6199	6199
50°	6119	6061	6033
55°	5975	5896	5864
60°	5752	5660	5623
65°	5480	5370	5305
70°	5106	4998	4890
75°	4579	4439	4330
80°	3705	3648	3546
85°	2216	2534	2639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	1.7
10°-20°	299.9	4.9
20°-30°	450.4	7.4
30°-40°	537.6	8.9
40°-50°	550.9	9.1
50°-60°	491.3	8.1
60°-70°	365.9	6.0
70°-80°	198.6	3.3
80°-90°	47.8	0.8
90°-100°	221.9	3.7
100°-110°	602.8	9.9
110°-120°	619.7	10.2
120°-130°	495.5	8.2
130°-140°	389.3	6.4
140°-150°	298.5	4.9
150°-160°	214.7	3.5
160°-170°	131.3	2.2
170°-180°	44.2	0.7
0°-30°	855.5	14.1
0°-40°	1393.1	23.0
0°-60°	2435.3	40.2
0°-90°	3047.6	50.2
90°-120°	1444.4	23.8
90°-150°	2627.7	43.3
90°-180°	3018.0	49.8
0°-180°	6065.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1114	1113	1101	1112	1110	106
15°	1070	1067	1056	1065	1065	301
25°	983	980	971	977	980	453
35°	866	864	856	856	860	541
45°	719	720	713	711	713	555
55°	557	557	550	545	547	496
65°	376	375	369	364	364	373
75°	193	191	187	184	182	204
85°	31	34	36	37	37	44
90°	2	6	10	13	13	3
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.0	1116.0	1116.0	1116.0	1116.0
2.5°	1119.6	1117.2	1107.6	1115.9	1114.8
5°	1114.5	1113.1	1101.0	1111.5	1110.0
7.5°	1106.5	1103.5	1091.8	1101.9	1100.4
10°	1098.1	1095.1	1084.7	1093.5	1092.1
12.5°	1087.3	1085.5	1073.8	1082.8	1082.5
15°	1069.7	1066.7	1056.3	1065.2	1065.2
17.5°	1046.4	1044.6	1034.4	1043.1	1041.9
20°	1030.8	1028.0	1018.9	1026.4	1026.4
22.5°	1011.7	1009.9	1000.9	1007.3	1008.4
25°	983.0	980.1	971.1	977.1	980.0
27.5°	951.3	949.0	941.5	945.4	947.5
30°	926.3	926.3	918.8	920.4	924.7
32.5°	903.5	903.5	894.8	896.4	898.5
35°	866.5	863.6	856.0	856.1	860.5
37.5°	823.5	822.0	817.2	816.4	817.5
40°	794.8	793.3	787.4	788.8	788.8
42.5°	766.1	764.7	758.7	756.6	759.0
45°	718.6	720.0	712.6	711.1	712.6
47.5°	671.7	671.7	665.7	661.5	663.9
50°	639.5	639.5	633.4	630.5	630.5
52.5°	605.9	607.1	600.0	595.8	597.0
55°	557.2	557.2	549.8	545.3	546.8
57.5°	503.5	503.5	496.0	491.5	494.2
60°	467.6	467.6	460.1	455.7	457.1
62.5°	431.8	431.8	424.3	419.8	420.1
65°	376.5	375.0	369.0	364.5	364.5
67.5°	323.3	319.5	314.9	308.9	308.9
70°	283.9	282.4	277.9	271.9	271.9
72.5°	248.0	245.3	240.8	236.1	236.1
75°	192.7	191.3	186.8	183.7	182.2
77.5°	138.0	136.9	136.6	132.4	133.5
80°	104.6	104.6	103.0	100.1	100.1
82.5°	74.7	75.8	73.2	72.6	71.4
85°	31.4	34.3	35.9	37.4	37.4
87.5°	6.3	10.6	10.5	12.2	12.2
90°	1.5	5.9	10.4	13.3	13.3
92.5°	13.3	60.7	105.5	45.3	38.4
95°	32.7	121.4	386.4	168.2	112.9
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.6
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.0	595.9	1125.2	1196.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.5	211.2	567.5	1109.3	1216.6
115°	190.3	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.8	266.6	496.4	928.2	1092.4
122.5°	242.0	279.8	489.3	876.9	1035.3
125°	261.6	297.9	480.0	808.9	954.2
127.5°	279.1	315.2	475.0	757.3	881.9
130°	289.8	324.7	472.6	724.9	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	349.9	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	625.0	695.8
140°	340.3	370.8	463.7	603.4	667.3
142.5°	349.8	378.1	462.5	586.5	640.0
145°	364.2	390.3	460.7	559.8	601.9
147.5°	380.2	402.5	459.2	538.7	571.9
150°	390.8	409.8	459.2	526.8	552.9
152.5°	399.2	415.8	458.1	516.0	537.5
155°	411.6	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.0
167.5°	453.8	456.8	460.7	473.6	474.7
170°	456.3	459.1	460.7	471.1	471.1
172.5°	458.7	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

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