

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: P519904

Luminaire Tested: **SQ4-F-050U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519904
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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

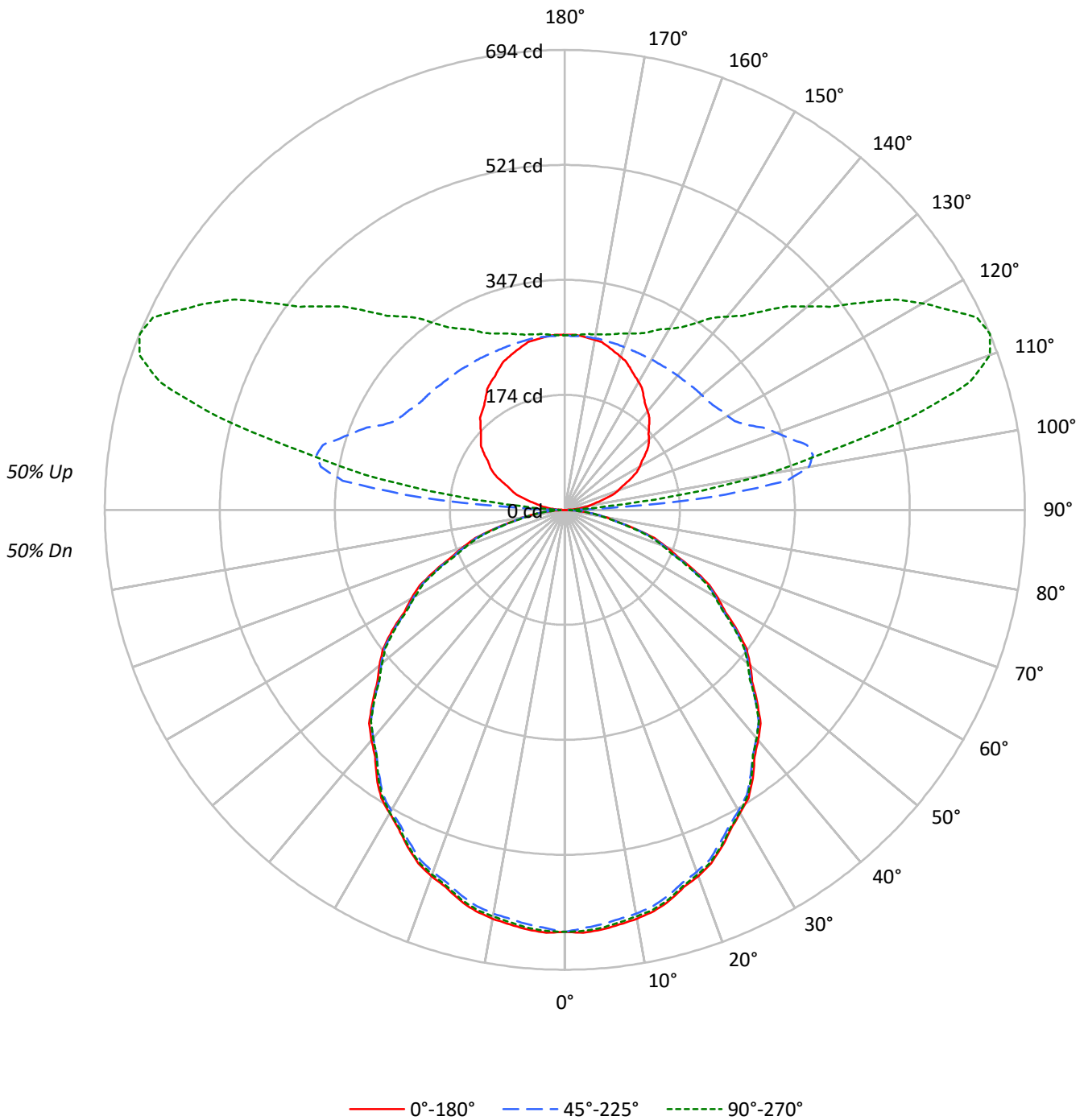
Lumens per Lamp: N/A
Luminaire Lumens: 3461.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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



TEST NUMBER: P519904
CATALOG NUMBER: SQ4-F-050U-050D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P519904

CATALOG NUMBER: SQ4-F-050U-050D-940-1D-UNV-STD-W-4

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°	5875	5875	5875
5°	5889	5818	5865
10°	5869	5797	5838
15°	5830	5757	5806
20°	5775	5708	5750
25°	5710	5641	5693
30°	5630	5586	5621
35°	5568	5501	5530
40°	5462	5410	5420
45°	5350	5305	5305
50°	5236	5187	5163
55°	5115	5046	5019
60°	4923	4846	4812
65°	4689	4595	4541
70°	4370	4278	4184
75°	3918	3800	3707
80°	3172	3124	3034
85°	1895	2160	2255



TEST NUMBER: P519904

CATALOG NUMBER: SQ4-F-050U-050D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	1.7
10°-20°	171.1	4.9
20°-30°	257.0	7.4
30°-40°	306.7	8.9
40°-50°	314.3	9.1
50°-60°	280.3	8.1
60°-70°	208.8	6.0
70°-80°	113.3	3.3
80°-90°	27.3	0.8
90°-100°	126.6	3.7
100°-110°	343.9	9.9
110°-120°	353.6	10.2
120°-130°	282.7	8.2
130°-140°	222.1	6.4
140°-150°	170.3	4.9
150°-160°	122.5	3.5
160°-170°	74.9	2.2
170°-180°	25.2	0.7
0°-30°	488.2	14.1
0°-40°	794.9	23.0
0°-60°	1389.6	40.1
0°-90°	1738.9	50.2
90°-120°	824.2	23.8
90°-150°	1499.4	43.3
90°-180°	1722.0	49.8
0°-180°	3461.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	636	635	628	634	633	60
15°	610	609	603	608	608	172
25°	561	559	554	558	559	258
35°	494	493	488	488	491	309
45°	410	411	407	406	407	316
55°	318	318	314	311	312	283
65°	215	214	210	208	208	213
75°	110	109	107	105	104	116
85°	18	20	20	21	21	25
90°	1	3	6	8	8	2
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	344	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

TEST NUMBER: P519904

CATALOG NUMBER: SQ4-F-050U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	636.8	636.8	636.8	636.8	636.8
2.5°	638.8	637.5	632.0	636.8	636.1
5°	635.9	635.1	628.2	634.2	633.3
7.5°	631.3	629.6	623.0	628.7	627.9
10°	626.5	624.9	618.8	624.0	623.1
12.5°	620.4	619.4	612.7	617.9	617.7
15°	610.4	608.7	602.7	607.8	607.8
17.5°	597.1	596.1	590.3	595.2	594.5
20°	588.2	586.5	581.4	585.6	585.6
22.5°	577.2	576.3	571.1	574.7	575.4
25°	560.9	559.2	554.1	557.5	559.2
27.5°	542.8	541.4	537.2	539.5	540.7
30°	528.5	528.5	524.3	525.2	527.6
32.5°	515.5	515.5	510.6	511.5	512.7
35°	494.4	492.7	488.4	488.5	491.0
37.5°	469.9	469.1	466.3	465.8	466.4
40°	453.5	452.7	449.2	450.0	450.0
42.5°	437.1	436.3	432.9	431.7	433.1
45°	410.0	410.9	406.6	405.8	406.6
47.5°	383.3	383.3	379.8	377.5	378.8
50°	364.8	364.8	361.4	359.7	359.7
52.5°	345.7	346.4	342.4	340.0	340.6
55°	318.0	318.0	313.7	311.2	312.0
57.5°	287.2	287.2	283.0	280.4	282.0
60°	266.8	266.8	262.6	260.0	260.8
62.5°	246.3	246.3	242.1	239.5	239.7
65°	214.8	214.0	210.5	208.0	208.0
67.5°	184.5	182.3	179.7	176.3	176.3
70°	162.0	161.1	158.6	155.1	155.1
72.5°	141.5	140.0	137.5	134.7	134.7
75°	109.9	109.2	106.6	104.8	104.0
77.5°	78.8	78.1	77.9	75.5	76.2
80°	59.7	59.7	58.8	57.1	57.1
82.5°	42.6	43.3	41.8	41.4	40.7
85°	17.9	19.5	20.4	21.3	21.3
87.5°	3.5	6.1	6.0	7.0	7.0
90°	0.9	3.3	5.9	7.7	7.7
92.5°	7.7	34.6	60.3	25.9	21.9
95°	18.6	69.3	220.5	96.0	64.5
97.5°	30.9	76.4	338.1	263.0	184.7
100°	39.1	81.3	374.0	379.1	306.2
102.5°	47.1	86.2	383.5	468.9	404.5
105°	61.0	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.2	640.6
110°	85.7	113.0	340.0	642.1	682.7



TEST NUMBER: P519904

CATALOG NUMBER: SQ4-F-050U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.7	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.4	558.7	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.7	279.2	500.4	590.7
125°	149.3	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.3	185.3	269.7	413.6	477.4
132.5°	171.4	191.4	268.3	397.8	454.3
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.9	265.2	356.6	397.0
140°	194.2	211.6	264.6	344.2	380.7
142.5°	199.6	215.7	263.9	334.6	365.1
145°	207.7	222.7	262.9	319.4	343.5
147.5°	217.0	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.6	315.5
152.5°	227.8	237.3	261.3	294.4	306.7
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.4	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.4	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.1	270.8
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.8	264.6	262.9	266.2	265.4
177.5°	264.5	264.5	262.4	265.0	263.8
180°	263.8	263.8	263.8	263.8	263.8

(END OF REPORT)