

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: P519136

Luminaire Tested: **SQ4-WB-050U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519136
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

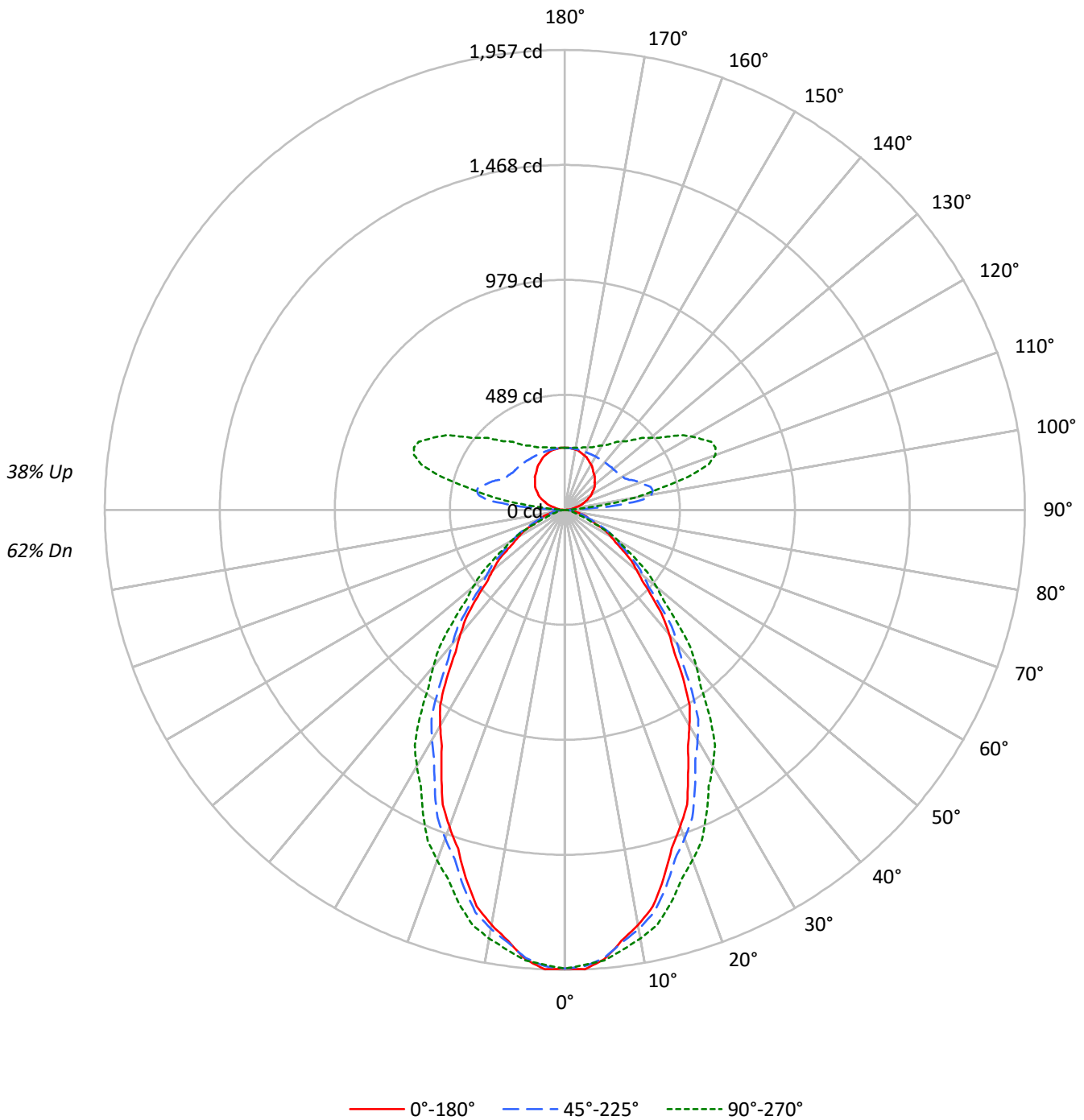
Lumens per Lamp: N/A
Luminaire Lumens: 4567.5 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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: P519136
CATALOG NUMBER: SQ4-WB-050U-100D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P519136

CATALOG NUMBER: SQ4-WB-050U-100D-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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14617	15584
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5728	6245	7290
55°	4864	5360	6021
60°	4157	4646	4805
65°	3310	3908	3104
70°	2935	3051	1894
75°	2716	2474	1159
80°	2502	2274	999
85°	2265	2085	815



TEST NUMBER: P519136

CATALOG NUMBER: SQ4-WB-050U-100D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	3.9
10°-20°	465.7	10.2
20°-30°	603.2	13.2
30°-40°	590.7	12.9
40°-50°	452.2	9.9
50°-60°	301.3	6.6
60°-70°	164.4	3.6
70°-80°	68.5	1.5
80°-90°	20.4	0.4
90°-100°	126.6	2.8
100°-110°	343.9	7.5
110°-120°	353.6	7.7
120°-130°	282.7	6.2
130°-140°	222.2	4.9
140°-150°	170.3	3.7
150°-160°	122.5	2.7
160°-170°	74.9	1.6
170°-180°	25.2	0.6
0°-30°	1248.0	27.3
0°-40°	1838.7	40.3
0°-60°	2592.2	56.8
0°-90°	2845.5	62.3
90°-120°	824.1	18.0
90°-150°	1499.3	32.8
90°-180°	1722.0	37.7
0°-180°	4567.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1920	1901	1914	1918	1925	179
15°	1624	1618	1662	1707	1736	454
25°	1241	1244	1309	1366	1426	571
35°	877	881	940	1004	1075	545
45°	526	536	571	615	671	410
55°	302	315	333	346	374	274
65°	152	164	179	156	142	158
75°	76	76	69	48	32	81
85°	21	21	20	13	8	23
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	343	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: P519136

CATALOG NUMBER: SQ4-WB-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1952.0	1952.0	1952.0	1952.0	1952.0
2.5°	1956.8	1939.4	1943.8	1943.7	1938.3
5°	1920.3	1901.1	1913.5	1917.9	1924.6
7.5°	1849.1	1834.5	1857.1	1873.9	1887.5
10°	1793.6	1781.0	1809.9	1834.2	1851.8
12.5°	1729.2	1718.6	1754.4	1787.1	1810.0
15°	1624.0	1618.1	1661.7	1706.9	1736.2
17.5°	1511.4	1508.6	1558.5	1611.3	1648.8
20°	1434.7	1433.9	1488.7	1543.6	1587.2
22.5°	1357.3	1359.1	1416.7	1473.9	1523.4
25°	1241.1	1244.5	1308.8	1365.8	1426.1
27.5°	1133.7	1135.2	1201.7	1261.9	1326.3
30°	1060.4	1064.6	1129.8	1192.1	1259.1
32.5°	987.1	991.9	1055.8	1120.2	1188.5
35°	877.1	881.3	940.5	1003.8	1074.9
37.5°	763.7	769.4	821.9	881.8	951.8
40°	690.4	698.7	745.2	801.6	870.2
42.5°	619.8	630.2	673.2	726.7	788.7
45°	525.9	536.0	571.3	614.6	670.7
47.5°	445.1	456.6	483.8	521.0	568.9
50°	399.1	410.0	435.1	462.7	507.9
52.5°	358.7	369.6	391.9	413.2	451.7
55°	302.4	314.9	333.2	345.8	374.3
57.5°	256.1	268.2	282.7	288.4	305.6
60°	225.3	238.7	251.8	251.2	260.4
62.5°	197.2	208.6	221.7	212.6	213.1
65°	151.6	164.2	179.0	156.4	142.2
67.5°	122.5	125.2	140.5	109.1	92.2
70°	108.8	108.8	113.1	84.5	70.2
72.5°	95.8	95.8	91.8	68.7	53.8
75°	76.2	76.2	69.4	47.6	32.5
77.5°	58.8	58.1	53.1	35.5	23.6
80°	47.1	47.1	42.8	28.1	18.8
82.5°	36.8	36.8	33.2	21.9	14.0
85°	21.4	21.4	19.7	12.7	7.7
87.5°	7.7	8.2	8.0	5.6	5.0
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6

TEST NUMBER: P519136

CATALOG NUMBER: SQ4-WB-050U-100D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	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	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)