

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: P519356

Luminaire Tested: **SQ4-WB-100U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519356
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

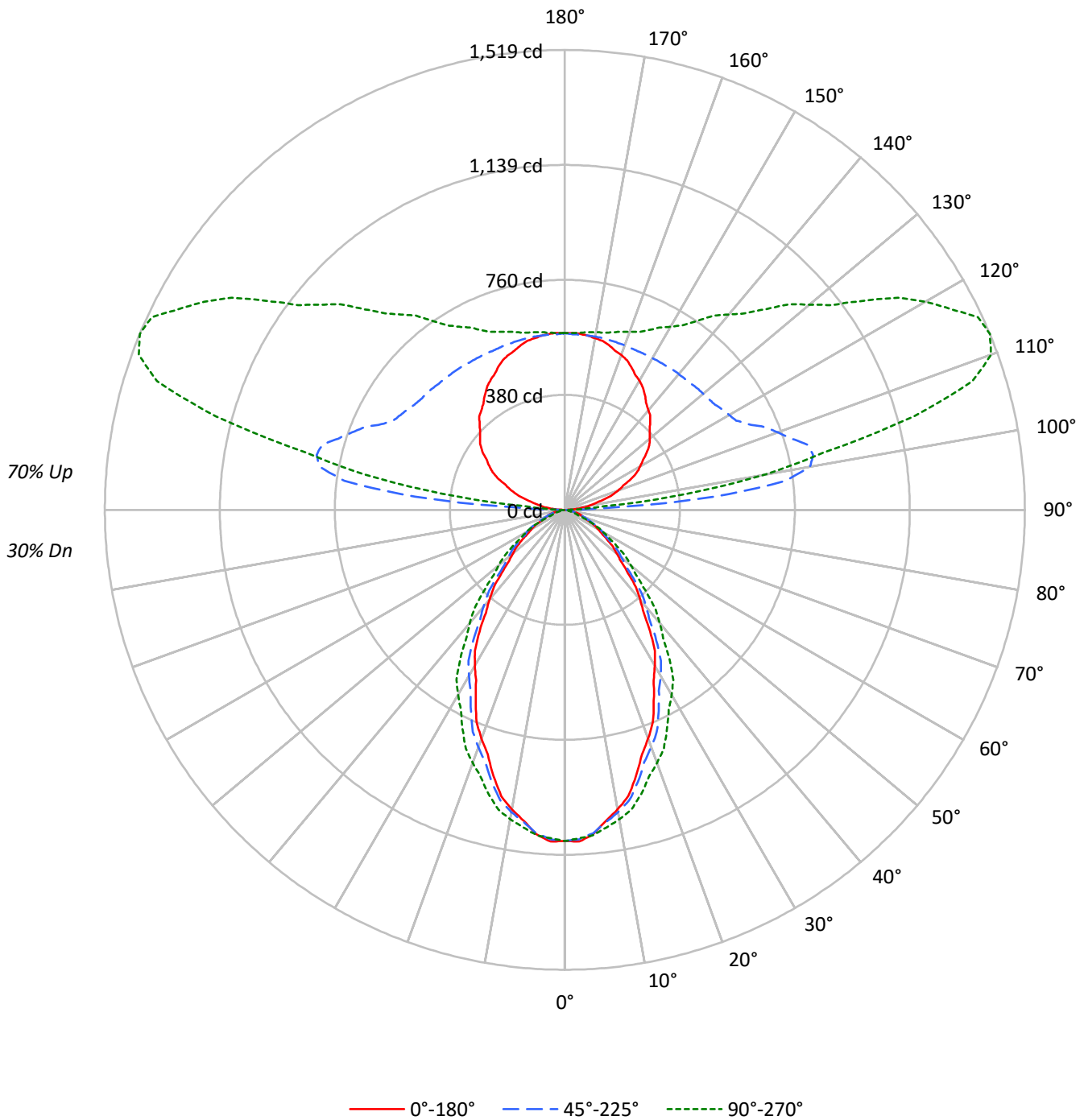
Lumens per Lamp: N/A
Luminaire Lumens: 5385.7 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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: P519356
CATALOG NUMBER: SQ4-WB-100U-050D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P519356

CATALOG NUMBER: SQ4-WB-100U-050D-830-1D-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9963	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8134
30°	6329	6743	7515
35°	5535	5935	6783
40°	4659	5028	5871
45°	3844	4177	4902
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2604	2692
65°	1853	2190	1740
70°	1643	1708	1060
75°	1522	1387	649
80°	1403	1275	563
85°	1270	1164	455



TEST NUMBER: P519356

CATALOG NUMBER: SQ4-WB-100U-050D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	1.9
10°-20°	260.9	4.8
20°-30°	338.0	6.3
30°-40°	330.9	6.1
40°-50°	253.3	4.7
50°-60°	168.8	3.1
60°-70°	92.1	1.7
70°-80°	38.4	0.7
80°-90°	12.1	0.2
90°-100°	273.2	5.1
100°-110°	754.3	14.0
110°-120°	777.9	14.4
120°-130°	625.1	11.6
130°-140°	491.3	9.1
140°-150°	376.8	7.0
150°-160°	270.8	5.0
160°-170°	165.6	3.1
170°-180°	55.8	1.0
0°-30°	699.2	13.0
0°-40°	1030.1	19.1
0°-60°	1452.2	27.0
0°-90°	1594.8	29.6
90°-120°	1805.5	33.5
90°-150°	3298.7	61.2
90°-180°	3791.0	70.4
0°-180°	5385.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1076	1065	1072	1074	1078	100
15°	910	906	931	956	973	254
25°	695	697	733	765	799	320
35°	491	494	527	562	602	305
45°	295	300	320	344	376	230
55°	169	176	187	194	210	154
65°	85	92	100	88	80	88
75°	43	43	39	27	18	46
85°	12	12	11	7	4	13
90°	2	4	8	8	9	3
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	



TEST NUMBER: P519356

CATALOG NUMBER: SQ4-WB-100U-050D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.6	1093.6	1093.6	1093.6	1093.6
2.5°	1096.3	1086.5	1089.0	1088.9	1085.9
5°	1075.8	1065.1	1072.0	1074.5	1078.2
7.5°	1035.9	1027.8	1040.4	1049.8	1057.4
10°	1004.8	997.8	1013.9	1027.6	1037.5
12.5°	968.7	962.8	982.8	1001.2	1014.0
15°	909.8	906.5	930.9	956.3	972.7
17.5°	846.8	845.2	873.2	902.7	923.7
20°	803.8	803.3	834.0	864.8	889.2
22.5°	760.4	761.4	793.7	825.7	853.5
25°	695.3	697.2	733.2	765.2	799.0
27.5°	635.1	636.0	673.2	707.0	743.0
30°	594.1	596.4	632.9	667.9	705.4
32.5°	553.0	555.7	591.5	627.6	665.9
35°	491.4	493.7	526.9	562.3	602.2
37.5°	427.8	431.0	460.5	494.0	533.2
40°	386.8	391.5	417.5	449.1	487.5
42.5°	347.2	353.0	377.2	407.1	441.9
45°	294.6	300.3	320.1	344.3	375.7
47.5°	249.3	255.8	271.0	291.9	318.7
50°	223.6	229.7	243.8	259.2	284.6
52.5°	201.0	207.1	219.6	231.5	253.1
55°	169.4	176.4	186.7	193.7	209.7
57.5°	143.5	150.2	158.4	161.5	171.2
60°	126.2	133.7	141.1	140.7	145.9
62.5°	110.5	116.8	124.2	119.1	119.4
65°	84.9	92.0	100.3	87.6	79.7
67.5°	68.6	70.1	78.7	61.1	51.6
70°	60.9	60.9	63.3	47.3	39.3
72.5°	53.6	53.6	51.4	38.5	30.1
75°	42.7	42.7	38.9	26.7	18.2
77.5°	32.9	32.5	29.8	19.9	13.2
80°	26.4	26.4	24.0	15.7	10.6
82.5°	20.6	20.6	18.6	12.3	7.9
85°	12.0	12.0	11.0	7.1	4.3
87.5°	4.6	5.0	5.3	4.0	3.8
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



TEST NUMBER: P519356

CATALOG NUMBER: SQ4-WB-100U-050D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)