

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: P518700

Luminaire Tested: **SQ4-BB-100U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518700
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-050D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

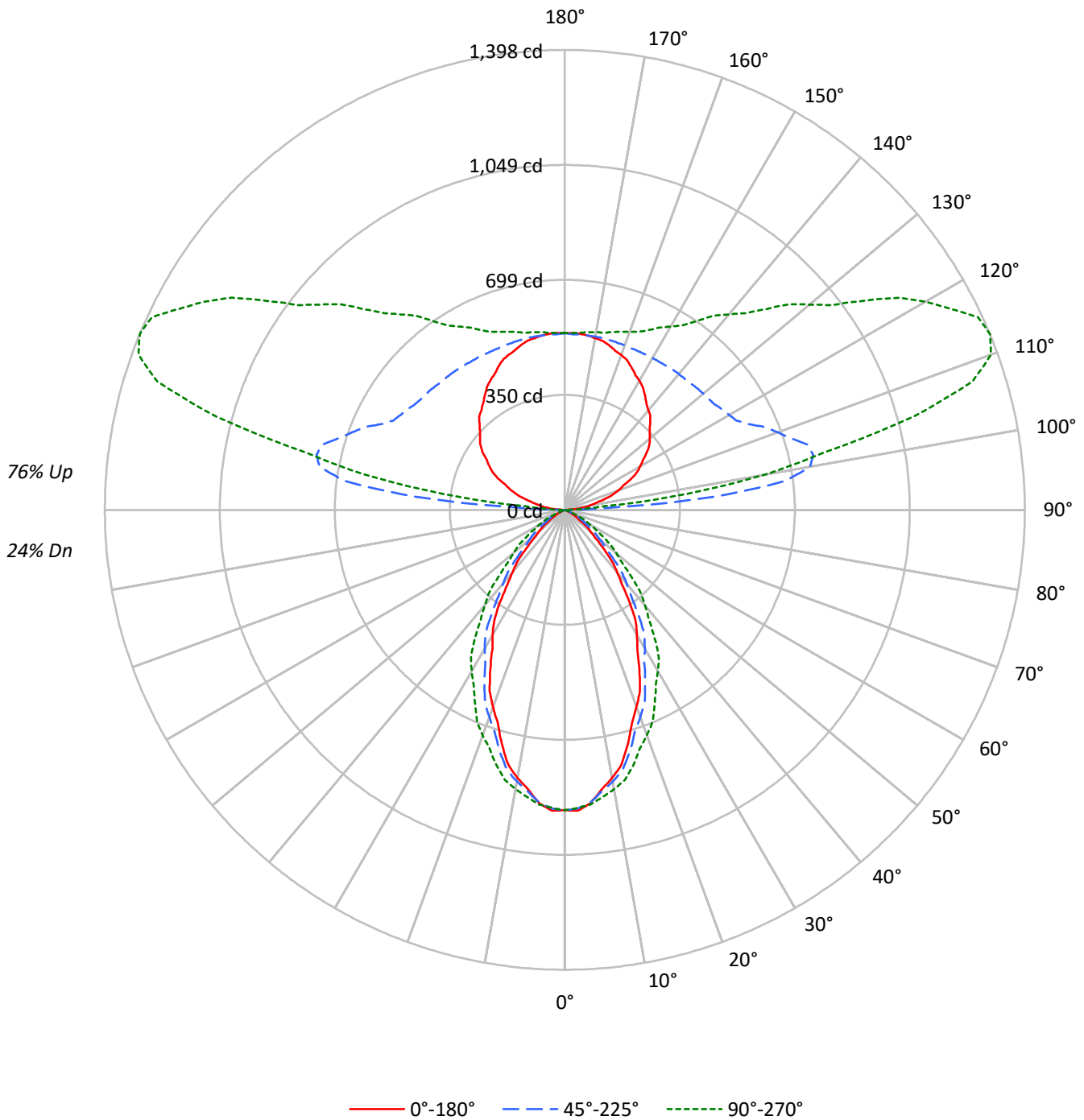
Lumens per Lamp: N/A
Luminaire Lumens: 4580.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8424	8424	8424
5°	8288	8268	8329
10°	7754	7858	8078
15°	7050	7274	7679
20°	6258	6583	7160
25°	5449	5881	6578
30°	4668	5181	6028
35°	3870	4398	5362
40°	2974	3517	4569
45°	2150	2663	3677
50°	1464	1984	2917
55°	952	1435	2266
60°	546	1011	1639
65°	144	618	830
70°	73	192	237
75°	32	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	1.8
10°-20°	213.1	4.7
20°-30°	266.7	5.8
30°-40°	246.4	5.4
40°-50°	165.6	3.6
50°-60°	85.5	1.9
60°-70°	26.8	0.6
70°-80°	1.7	0.0
80°-90°	1.1	0.0
90°-100°	251.5	5.5
100°-110°	694.4	15.2
110°-120°	716.1	15.6
120°-130°	575.5	12.6
130°-140°	452.3	9.9
140°-150°	346.9	7.6
150°-160°	249.3	5.4
160°-170°	152.5	3.3
170°-180°	51.4	1.1
0°-30°	563.1	12.3
0°-40°	809.5	17.7
0°-60°	1060.6	23.2
0°-90°	1090.2	23.8
90°-120°	1662.0	36.3
90°-150°	3036.6	66.3
90°-180°	3490.0	76.2
0°-180°	4580.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	895	886	893	896	899	83
15°	738	736	762	787	804	206
25°	535	540	578	617	646	245
35°	344	352	390	436	476	213
45°	165	175	204	244	282	129
55°	59	69	89	115	141	55
65°	7	13	28	34	38	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	3	7	8	9	3
95°	37	136	456	188	122	40
105°	124	191	764	1166	1098	132
115°	222	268	615	1218	1385	218
125°	304	346	558	944	1108	271
135°	366	406	542	764	862	283
145°	424	454	535	651	700	266
155°	479	495	531	584	602	221
165°	518	525	534	554	559	146
175°	537	538	534	542	540	51
180°	537	537	537	537	537	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	913.0	913.0	913.0	913.0	913.0
2.5°	915.1	906.5	908.7	908.7	906.3
5°	894.9	885.8	892.7	895.8	899.3
7.5°	857.1	850.0	863.2	873.0	880.2
10°	827.7	821.7	838.8	852.2	862.2
12.5°	793.8	789.1	809.8	828.3	841.0
15°	738.1	735.5	761.5	787.0	803.9
17.5°	678.4	678.3	707.9	739.7	760.0
20°	637.4	638.7	670.5	705.5	729.2
22.5°	596.4	599.4	633.4	669.9	697.1
25°	535.3	539.6	577.7	617.3	646.2
27.5°	476.7	483.0	523.1	564.1	599.4
30°	438.2	445.5	486.3	529.5	565.8
32.5°	400.3	409.1	448.8	494.6	531.5
35°	343.6	352.3	390.5	436.4	476.1
37.5°	285.1	293.5	330.8	376.1	419.0
40°	246.9	256.4	292.0	335.8	379.4
42.5°	212.3	221.8	255.2	298.3	339.5
45°	164.8	174.7	204.1	243.8	281.8
47.5°	125.4	136.1	161.9	197.9	232.5
50°	102.0	112.8	138.2	169.9	203.2
52.5°	83.3	93.8	116.7	146.5	177.0
55°	59.2	69.1	89.2	114.6	140.9
57.5°	40.9	49.5	67.5	88.6	109.3
60°	29.6	37.8	54.8	71.9	88.8
62.5°	19.7	27.2	43.8	57.0	68.3
65°	6.6	12.7	28.3	34.1	38.0
67.5°	3.4	4.0	14.8	15.7	17.0
70°	2.7	2.7	7.1	7.5	8.8
72.5°	1.9	1.9	2.8	3.6	3.9
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.4	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.7	1.4	1.6	1.7
90°	1.7	3.4	6.9	7.8	8.6
92.5°	15.5	64.2	114.8	41.9	32.7
95°	37.0	136.1	456.3	187.6	122.0
97.5°	61.2	152.4	676.0	520.4	376.9
100°	79.1	162.2	757.1	762.4	619.6
102.5°	96.2	173.4	772.9	942.0	806.6
105°	123.7	191.0	764.0	1166.3	1098.2
107.5°	153.0	212.8	721.3	1274.5	1299.3
110°	173.6	227.4	688.3	1297.7	1378.4



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CATALOG NUMBER: SQ4-BB-100U-050D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	192.2	243.9	657.4	1279.4	1398.3
115°	221.7	267.9	615.3	1218.1	1385.3
117.5°	247.5	293.5	587.6	1131.8	1322.0
120°	264.7	310.1	576.6	1073.4	1265.0
122.5°	281.2	324.5	567.7	1018.8	1200.3
125°	304.2	346.2	557.7	943.9	1107.7
127.5°	323.8	365.8	551.9	880.4	1021.8
130°	336.9	378.9	549.1	841.6	970.2
132.5°	349.2	389.2	546.4	809.1	925.5
135°	366.1	405.6	542.2	764.5	861.9
137.5°	385.0	421.0	540.2	727.0	810.2
140°	395.3	430.6	538.8	702.0	775.1
142.5°	407.0	439.6	537.4	679.8	744.2
145°	424.5	453.9	535.4	650.8	700.4
147.5°	441.4	467.1	533.5	626.3	664.8
150°	453.7	474.7	532.8	611.7	642.8
152.5°	463.4	483.0	532.1	599.2	624.9
155°	478.7	494.6	531.1	583.9	602.4
157.5°	492.8	505.0	531.2	572.8	585.4
160°	501.0	511.9	531.9	566.5	575.8
162.5°	507.9	517.5	532.6	561.0	568.2
165°	518.2	524.9	533.7	554.4	558.6
167.5°	526.1	530.1	534.5	550.4	551.7
170°	530.2	533.6	534.5	548.3	548.3
172.5°	533.7	535.7	534.5	545.5	544.8
175°	537.1	537.9	534.5	542.2	540.5
177.5°	538.5	537.8	534.3	539.1	537.8
180°	537.1	537.1	537.1	537.1	537.1

(END OF REPORT)