

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: P518412

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518412
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

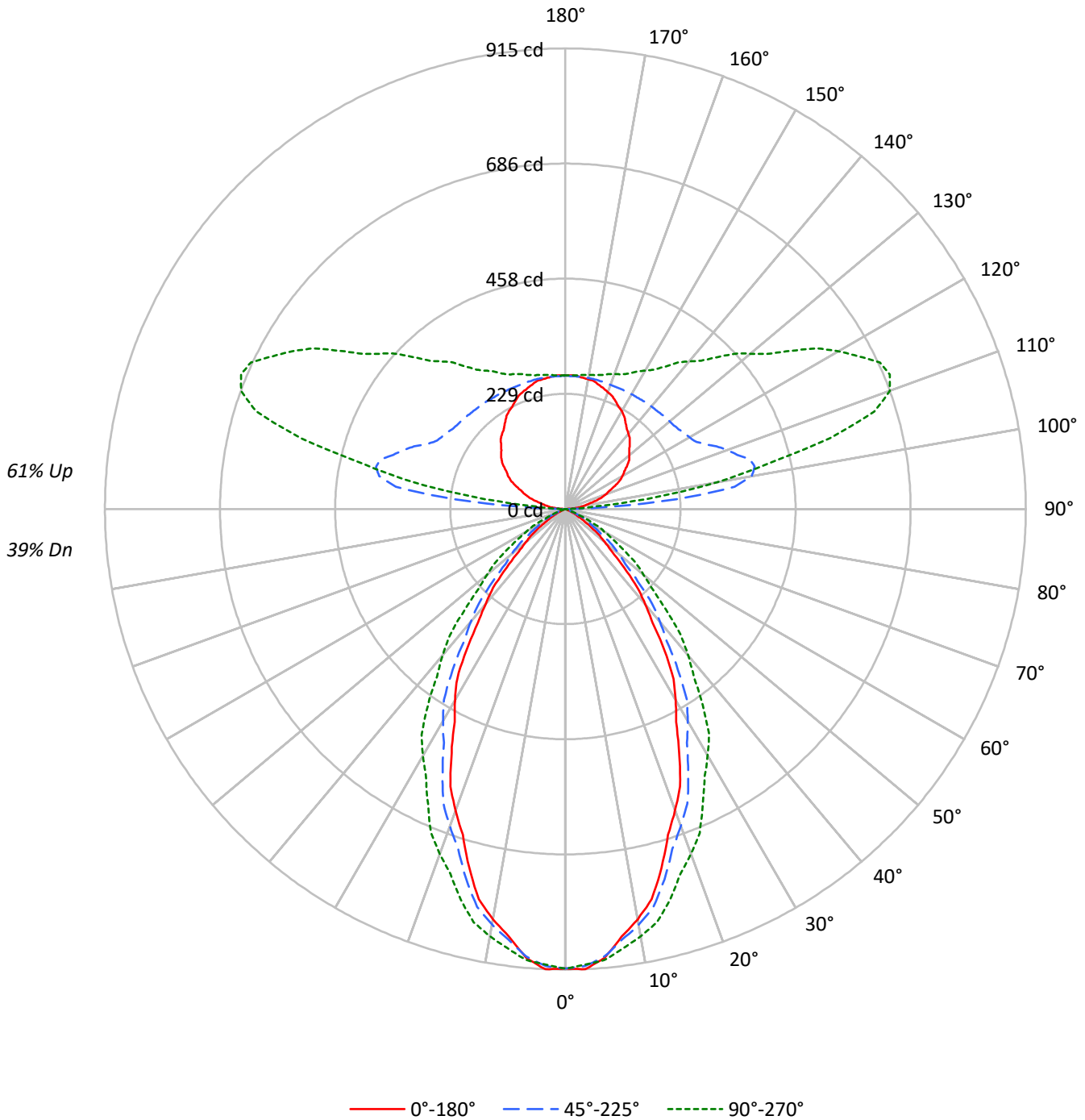
Lumens per Lamp: N/A
Luminaire Lumens: 2820.9 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16

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	3.0
10°-20°	213.1	7.6
20°-30°	266.7	9.5
30°-40°	246.4	8.7
40°-50°	165.6	5.9
50°-60°	85.5	3.0
60°-70°	26.8	0.9
70°-80°	1.7	0.1
80°-90°	1.1	0.0
90°-100°	127.2	4.5
100°-110°	345.7	12.3
110°-120°	355.4	12.6
120°-130°	284.2	10.1
130°-140°	223.3	7.9
140°-150°	171.2	6.1
150°-160°	123.1	4.4
160°-170°	75.3	2.7
170°-180°	25.4	0.9
0°-30°	563.1	20.0
0°-40°	809.5	28.7
0°-60°	1060.6	37.6
0°-90°	1090.1	38.6
90°-120°	828.3	29.4
90°-150°	1507.0	53.4
90°-180°	1731.0	61.4
0°-180°	2820.9	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°	1	3	6	8	8	1
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	



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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°	0.2	0.7	1.2	1.5	1.5
90°	0.9	3.4	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.8	69.6	221.6	96.4	64.8
97.5°	31.0	76.9	339.7	264.3	185.6
100°	39.2	81.7	375.9	381.0	307.7
102.5°	47.4	86.6	385.4	471.2	406.6
105°	61.4	95.5	380.1	578.8	544.6
107.5°	75.9	106.0	358.2	634.4	643.9
110°	86.1	113.6	341.8	645.3	686.1

TEST NUMBER: P518412

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.2	697.7
115°	109.1	132.4	304.3	605.4	689.5
117.5°	122.4	144.7	290.8	561.6	656.5
120°	131.3	152.9	284.7	532.3	626.5
122.5°	138.8	160.4	280.6	502.9	593.7
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.1	180.7	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.9
132.5°	172.3	192.3	269.7	399.8	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.7	265.9	346.0	382.7
142.5°	200.6	216.8	265.2	336.3	367.0
145°	208.8	223.8	264.2	321.0	345.2
147.5°	218.0	230.9	263.4	309.0	328.0
150°	224.2	235.0	263.4	302.1	317.1
152.5°	228.9	238.4	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.6	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.8	263.2	276.9	280.6
165°	255.7	259.0	263.4	274.5	275.3
167.5°	260.3	262.0	264.2	271.6	272.2
170°	261.7	263.3	264.2	270.2	270.2
172.5°	263.0	264.0	264.2	268.8	268.8
175°	265.1	265.9	264.2	267.6	266.8
177.5°	265.8	265.8	263.7	266.4	265.1
180°	265.1	265.1	265.1	265.1	265.1

(END OF REPORT)