

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: P518508

Luminaire Tested: **SQ4-BB-075U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518508  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

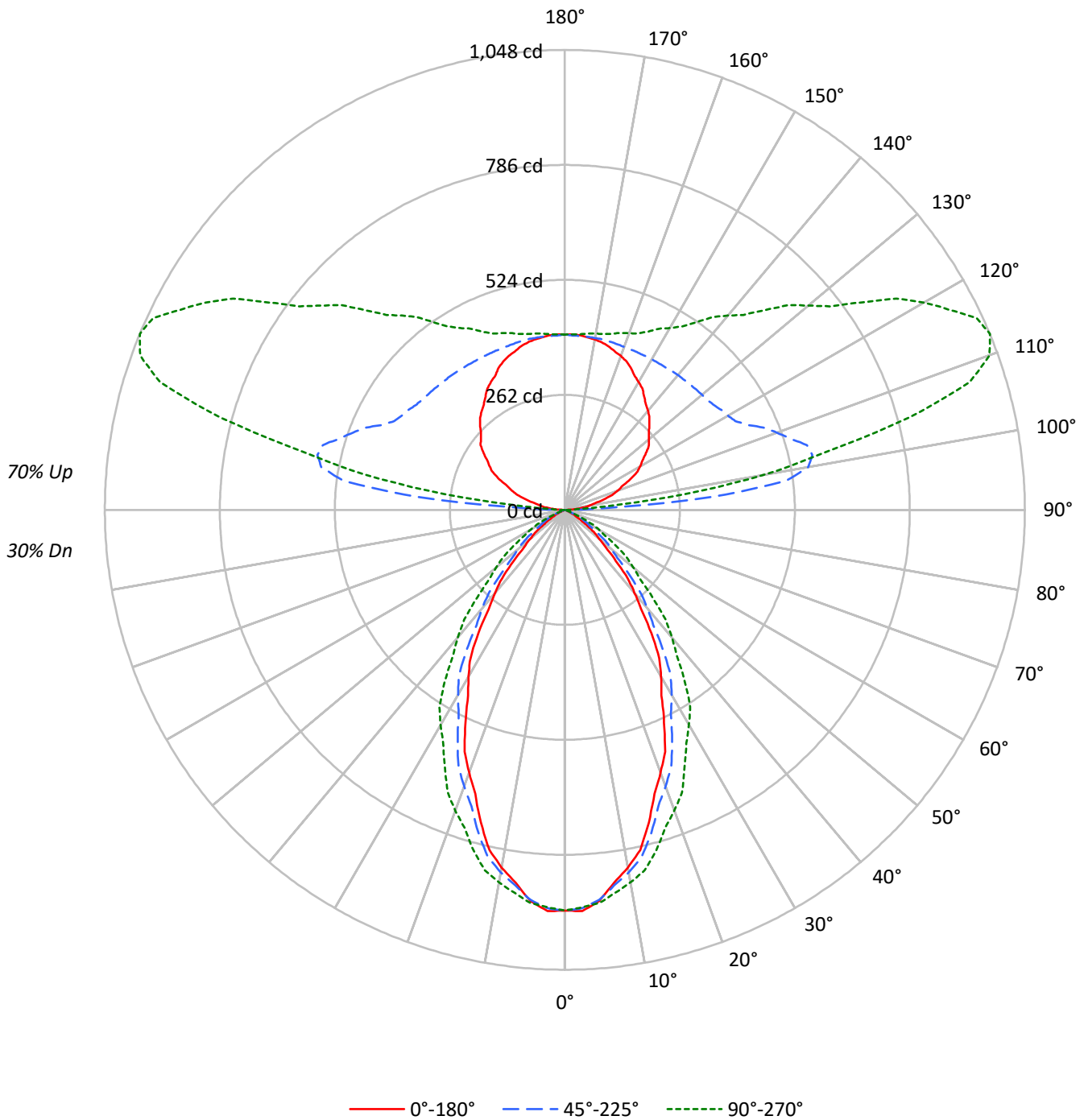
Lumens per Lamp: N/A  
Luminaire Lumens: 3691.4 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 34.7  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

**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	2.3
10°-20°	213.1	5.8
20°-30°	266.7	7.2
30°-40°	246.4	6.7
40°-50°	165.6	4.5
50°-60°	85.5	2.3
60°-70°	26.8	0.7
70°-80°	1.7	0.0
80°-90°	1.0	0.0
90°-100°	188.3	5.1
100°-110°	518.1	14.0
110°-120°	534.8	14.5
120°-130°	428.5	11.6
130°-140°	336.5	9.1
140°-150°	257.9	7.0
150°-160°	185.4	5.0
160°-170°	113.4	3.1
170°-180°	38.2	1.0
0°-30°	563.1	15.3
0°-40°	809.5	21.9
0°-60°	1060.6	28.7
0°-90°	1090.1	29.5
90°-120°	1241.3	33.6
90°-150°	2264.2	61.3
90°-180°	2601.0	70.5
0°-180°	3691.4	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	2
95°	28	103	333	142	91	30
105°	93	142	571	870	811	98
115°	164	200	458	912	1035	162
125°	226	258	415	703	823	202
135°	273	303	404	568	643	210
145°	315	337	398	484	522	198
155°	357	368	395	435	448	164
165°	386	391	397	413	415	109
175°	399	400	398	403	402	38
180°	399	399	399	399	399	

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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°	0.8	3.3	5.9	7.6	7.6
92.5°	11.7	50.1	86.8	33.3	27.4
95°	28.0	102.8	333.0	142.4	90.9
97.5°	45.7	114.0	508.2	391.6	276.3
100°	58.6	120.9	563.3	568.5	463.9
102.5°	70.9	129.2	577.5	705.3	609.3
105°	92.6	142.4	570.9	869.5	811.3
107.5°	113.3	158.9	538.5	949.9	967.2
110°	128.3	169.8	514.0	969.9	1029.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.9	182.1	489.5	957.0	1048.0
115°	164.0	199.7	457.9	911.8	1034.8
117.5°	185.0	217.9	437.9	848.5	987.5
120°	198.0	229.5	429.0	801.0	944.7
122.5°	209.5	241.1	422.9	759.4	895.8
125°	226.0	257.6	415.4	702.8	823.2
127.5°	241.6	271.7	410.5	655.6	761.2
130°	249.8	280.5	407.8	627.5	723.8
132.5°	259.3	290.0	405.8	602.8	689.9
135°	272.7	302.6	403.5	568.4	643.1
137.5°	285.3	313.0	401.7	540.5	602.2
140°	294.8	320.6	401.0	522.1	577.7
142.5°	303.0	326.7	399.6	505.6	553.2
145°	315.2	336.8	397.6	484.3	521.6
147.5°	328.3	346.9	396.6	465.4	495.3
150°	336.4	353.0	395.9	455.1	478.3
152.5°	343.9	359.2	395.2	446.1	465.4
155°	356.8	368.5	395.1	435.3	447.7
157.5°	366.2	375.6	395.1	426.3	435.0
160°	373.0	380.4	395.1	421.5	428.2
162.5°	378.4	384.5	395.7	417.4	422.7
165°	385.7	390.7	396.8	412.9	415.4
167.5°	390.8	394.6	397.6	409.2	409.8
170°	394.2	396.7	397.6	407.8	407.8
172.5°	396.9	398.1	397.6	405.7	405.1
175°	399.3	400.1	397.6	402.7	401.8
177.5°	400.0	400.0	397.3	401.3	400.0
180°	399.3	399.3	399.3	399.3	399.3

(END OF REPORT)