

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521001

Luminaire Tested: **SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521001  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

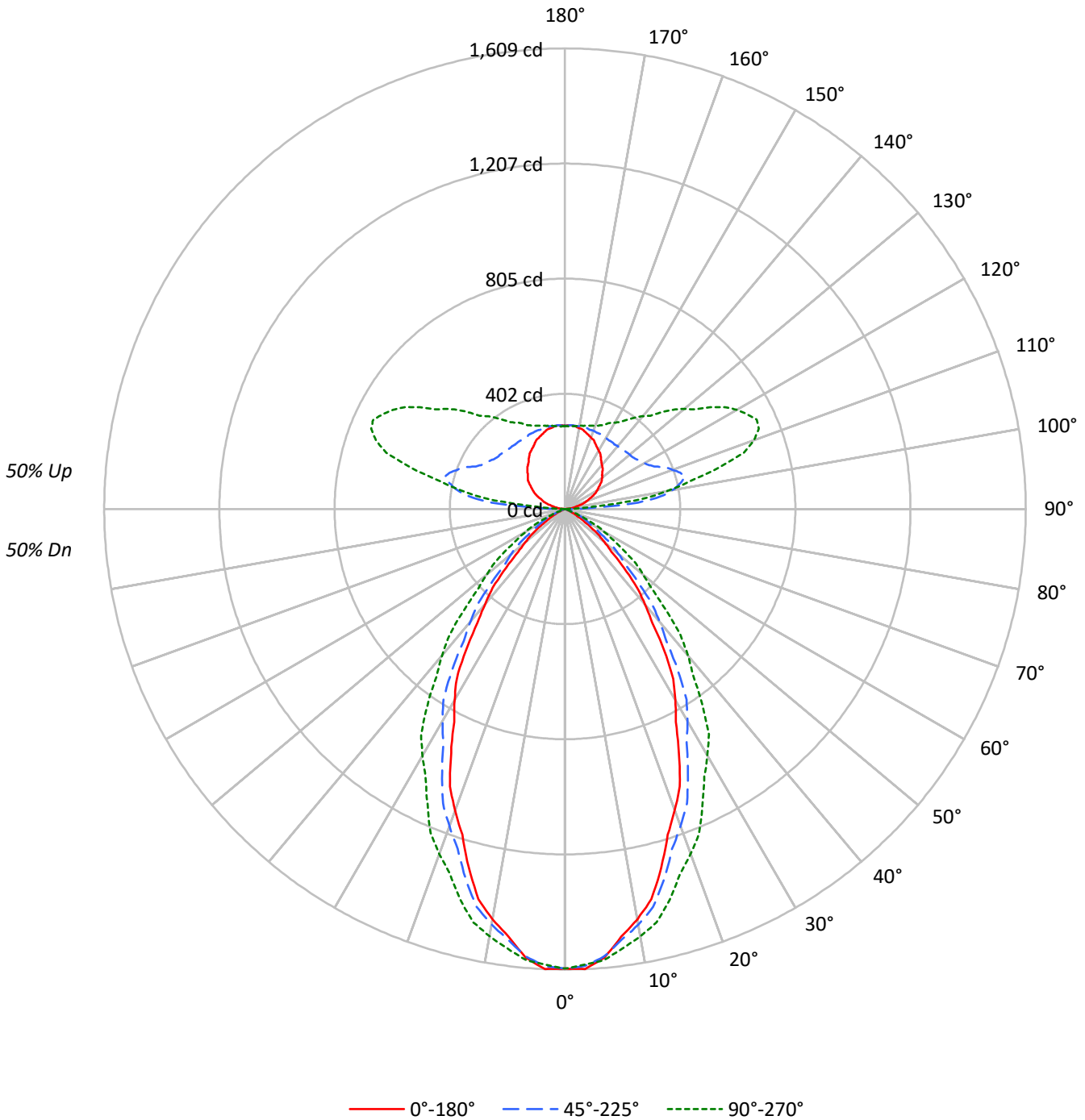
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3796.1 lumens  
Efficiency: N/A  
Efficacy: 82.9 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: General Diffuse

Input Watts (W): 45.8  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14812	14812	14812
5°	14573	14537	14645
10°	13636	13818	14204
15°	12396	12790	13501
20°	11003	11576	12590
25°	9582	10342	11568
30°	8209	9110	10599
35°	6805	7733	9429
40°	5229	6183	8036
45°	3780	4682	6465
50°	2575	3489	5128
55°	1674	2524	3986
60°	960	1777	2880
65°	255	1085	1458
70°	127	334	418
75°	57	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.5	3.9
10°-20°	374.7	9.9
20°-30°	469.0	12.4
30°-40°	433.2	11.4
40°-50°	291.1	7.7
50°-60°	150.4	4.0
60°-70°	47.1	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	149.8	3.9
100°-110°	361.9	9.5
110°-120°	386.0	10.2
120°-130°	312.7	8.2
130°-140°	242.1	6.4
140°-150°	184.7	4.9
150°-160°	133.7	3.5
160°-170°	82.3	2.2
170°-180°	27.9	0.7
0°-30°	990.2	26.1
0°-40°	1423.5	37.5
0°-60°	1864.9	49.1
0°-90°	1915.1	50.4
90°-120°	897.7	23.6
90°-150°	1637.1	43.1
90°-180°	1881.0	49.6
0°-180°	3796.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1574	1558	1570	1575	1581	146
15°	1298	1293	1339	1384	1414	361
25°	941	949	1016	1085	1136	432
35°	604	619	687	767	837	374
45°	290	307	359	429	496	228
55°	104	122	157	201	248	97
65°	12	22	50	60	67	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	75	257	167	117	17
105°	58	100	435	563	556	61
115°	106	135	350	663	739	105
125°	151	174	303	527	619	135
135°	185	207	291	416	478	143
145°	219	235	286	353	381	137
155°	251	262	289	313	324	116
165°	278	282	293	297	302	78
175°	294	292	294	291	290	28
180°	290	290	290	290	290	

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CATALOG NUMBER: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1605.4	1605.4	1605.4	1605.4	1605.4
2.5°	1609.1	1593.9	1597.9	1597.8	1593.6
5°	1573.5	1557.6	1569.6	1575.2	1581.3
7.5°	1507.0	1494.6	1517.8	1535.1	1547.7
10°	1455.5	1444.8	1474.9	1498.6	1516.1
12.5°	1395.8	1387.6	1423.9	1456.4	1478.8
15°	1297.8	1293.3	1339.0	1383.9	1413.5
17.5°	1192.8	1192.7	1244.8	1300.6	1336.3
20°	1120.7	1123.0	1179.0	1240.5	1282.3
22.5°	1048.7	1054.0	1113.7	1177.9	1225.7
25°	941.3	948.9	1015.9	1085.4	1136.3
27.5°	838.2	849.3	919.7	992.0	1053.9
30°	770.5	783.4	855.1	931.1	994.9
32.5°	704.0	719.3	789.2	869.6	934.6
35°	604.2	619.4	686.6	767.4	837.2
37.5°	501.3	516.1	581.7	661.3	736.7
40°	434.2	450.9	513.4	590.5	667.2
42.5°	373.3	390.0	448.8	524.5	596.9
45°	289.7	307.2	358.8	428.7	495.5
47.5°	220.4	239.4	284.7	347.9	408.8
50°	179.4	198.4	243.1	298.8	357.3
52.5°	146.5	164.9	205.2	257.7	311.3
55°	104.1	121.5	156.9	201.4	247.8
57.5°	71.9	87.0	118.7	155.8	192.1
60°	52.0	66.5	96.3	126.5	156.1
62.5°	34.6	47.9	77.0	100.2	120.1
65°	11.7	22.3	49.7	60.0	66.8
67.5°	5.9	7.1	26.1	27.5	29.8
70°	4.7	4.7	12.4	13.3	15.5
72.5°	3.4	3.4	5.0	6.4	6.8
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	40.5	95.5	46.4	31.5
95°	14.8	74.9	256.6	166.8	116.9
97.5°	26.2	83.0	337.9	325.6	279.5
100°	35.1	88.0	382.7	404.0	366.1
102.5°	43.4	92.5	412.2	469.3	446.8
105°	57.8	100.0	435.0	562.8	555.6
107.5°	72.0	108.7	421.6	637.8	654.8
110°	81.8	116.1	399.9	670.2	702.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.7	123.6	380.7	678.1	732.6
115°	105.8	135.3	349.5	662.6	739.0
117.5°	119.9	147.7	331.2	626.9	716.4
120°	129.2	155.1	319.3	599.0	692.8
122.5°	139.1	163.0	312.0	570.4	662.8
125°	150.7	173.6	303.3	526.9	619.0
127.5°	162.3	183.9	297.3	490.1	571.0
130°	169.2	190.3	295.3	464.5	543.9
132.5°	175.6	197.6	292.4	446.0	513.4
135°	185.2	206.9	291.0	415.5	478.1
137.5°	194.3	216.1	286.7	394.9	442.0
140°	201.2	221.1	286.7	380.0	423.3
142.5°	208.1	227.9	284.3	367.1	403.6
145°	219.0	235.3	285.5	353.2	380.9
147.5°	229.3	245.0	284.8	337.2	360.1
150°	235.7	249.5	286.7	330.2	348.3
152.5°	242.5	255.9	286.2	322.8	338.9
155°	251.0	261.9	289.2	312.8	324.3
157.5°	261.3	270.5	288.6	309.0	315.8
160°	265.2	273.0	291.0	304.1	308.9
162.5°	271.6	278.4	290.0	302.5	305.4
165°	277.5	281.7	292.9	297.3	301.5
167.5°	284.8	287.5	292.1	296.9	297.1
170°	286.7	288.5	294.1	293.6	296.6
172.5°	290.2	291.5	292.6	293.9	292.1
175°	293.5	292.3	293.5	291.0	290.4
177.5°	292.9	292.9	291.9	290.9	288.5
180°	290.4	290.4	290.4	290.4	290.4

(END OF REPORT)