

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: P521105

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

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521105  
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-075U-075D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

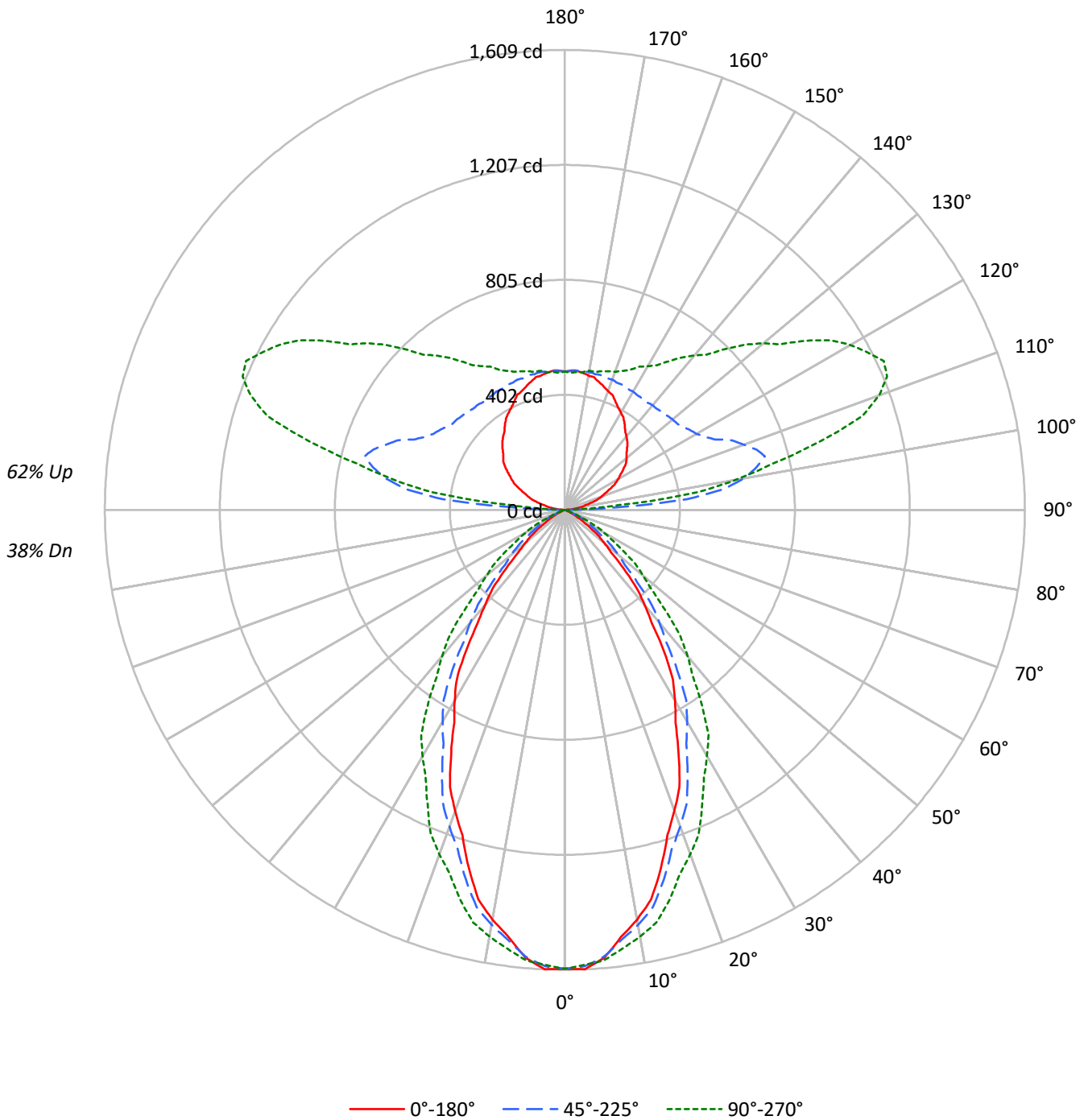
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5047.7 lumens  
Efficiency: N/A  
Efficacy: 91.8 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): 55  
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	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	39	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

**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	2.9
10°-20°	374.7	7.4
20°-30°	469.0	9.3
30°-40°	433.2	8.6
40°-50°	291.1	5.8
50°-60°	150.4	3.0
60°-70°	47.1	0.9
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	249.4	4.9
100°-110°	602.8	11.9
110°-120°	642.9	12.7
120°-130°	520.7	10.3
130°-140°	403.1	8.0
140°-150°	307.5	6.1
150°-160°	222.6	4.4
160°-170°	137.1	2.7
170°-180°	46.4	0.9
0°-30°	990.2	19.6
0°-40°	1423.5	28.2
0°-60°	1864.9	36.9
0°-90°	1915.1	37.9
90°-120°	1495.1	29.6
90°-150°	2726.5	54.0
90°-180°	3133.0	62.1
0°-180°	5047.7	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°	25	125	427	278	195	28
105°	96	166	724	937	925	102
115°	176	225	582	1103	1231	174
125°	251	289	505	878	1031	224
135°	308	344	485	692	796	238
145°	365	392	476	588	634	228
155°	418	436	482	521	540	193
165°	462	469	488	495	502	130
175°	489	487	489	485	484	46
180°	484	484	484	484	484	



TEST NUMBER: P521105

CATALOG NUMBER: SQ4-BB-075U-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°	8.2	67.5	159.0	77.3	52.5
95°	24.6	124.8	427.3	277.9	194.7
97.5°	43.7	138.2	562.8	542.2	465.4
100°	58.4	146.6	637.4	672.8	609.7
102.5°	72.3	154.1	686.6	781.6	744.2
105°	96.3	166.5	724.5	937.3	925.3
107.5°	119.9	181.0	702.1	1062.3	1090.5
110°	136.3	193.4	666.1	1116.1	1169.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	152.7	205.8	634.1	1129.3	1220.0
115°	176.3	225.3	582.0	1103.4	1230.7
117.5°	199.6	245.9	551.5	1044.1	1193.2
120°	215.2	258.3	531.8	997.5	1153.8
122.5°	231.6	271.5	519.5	949.9	1103.8
125°	251.1	289.1	505.2	877.6	1030.9
127.5°	270.3	306.2	495.1	816.3	950.9
130°	281.8	316.9	491.9	773.6	905.9
132.5°	292.5	329.1	486.9	742.8	855.0
135°	308.4	344.5	484.7	692.0	796.2
137.5°	323.6	359.9	477.5	657.6	736.2
140°	335.1	368.1	477.5	632.9	705.0
142.5°	346.6	379.6	473.4	611.3	672.2
145°	364.8	391.9	475.5	588.2	634.3
147.5°	381.8	408.1	474.2	561.6	599.7
150°	392.5	415.5	477.5	549.9	580.0
152.5°	403.9	426.2	476.7	537.6	564.4
155°	418.1	436.1	481.6	521.0	540.0
157.5°	435.1	450.5	480.6	514.7	525.9
160°	441.7	454.7	484.7	506.4	514.4
162.5°	452.3	463.7	483.1	503.9	508.7
165°	462.2	469.2	487.8	495.1	502.1
167.5°	474.2	478.9	486.5	494.5	494.7
170°	477.5	480.5	489.8	488.9	493.9
172.5°	483.3	485.5	487.4	489.5	486.5
175°	488.8	486.8	488.8	484.7	483.7
177.5°	487.8	487.8	486.1	484.4	480.4
180°	483.7	483.7	483.7	483.7	483.7

(END OF REPORT)