

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: P521118

Luminaire Tested: **SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521118  
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-100D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 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**

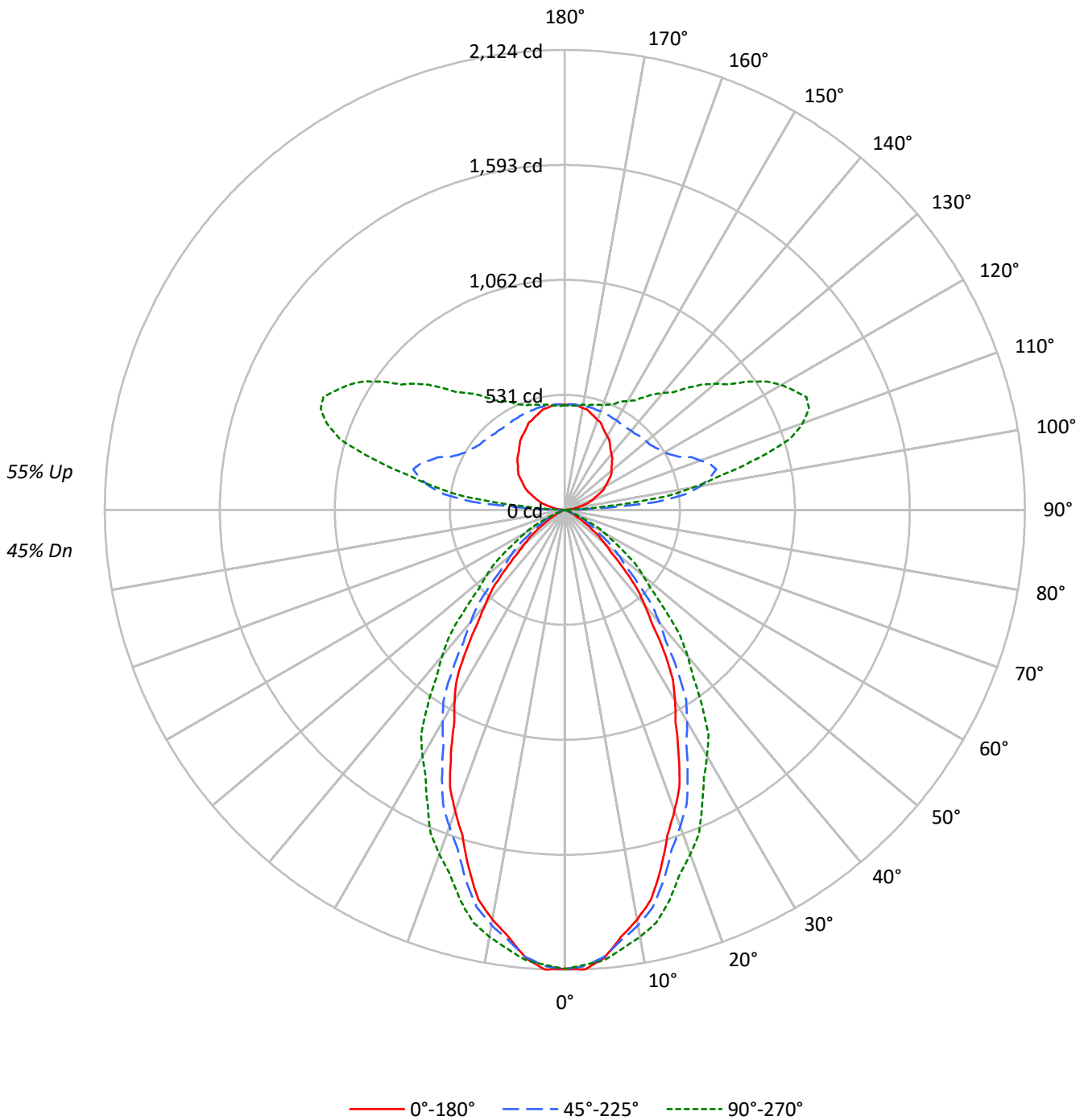
Lumens per Lamp: N/A  
Luminaire Lumens: 5661.0 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 65.9  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45				45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	57	48	47	46	41				41
2	91	84	79	75	83	78	73	70	66	63	60	54	52	51	44	43	42	37				37
3	84	76	69	64	77	70	65	60	59	56	52	50	47	45	41	39	37	33				33
4	78	68	61	56	71	63	57	53	54	50	46	45	42	40	37	35	34	30				30
5	72	62	54	49	66	57	51	46	49	45	41	42	38	36	35	32	31	27				27
6	67	56	49	44	61	52	46	41	45	40	37	38	35	32	32	30	28	25				25
7	62	51	44	39	57	48	41	37	41	37	33	35	32	29	30	27	25	23				23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21				21
9	54	43	36	32	50	40	34	30	35	31	27	31	27	24	26	23	22	19				19
10	51	40	33	29	47	38	32	28	33	28	25	29	25	22	24	22	20	18				18

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

	0°	45°	90°
0°	19555	19555	19555
5°	19241	19192	19335
10°	18003	18242	18752
15°	16367	16885	17825
20°	14528	15283	16621
25°	12652	13653	15272
30°	10837	12028	13993
35°	8986	10210	12450
40°	6904	8163	10608
45°	4991	6181	8536
50°	3400	4607	6771
55°	2210	3331	5262
60°	1268	2347	3803
65°	336	1432	1925
70°	167	442	553
75°	75	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	3.4
10°-20°	494.7	8.7
20°-30°	619.3	10.9
30°-40°	572.0	10.1
40°-50°	384.4	6.8
50°-60°	198.5	3.5
60°-70°	62.2	1.1
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	249.4	4.4
100°-110°	602.8	10.6
110°-120°	642.9	11.4
120°-130°	520.7	9.2
130°-140°	403.1	7.1
140°-150°	307.5	5.4
150°-160°	222.6	3.9
160°-170°	137.1	2.4
170°-180°	46.4	0.8
0°-30°	1307.3	23.1
0°-40°	1879.3	33.2
0°-60°	2462.2	43.5
0°-90°	2528.4	44.7
90°-120°	1495.1	26.4
90°-150°	2726.5	48.2
90°-180°	3133.0	55.3
0°-180°	5661.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2078	2056	2072	2080	2088	193
15°	1714	1707	1768	1827	1866	477
25°	1243	1253	1341	1433	1500	570
35°	798	818	906	1013	1105	494
45°	382	406	474	566	654	300
55°	137	160	207	266	327	128
65°	15	29	66	79	88	26
75°	2	2	1	0	0	3
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	



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CATALOG NUMBER: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2119.5	2119.5	2119.5	2119.5	2119.5
2.5°	2124.4	2104.4	2109.7	2109.5	2103.9
5°	2077.5	2056.4	2072.3	2079.7	2087.7
7.5°	1989.7	1973.3	2003.8	2026.8	2043.4
10°	1921.6	1907.6	1947.2	1978.5	2001.6
12.5°	1842.9	1832.0	1880.0	1922.9	1952.4
15°	1713.5	1707.4	1767.8	1827.1	1866.2
17.5°	1574.8	1574.6	1643.5	1717.2	1764.3
20°	1479.7	1482.7	1556.6	1637.8	1692.9
22.5°	1384.5	1391.5	1470.4	1555.1	1618.3
25°	1242.8	1252.8	1341.2	1433.0	1500.2
27.5°	1106.6	1121.3	1214.3	1309.7	1391.5
30°	1017.2	1034.2	1129.0	1229.3	1313.5
32.5°	929.4	949.7	1042.0	1148.1	1234.0
35°	797.8	817.8	906.5	1013.1	1105.4
37.5°	661.8	681.4	768.0	873.0	972.7
40°	573.2	595.3	677.8	779.6	880.8
42.5°	492.8	514.9	592.5	692.5	788.1
45°	382.5	405.5	473.7	566.0	654.2
47.5°	291.0	316.1	375.9	459.4	539.8
50°	236.9	261.9	321.0	394.5	471.7
52.5°	193.4	217.7	270.9	340.2	411.0
55°	137.4	160.5	207.1	265.9	327.1
57.5°	95.0	114.8	156.7	205.8	253.7
60°	68.7	87.8	127.2	167.0	206.1
62.5°	45.7	63.2	101.7	132.3	158.5
65°	15.4	29.4	65.6	79.2	88.2
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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)