

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: P518554

Luminaire Tested: **SQ4-BB-075U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518554
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-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

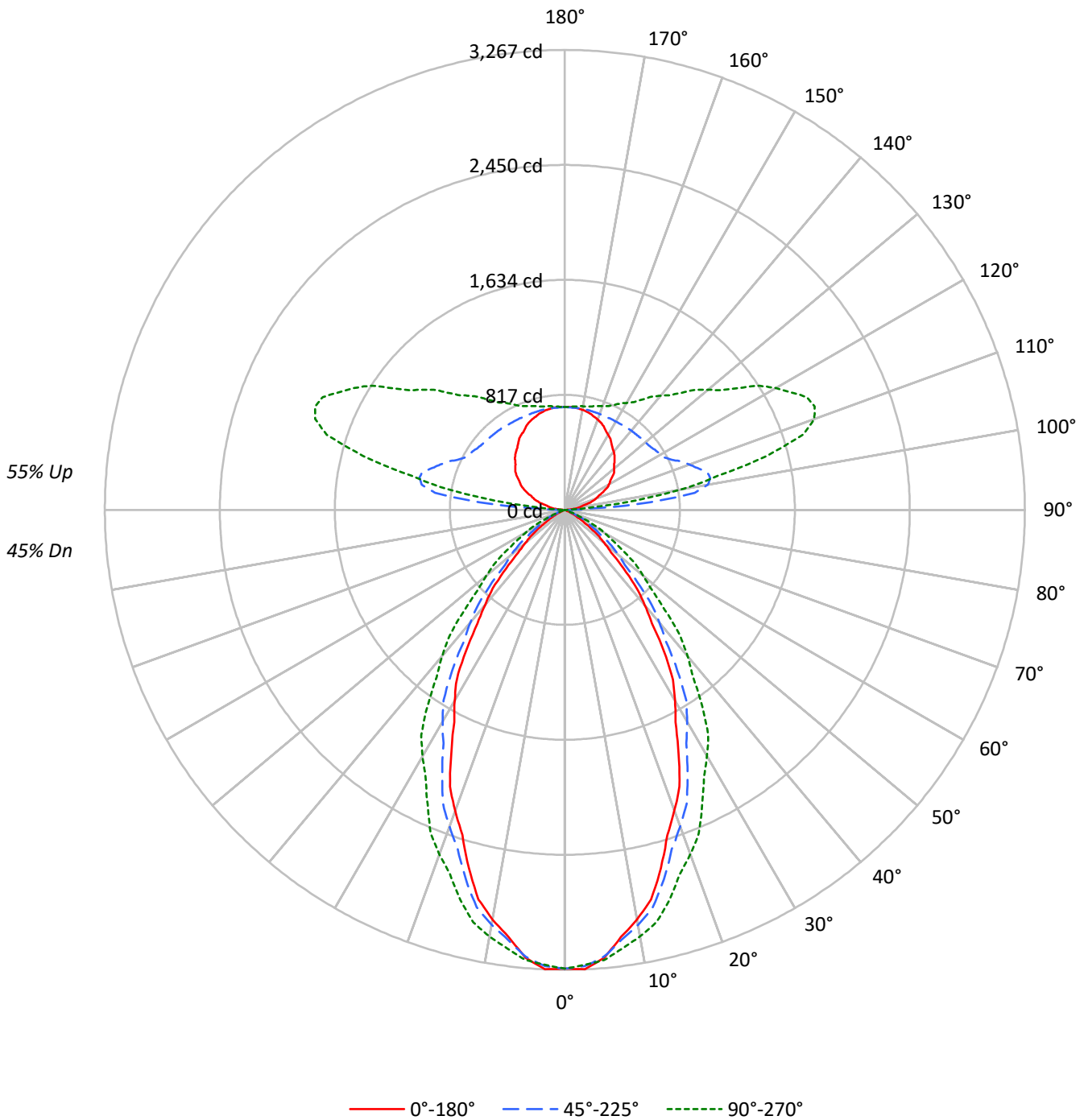
Lumens per Lamp: N/A
Luminaire Lumens: 8654.3 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7849	9572
40°	5308	6276	8156
45°	3837	4753	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1804	2924
65°	259	1101	1480
70°	128	340	425
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.4	3.4
10°-20°	760.6	8.8
20°-30°	952.2	11.0
30°-40°	879.5	10.2
40°-50°	591.0	6.8
50°-60°	305.3	3.5
60°-70°	95.6	1.1
70°-80°	6.1	0.1
80°-90°	2.0	0.0
90°-100°	344.9	4.0
100°-110°	949.1	11.0
110°-120°	979.6	11.3
120°-130°	784.8	9.1
130°-140°	616.4	7.1
140°-150°	472.4	5.5
150°-160°	339.7	3.9
160°-170°	207.7	2.4
170°-180°	70.0	0.8
0°-30°	2010.3	23.2
0°-40°	2889.8	33.4
0°-60°	3786.1	43.7
0°-90°	3889.7	44.9
90°-120°	2273.6	26.3
90°-150°	4147.3	47.9
90°-180°	4765.0	55.1
0°-180°	8654.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3259	3259	3259	3259	3259	
5°	3194	3162	3187	3198	3210	296
15°	2635	2626	2718	2810	2870	734
25°	1911	1926	2062	2204	2307	876
35°	1227	1258	1394	1558	1700	760
45°	588	624	728	870	1006	462
55°	211	247	318	409	503	197
65°	24	45	101	122	136	40
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	11	14	14	3
95°	51	188	610	261	166	54
105°	170	261	1046	1593	1486	179
115°	300	366	839	1670	1895	296
125°	414	472	761	1287	1508	369
135°	500	554	739	1041	1178	385
145°	577	617	728	887	956	362
155°	654	675	724	797	820	300
165°	706	716	727	756	761	199
175°	731	733	728	738	736	69
180°	731	731	731	731	731	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3259.1	3259.1	3259.1	3259.1	3259.1
2.5°	3266.7	3235.9	3244.0	3243.8	3235.2
5°	3194.5	3162.1	3186.6	3197.9	3210.2
7.5°	3059.5	3034.2	3081.3	3116.5	3142.1
10°	2954.8	2933.2	2994.2	3042.3	3077.8
12.5°	2833.7	2817.1	2890.8	2956.8	3002.1
15°	2634.7	2625.5	2718.3	2809.5	2869.7
17.5°	2421.6	2421.2	2527.2	2640.5	2712.9
20°	2275.2	2279.9	2393.5	2518.4	2603.2
22.5°	2128.9	2139.7	2261.0	2391.3	2488.4
25°	1911.0	1926.4	2062.4	2203.5	2306.8
27.5°	1701.6	1724.1	1867.2	2013.8	2139.6
30°	1564.1	1590.3	1736.0	1890.3	2019.8
32.5°	1429.2	1460.3	1602.3	1765.5	1897.4
35°	1226.7	1257.5	1393.8	1557.9	1699.7
37.5°	1017.6	1047.8	1181.0	1342.4	1495.7
40°	881.4	915.3	1042.2	1198.7	1354.4
42.5°	757.8	791.7	911.0	1064.8	1211.9
45°	588.1	623.6	728.5	870.3	1006.0
47.5°	447.5	486.0	578.0	706.4	830.0
50°	364.2	402.8	493.5	606.6	725.3
52.5°	297.4	334.7	416.6	523.1	632.0
55°	211.3	246.7	318.5	408.9	503.0
57.5°	146.0	176.5	240.9	316.4	390.1
60°	105.6	134.9	195.5	256.8	316.9
62.5°	70.3	97.1	156.4	203.4	243.8
65°	23.7	45.2	100.9	121.7	135.6
67.5°	12.0	14.4	53.0	55.9	60.5
70°	9.5	9.5	25.2	26.9	31.5
72.5°	6.9	6.9	10.1	13.0	13.9
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.2	2.8	2.8
90°	1.6	6.1	10.9	14.0	14.0
92.5°	21.5	91.8	159.0	61.1	50.1
95°	51.4	188.3	610.0	260.8	166.5
97.5°	83.7	208.8	930.9	717.2	506.1
100°	107.4	221.5	1031.7	1041.4	849.6
102.5°	129.8	236.6	1057.9	1291.9	1116.1
105°	169.6	260.9	1045.7	1592.6	1486.1
107.5°	207.6	291.0	986.3	1739.8	1771.5
110°	235.0	311.1	941.5	1776.5	1886.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	259.9	333.5	896.6	1752.9	1919.6
115°	300.3	365.8	838.8	1670.2	1895.4
117.5°	338.9	399.2	802.0	1554.1	1808.8
120°	362.6	420.4	785.8	1467.2	1730.4
122.5°	383.7	441.6	774.6	1390.9	1640.8
125°	413.9	471.7	760.9	1287.3	1507.9
127.5°	442.6	497.6	751.9	1200.7	1394.3
130°	457.5	513.8	746.9	1149.3	1325.8
132.5°	474.9	531.2	743.2	1104.1	1263.6
135°	499.5	554.3	739.2	1041.0	1178.0
137.5°	522.5	573.4	735.7	990.1	1103.0
140°	540.0	587.1	734.5	956.2	1058.2
142.5°	554.9	598.4	732.0	926.0	1013.3
145°	577.3	616.9	728.3	887.0	955.5
147.5°	601.3	635.4	726.4	852.4	907.2
150°	616.2	646.7	725.2	833.5	876.1
152.5°	629.9	657.9	723.9	817.1	852.4
155°	653.6	674.9	723.6	797.3	820.1
157.5°	670.7	688.0	723.6	780.9	796.7
160°	683.1	696.8	723.6	772.1	784.3
162.5°	693.1	704.4	724.8	764.6	774.3
165°	706.5	715.6	726.7	756.4	760.9
167.5°	715.8	722.8	728.3	749.5	750.7
170°	722.0	726.6	728.3	746.9	746.9
172.5°	727.0	729.2	728.3	743.2	742.0
175°	731.4	732.9	728.3	737.6	736.0
177.5°	732.6	732.6	727.6	735.1	732.6
180°	731.4	731.4	731.4	731.4	731.4

(END OF REPORT)