

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: P518428

Luminaire Tested: **SQ4-BB-050U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518428
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

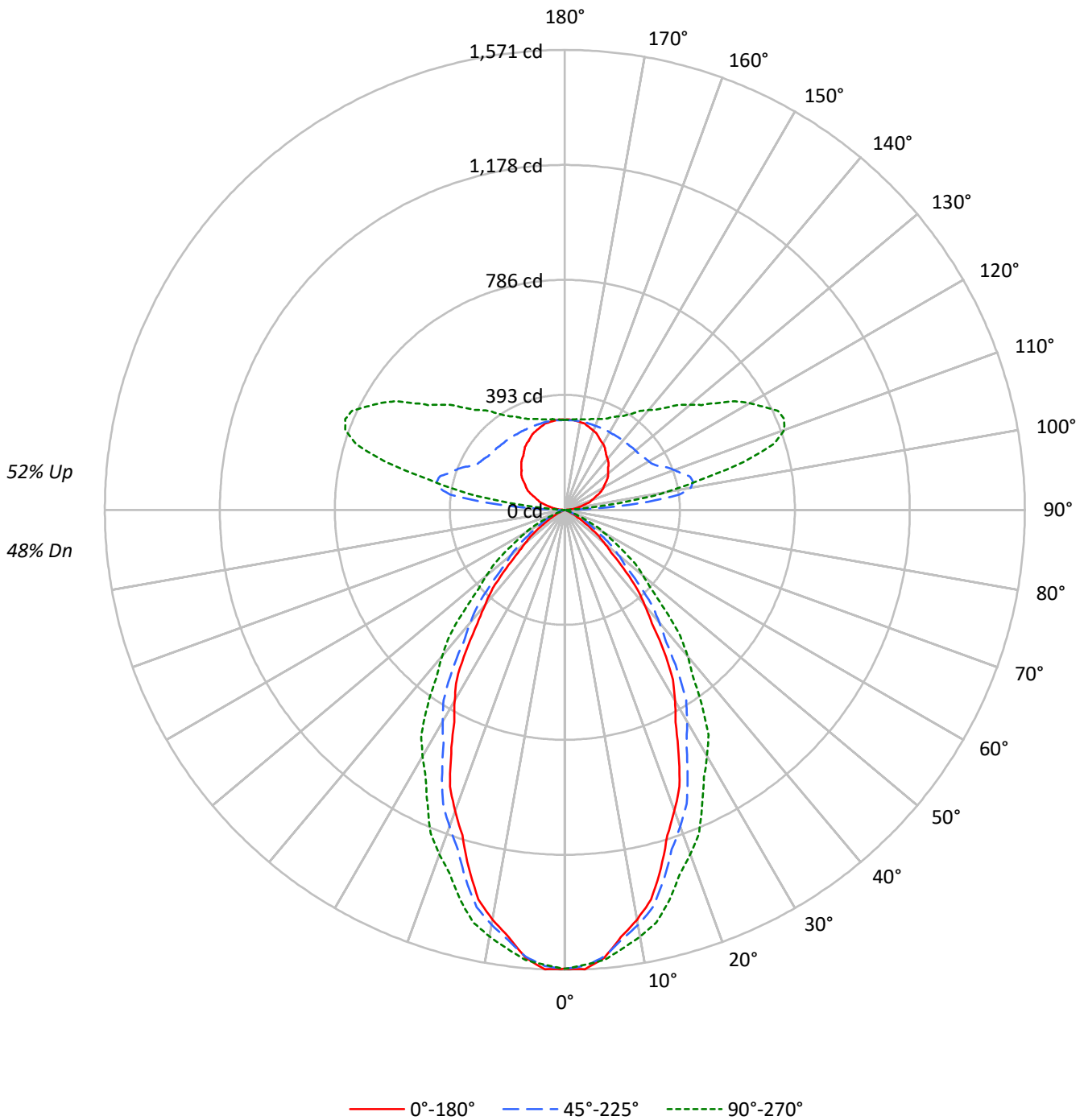
Lumens per Lamp: N/A
Luminaire Lumens: 3882.9 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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				
RC	80					70					50					30				
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	98	98	98	98	82	82	82	68	68	68	54	54	54	48		
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44		
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40		
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36		
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32		
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29		
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27		
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25		
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23		
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21		
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14228	14193	14299
10°	13314	13491	13867
15°	12103	12487	13182
20°	10743	11302	12293
25°	9356	10098	11294
30°	8014	8895	10349
35°	6645	7550	9208
40°	5105	6036	7845
45°	3690	4571	6313
50°	2515	3406	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	3.7
10°-20°	365.8	9.4
20°-30°	458.0	11.8
30°-40°	423.0	10.9
40°-50°	284.2	7.3
50°-60°	146.8	3.8
60°-70°	46.0	1.2
70°-80°	2.9	0.1
80°-90°	1.2	0.0
90°-100°	147.9	3.8
100°-110°	401.8	10.3
110°-120°	413.2	10.6
120°-130°	330.3	8.5
130°-140°	259.5	6.7
140°-150°	199.0	5.1
150°-160°	143.1	3.7
160°-170°	87.5	2.3
170°-180°	29.5	0.8
0°-30°	966.8	24.9
0°-40°	1389.8	35.8
0°-60°	1820.8	46.9
0°-90°	1871.0	48.2
90°-120°	962.9	24.8
90°-150°	1751.8	45.1
90°-180°	2012.0	51.8
0°-180°	3882.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1521	1532	1538	1544	142
15°	1267	1263	1307	1351	1380	353
25°	919	926	992	1060	1109	421
35°	590	605	670	749	818	365
45°	283	300	350	419	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1567.4	1567.4	1567.4	1567.4	1567.4
2.5°	1571.1	1556.2	1560.1	1560.0	1555.9
5°	1536.3	1520.8	1532.5	1538.0	1543.9
7.5°	1471.4	1459.3	1481.9	1498.8	1511.2
10°	1421.1	1410.7	1440.0	1463.2	1480.2
12.5°	1362.8	1354.8	1390.3	1422.0	1443.8
15°	1267.1	1262.7	1307.3	1351.2	1380.1
17.5°	1164.6	1164.5	1215.4	1269.9	1304.7
20°	1094.2	1096.5	1151.1	1211.2	1252.0
22.5°	1023.9	1029.1	1087.4	1150.0	1196.8
25°	919.1	926.5	991.9	1059.7	1109.4
27.5°	818.4	829.2	898.0	968.5	1029.0
30°	752.2	764.8	834.9	909.1	971.4
32.5°	687.3	702.3	770.6	849.1	912.5
35°	590.0	604.8	670.3	749.2	817.5
37.5°	489.4	503.9	568.0	645.6	719.3
40°	423.9	440.2	501.2	576.5	651.4
42.5°	364.4	380.8	438.1	512.1	582.8
45°	282.8	299.9	350.3	418.6	483.8
47.5°	215.2	233.7	278.0	339.7	399.2
50°	175.2	193.7	237.3	291.7	348.8
52.5°	143.0	161.0	200.3	251.6	303.9
55°	101.6	118.7	153.2	196.7	241.9
57.5°	70.2	84.9	115.9	152.2	187.6
60°	50.8	64.9	94.0	123.5	152.4
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.8	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	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°	0.2	0.8	1.4	1.8	1.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.7	703.7	801.6
117.5°	142.3	168.2	338.1	652.9	763.1
120°	152.6	177.8	330.9	618.8	728.3
122.5°	161.3	186.5	326.2	584.6	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.8	588.0
130°	193.2	216.5	315.1	483.2	557.8
132.5°	200.3	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.1	439.2	495.4
137.5°	220.6	241.7	309.9	416.6	463.9
140°	226.9	247.2	309.1	402.2	444.9
142.5°	233.2	252.0	308.3	391.0	426.6
145°	242.8	260.2	307.2	373.2	401.3
147.5°	253.5	268.4	306.2	359.2	381.3
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.1	305.2	335.1	344.8
157.5°	282.6	290.1	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	321.9	326.2
165°	297.2	301.1	306.2	319.1	320.0
167.5°	302.6	304.5	307.2	315.7	316.5
170°	304.2	306.1	307.2	314.1	314.1
172.5°	305.8	306.9	307.2	312.5	312.5
175°	308.1	309.1	307.2	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)