

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: P518658

Luminaire Tested: **SQ4-BB-0U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518658
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (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-0U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

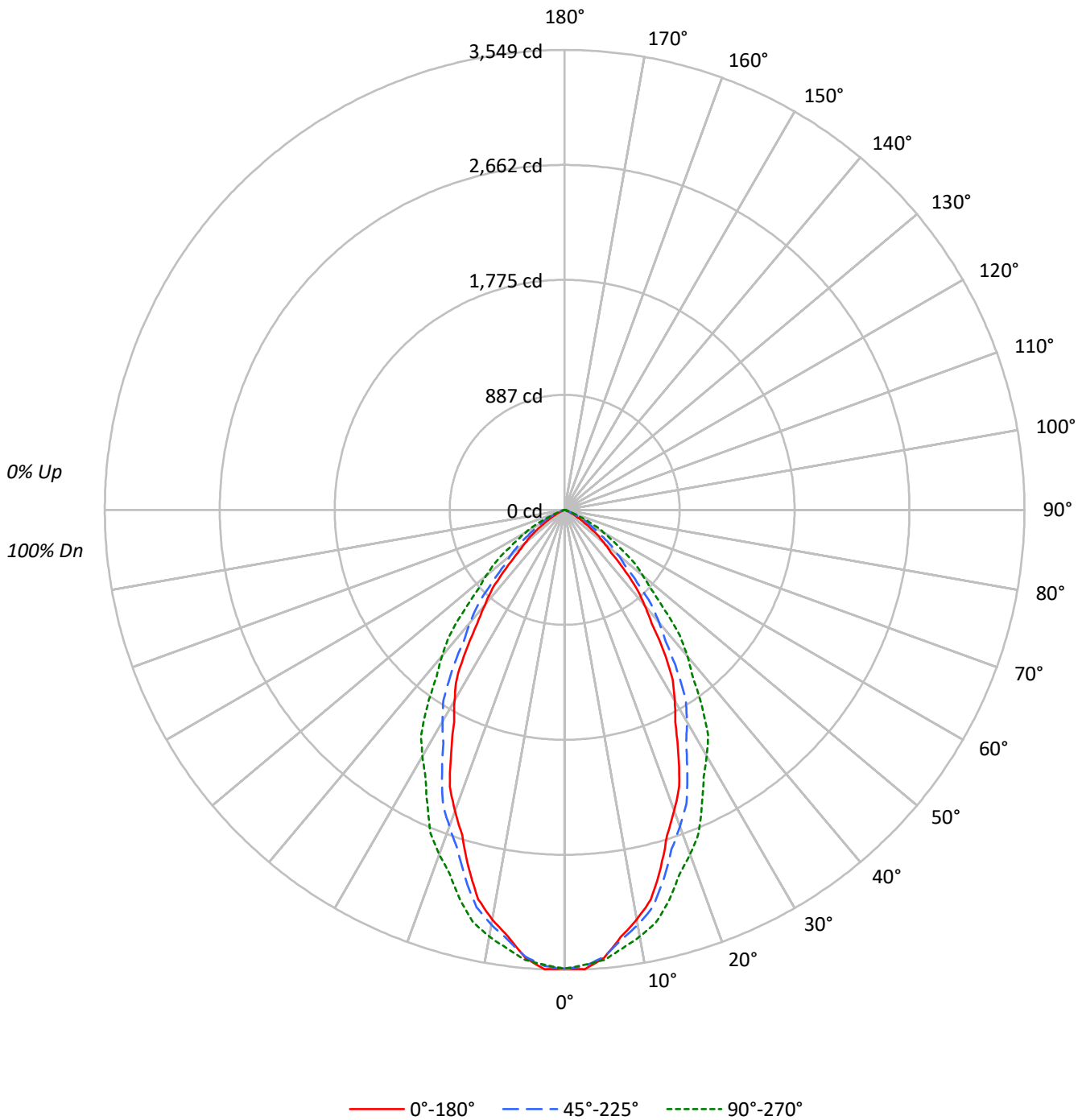
Lumens per Lamp: N/A
Luminaire Lumens: 4223.6 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 71.7
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82				82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74				74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61				61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44				44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41				41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16150
10°	15036	15237	15662
15°	13670	14104	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7129
50°	2840	3847	5655
55°	1846	2783	4395
60°	1059	1960	3177
65°	281	1196	1608
70°	139	370	463
75°	61	30	0
80°	45	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.1	7.7
10°-20°	826.3	19.6
20°-30°	1034.5	24.5
30°-40°	955.5	22.6
40°-50°	642.1	15.2
50°-60°	331.6	7.9
60°-70°	103.9	2.5
70°-80°	6.6	0.2
80°-90°	0.1	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2183.9	51.7
0°-40°	3139.4	74.3
0°-60°	4113.1	97.4
0°-90°	4223.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4223.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3541	3541	3541	3541	3541	
5°	3470	3435	3462	3474	3488	322
15°	2862	2852	2953	3052	3118	797
25°	2076	2093	2240	2394	2506	952
35°	1333	1366	1514	1692	1846	826
45°	639	677	791	946	1093	502
55°	230	268	346	444	546	214
65°	26	49	110	132	147	43
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3540.6	3540.6	3540.6	3540.6	3540.6
2.5°	3548.8	3515.3	3524.2	3523.9	3514.6
5°	3470.4	3435.2	3461.8	3474.1	3487.5
7.5°	3323.7	3296.3	3347.4	3385.7	3413.5
10°	3210.0	3186.6	3252.8	3305.1	3343.6
12.5°	3078.5	3060.4	3140.5	3212.1	3261.4
15°	2862.3	2852.2	2953.1	3052.2	3117.5
17.5°	2630.7	2630.4	2745.5	2868.5	2947.2
20°	2471.7	2476.8	2600.2	2735.9	2828.0
22.5°	2312.8	2324.5	2456.3	2597.8	2703.3
25°	2076.1	2092.8	2240.5	2393.8	2506.0
27.5°	1848.6	1873.0	2028.4	2187.8	2324.4
30°	1699.2	1727.7	1885.9	2053.6	2194.2
32.5°	1552.6	1586.4	1740.7	1918.0	2061.3
35°	1332.6	1366.1	1514.2	1692.4	1846.5
37.5°	1105.5	1138.3	1283.0	1458.4	1624.9
40°	957.5	994.4	1132.2	1302.2	1471.4
42.5°	823.2	860.1	989.7	1156.8	1316.5
45°	638.9	677.4	791.4	945.5	1092.8
47.5°	486.1	528.0	628.0	767.4	901.7
50°	395.7	437.6	536.1	659.0	787.9
52.5°	323.1	363.6	452.6	568.3	686.5
55°	229.5	268.1	346.0	444.3	546.4
57.5°	158.6	191.8	261.7	343.7	423.8
60°	114.8	146.6	212.4	279.0	344.3
62.5°	76.4	105.5	169.9	220.9	264.8
65°	25.7	49.1	109.6	132.2	147.3
67.5°	13.0	15.7	57.6	60.8	65.8
70°	10.3	10.3	27.4	29.2	34.3
72.5°	7.5	7.5	11.0	14.1	15.1
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)