

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: P518645

Luminaire Tested: **SQ4-BB-0U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518645
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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

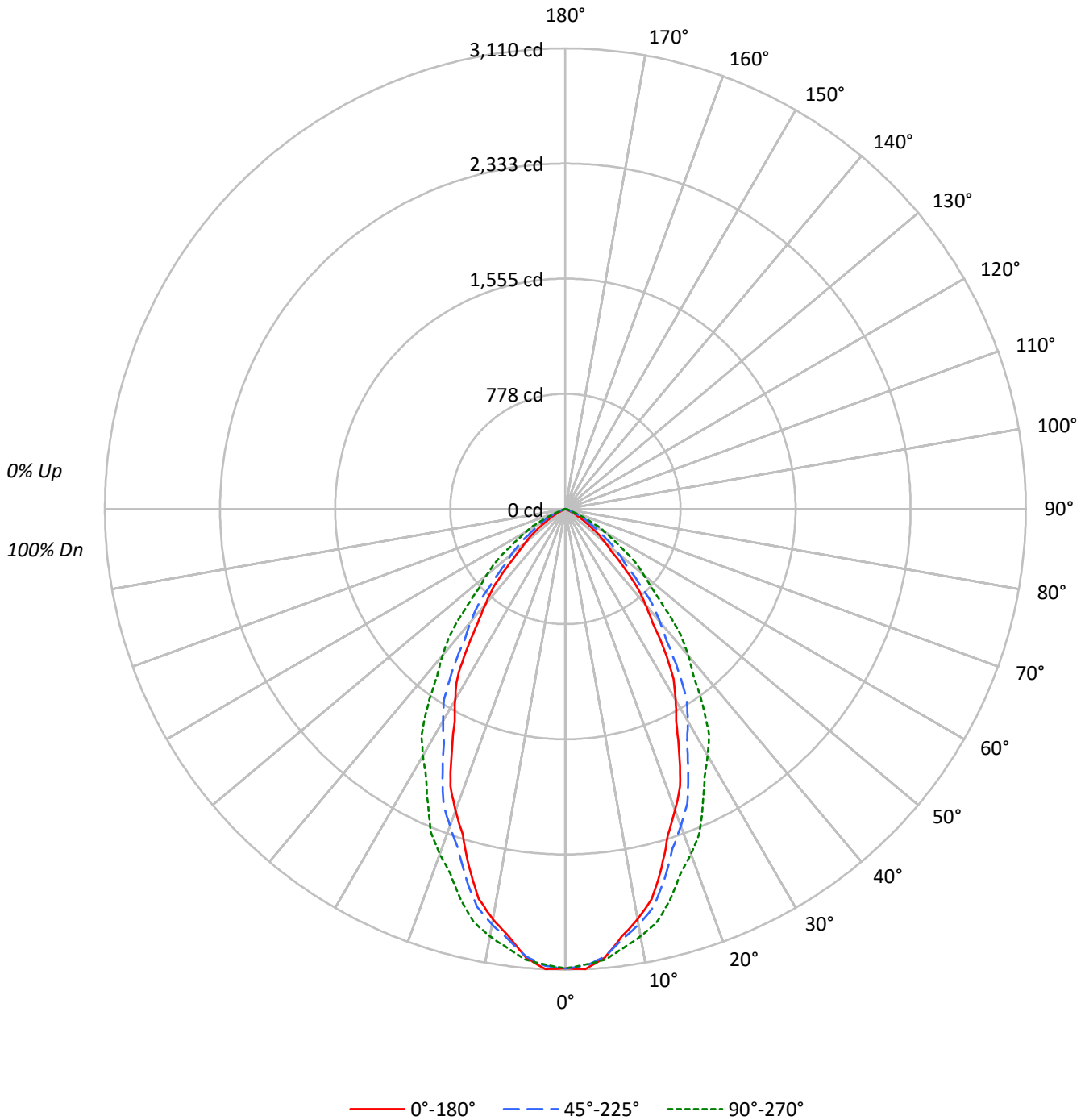
Lumens per Lamp: N/A
Luminaire Lumens: 3701.2 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 55.3
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	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°	19083	19083	19083
5°	18777	18730	18869
10°	17568	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10575	11737	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8331
50°	3318	4495	6607
55°	2157	3251	5134
60°	1238	2289	3711
65°	327	1399	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	7.7
10°-20°	724.1	19.6
20°-30°	906.5	24.5
30°-40°	837.3	22.6
40°-50°	562.6	15.2
50°-60°	290.6	7.9
60°-70°	91.0	2.5
70°-80°	5.7	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°	1913.8	51.7
0°-40°	2751.1	74.3
0°-60°	3604.3	97.4
0°-90°	3701.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3701.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3103	3103	3103	3103	3103	
5°	3041	3010	3034	3044	3056	282
15°	2508	2499	2588	2675	2732	699
25°	1819	1834	1963	2098	2196	834
35°	1168	1197	1327	1483	1618	723
45°	560	594	694	828	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3102.6	3102.6	3102.6	3102.6	3102.6
2.5°	3109.8	3080.5	3088.2	3088.0	3079.8
5°	3041.1	3010.3	3033.6	3044.4	3056.1
7.5°	2912.6	2888.5	2933.3	2966.9	2991.3
10°	2812.9	2792.4	2850.5	2896.3	2930.0
12.5°	2697.7	2681.8	2752.0	2814.8	2858.0
15°	2508.2	2499.4	2587.8	2674.6	2731.9
17.5°	2305.3	2305.0	2405.9	2513.7	2582.7
20°	2166.0	2170.4	2278.6	2397.5	2478.2
22.5°	2026.7	2037.0	2152.5	2276.5	2368.9
25°	1819.3	1833.9	1963.4	2097.7	2196.0
27.5°	1619.9	1641.3	1777.5	1917.1	2036.9
30°	1489.0	1514.0	1652.6	1799.5	1922.8
32.5°	1360.5	1390.2	1525.3	1680.7	1806.3
35°	1167.8	1197.2	1326.9	1483.1	1618.1
37.5°	968.8	997.5	1124.3	1278.0	1423.9
40°	839.1	871.4	992.2	1141.2	1289.4
42.5°	721.4	753.7	867.3	1013.7	1153.7
45°	559.9	593.6	693.5	828.5	957.7
47.5°	426.0	462.7	550.3	672.4	790.1
50°	346.7	383.4	469.8	577.5	690.5
52.5°	283.1	318.6	396.6	498.0	601.6
55°	201.1	234.9	303.2	389.3	478.8
57.5°	139.0	168.1	229.4	301.2	371.4
60°	100.6	128.5	186.1	244.5	301.7
62.5°	66.9	92.5	148.9	193.6	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.4	53.2	57.6
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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)