

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: P518587

Luminaire Tested: **SQ4-BB-0U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518587
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-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

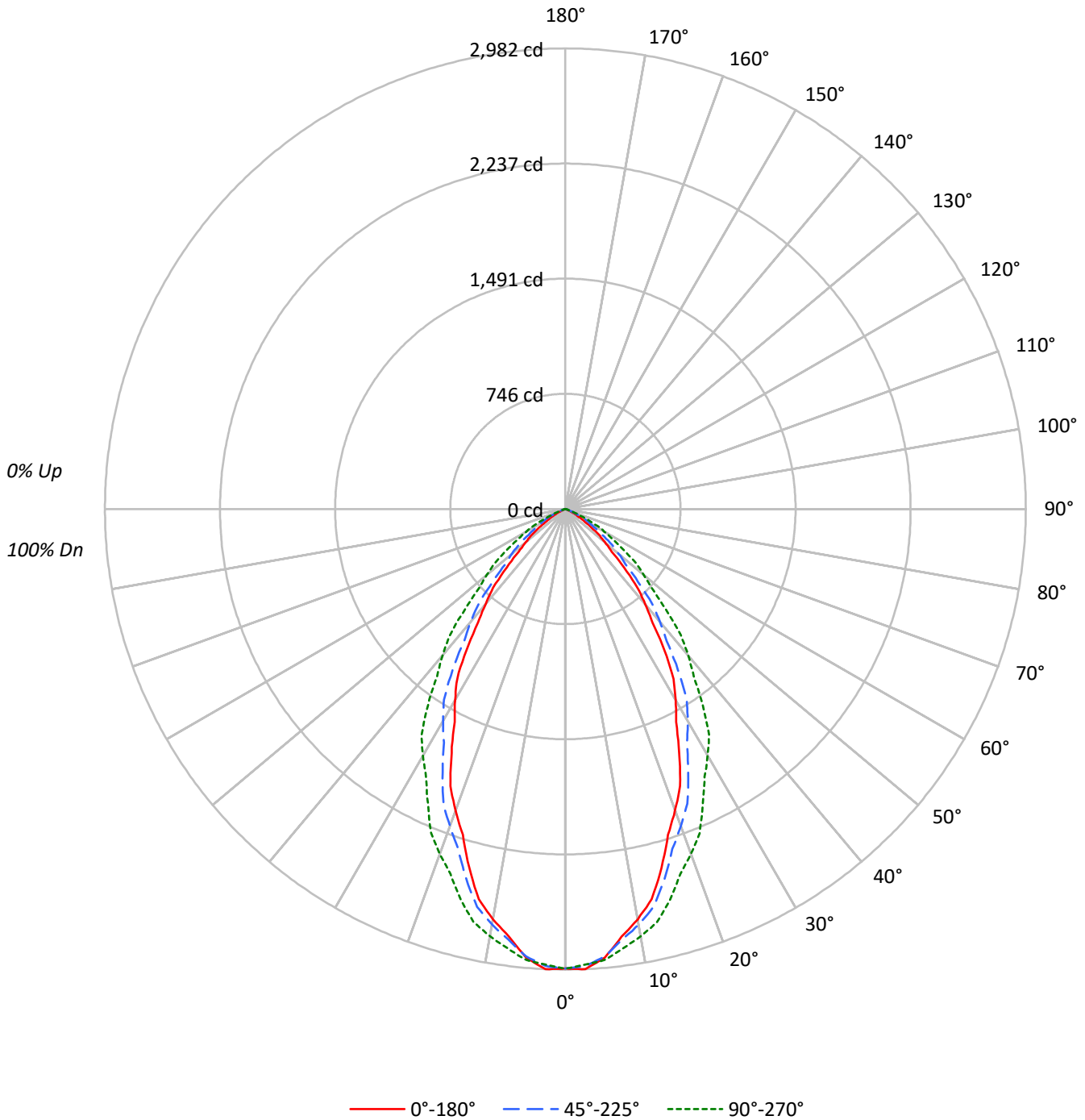
Lumens per Lamp: N/A
Luminaire Lumens: 3549.3 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 53.4
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°	9150	9150	9150
5°	9003	8981	9048
10°	8424	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3231	3820	4964
45°	2335	2892	3994
50°	1591	2155	3168
55°	1034	1559	2462
60°	593	1098	1779
65°	157	670	901
70°	77	207	259
75°	34	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	7.7
10°-20°	694.4	19.6
20°-30°	869.3	24.5
30°-40°	803.0	22.6
40°-50°	539.5	15.2
50°-60°	278.7	7.9
60°-70°	87.3	2.5
70°-80°	5.5	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°	1835.2	51.7
0°-40°	2638.2	74.3
0°-60°	3456.4	97.4
0°-90°	3549.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3549.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2975	2975	2975	2975	2975	
5°	2916	2887	2909	2920	2931	270
15°	2405	2397	2482	2565	2620	670
25°	1745	1759	1883	2012	2106	800
35°	1120	1148	1272	1422	1552	694
45°	537	569	665	794	918	422
55°	193	225	291	373	459	180
65°	22	41	92	111	124	36
75°	3	3	1	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°	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	2982.3	2954.1	2961.5	2961.3	2953.5
5°	2916.3	2886.8	2909.1	2919.5	2930.7
7.5°	2793.1	2770.0	2813.0	2845.2	2868.5
10°	2697.5	2677.8	2733.5	2777.4	2809.8
12.5°	2587.0	2571.8	2639.1	2699.3	2740.7
15°	2405.3	2396.9	2481.6	2564.9	2619.8
17.5°	2210.7	2210.4	2307.2	2410.6	2476.7
20°	2077.1	2081.4	2185.1	2299.1	2376.5
22.5°	1943.5	1953.4	2064.2	2183.1	2271.7
25°	1744.6	1758.7	1882.8	2011.6	2105.9
27.5°	1553.5	1574.0	1704.6	1838.5	1953.3
30°	1427.9	1451.9	1584.8	1725.7	1843.9
32.5°	1304.7	1333.1	1462.8	1611.8	1732.2
35°	1119.9	1148.0	1272.5	1422.2	1551.7
37.5°	929.0	956.6	1078.1	1225.6	1365.5
40°	804.7	835.6	951.5	1094.3	1236.5
42.5°	691.8	722.8	831.7	972.1	1106.4
45°	536.9	569.3	665.0	794.5	918.4
47.5°	408.5	443.7	527.7	644.8	757.7
50°	332.5	367.7	450.5	553.8	662.1
52.5°	271.5	305.5	380.3	477.6	576.9
55°	192.9	225.3	290.8	373.3	459.2
57.5°	133.3	161.2	219.9	288.8	356.1
60°	96.4	123.2	178.5	234.4	289.3
62.5°	64.2	88.7	142.8	185.7	222.5
65°	21.6	41.3	92.1	111.1	123.8
67.5°	10.9	13.2	48.4	51.1	55.3
70°	8.6	8.6	23.0	24.6	28.8
72.5°	6.3	6.3	9.2	11.8	12.7
75°	2.9	2.9	1.4	0.0	0.0
77.5°	1.4	1.4	1.2	0.0	0.0
80°	1.4	1.4	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)