

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: P518657

Luminaire Tested: **SQ4-BB-0U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518657  
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-6  
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**

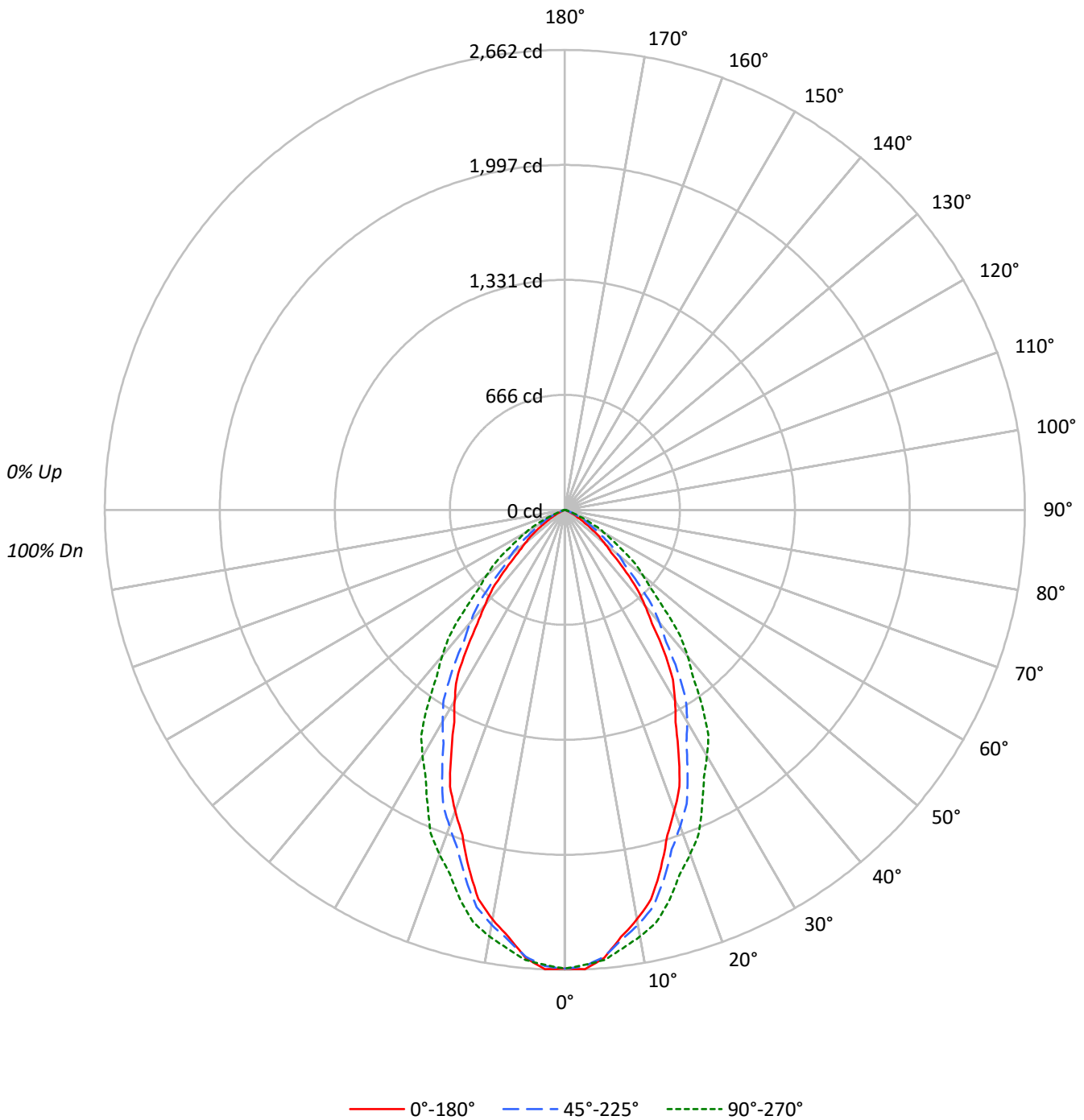
Lumens per Lamp: N/A  
Luminaire Lumens: 3167.7 lumens  
Efficiency: N/A  
Efficacy: 57.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Direct

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°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8528	10399
40°	5766	6818	8860
45°	4168	5163	7129
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	281	1196	1608
70°	138	370	462
75°	62	31	0
80°	46	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.3	7.7
10°-20°	619.7	19.6
20°-30°	775.8	24.5
30°-40°	716.6	22.6
40°-50°	481.5	15.2
50°-60°	248.7	7.9
60°-70°	77.9	2.5
70°-80°	4.9	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°	1637.9	51.7
0°-40°	2354.6	74.3
0°-60°	3084.8	97.4
0°-90°	3167.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3167.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2655	2655	2655	2655	2655	
5°	2603	2576	2596	2606	2616	241
15°	2147	2139	2215	2289	2338	598
25°	1557	1570	1680	1795	1880	714
35°	1000	1025	1136	1269	1385	619
45°	479	508	594	709	820	376
55°	172	201	260	333	410	161
65°	19	37	82	99	110	33
75°	3	3	1	0	0	4
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°	2655.4	2655.4	2655.4	2655.4	2655.4
2.5°	2661.6	2636.5	2643.1	2643.0	2635.9
5°	2602.8	2576.4	2596.4	2605.6	2615.6
7.5°	2492.8	2472.2	2510.5	2539.3	2560.1
10°	2407.5	2389.9	2439.6	2478.8	2507.7
12.5°	2308.8	2295.3	2355.3	2409.1	2446.0
15°	2146.7	2139.2	2214.8	2289.1	2338.1
17.5°	1973.0	1972.8	2059.1	2151.4	2210.4
20°	1853.8	1857.6	1950.2	2051.9	2121.0
22.5°	1734.6	1743.4	1842.2	1948.4	2027.5
25°	1557.0	1569.6	1680.4	1795.3	1879.5
27.5°	1386.4	1404.8	1521.3	1640.8	1743.3
30°	1274.4	1295.8	1414.4	1540.2	1645.7
32.5°	1164.4	1189.8	1305.5	1438.5	1546.0
35°	999.5	1024.6	1135.7	1269.3	1384.9
37.5°	829.1	853.8	962.2	1093.8	1218.7
40°	718.1	745.8	849.2	976.7	1103.5
42.5°	617.4	645.1	742.3	867.6	987.4
45°	479.2	508.1	593.5	709.1	819.6
47.5°	364.6	396.0	471.0	575.5	676.3
50°	296.8	328.2	402.1	494.2	591.0
52.5°	242.3	272.7	339.4	426.2	514.9
55°	172.1	201.0	259.5	333.2	409.8
57.5°	119.0	143.8	196.3	257.8	317.8
60°	86.1	109.9	159.3	209.2	258.2
62.5°	57.3	79.2	127.4	165.7	198.6
65°	19.3	36.9	82.2	99.2	110.5
67.5°	9.8	11.8	43.2	45.6	49.3
70°	7.7	7.7	20.6	21.9	25.7
72.5°	5.7	5.7	8.2	10.6	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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)