

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: P518590

Luminaire Tested: **SQ4-BB-0U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518590  
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-8  
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**

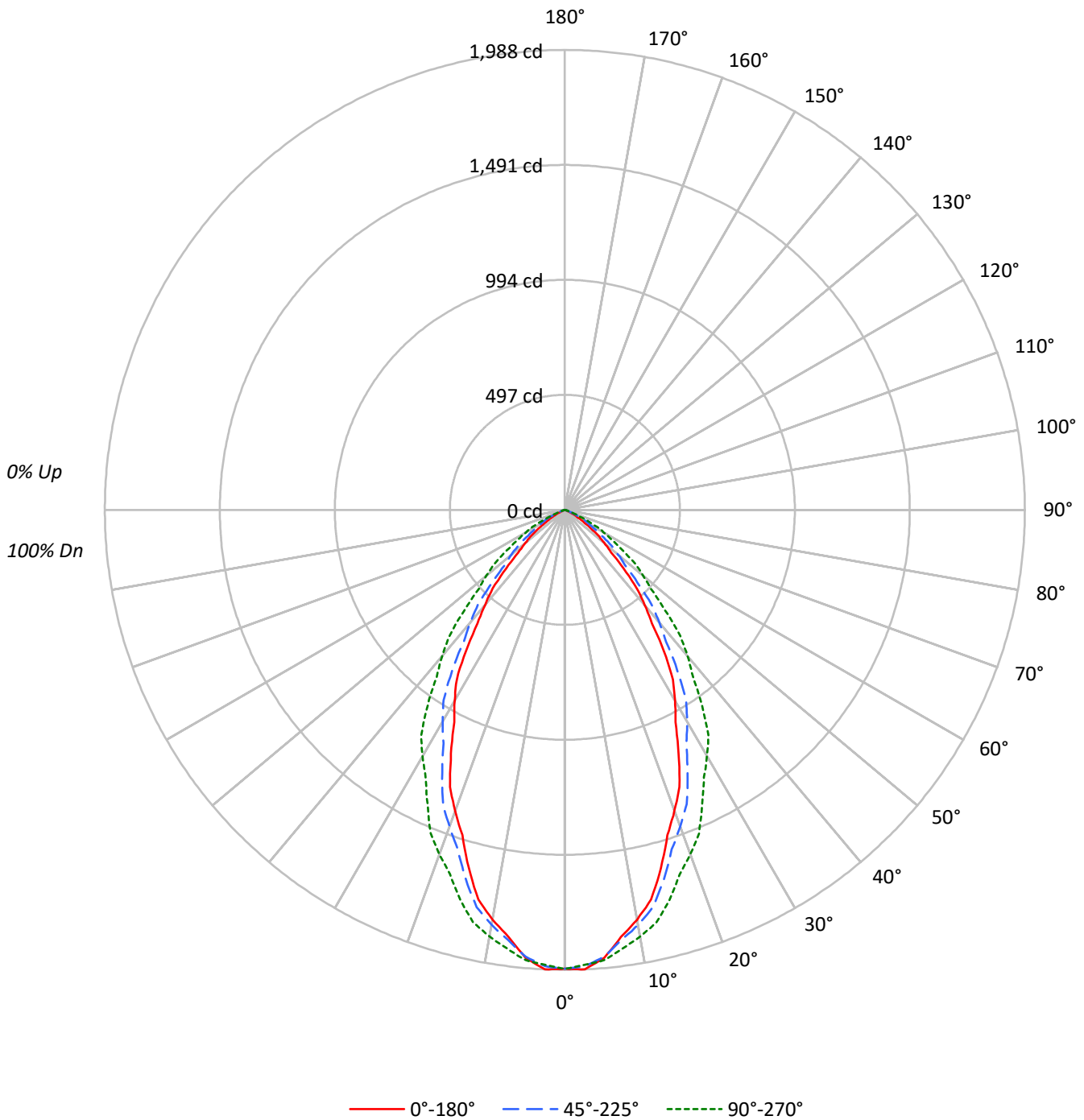
Lumens per Lamp: N/A  
Luminaire Lumens: 2366.2 lumens  
Efficiency: N/A  
Efficacy: 67.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.2  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9151	9151	9151
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°	3230	3820	4964
45°	2335	2893	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1098	1780
65°	157	670	901
70°	78	208	259
75°	34	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.0	7.7
10°-20°	462.9	19.6
20°-30°	579.5	24.5
30°-40°	535.3	22.6
40°-50°	359.7	15.2
50°-60°	185.8	7.9
60°-70°	58.2	2.5
70°-80°	3.7	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°	1223.5	51.7
0°-40°	1758.8	74.3
0°-60°	2304.3	97.4
0°-90°	2366.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2366.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1944	1924	1939	1946	1954	180
15°	1604	1598	1654	1710	1746	447
25°	1163	1172	1255	1341	1404	533
35°	747	765	848	948	1034	462
45°	358	380	443	530	612	281
55°	129	150	194	249	306	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
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°	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	1988.2	1969.4	1974.4	1974.2	1969.0
5°	1944.2	1924.5	1939.4	1946.3	1953.8
7.5°	1862.1	1846.7	1875.3	1896.8	1912.4
10°	1798.4	1785.2	1822.3	1851.6	1873.2
12.5°	1724.7	1714.5	1759.4	1799.6	1827.1
15°	1603.5	1597.9	1654.4	1709.9	1746.5
17.5°	1473.8	1473.6	1538.1	1607.0	1651.1
20°	1384.8	1387.6	1456.7	1532.7	1584.4
22.5°	1295.7	1302.3	1376.1	1455.4	1514.5
25°	1163.1	1172.5	1255.2	1341.1	1403.9
27.5°	1035.6	1049.3	1136.4	1225.7	1302.2
30°	952.0	967.9	1056.6	1150.5	1229.3
32.5°	869.8	888.8	975.2	1074.5	1154.8
35°	746.6	765.4	848.3	948.2	1034.5
37.5°	619.3	637.7	718.8	817.0	910.3
40°	536.4	557.1	634.3	729.6	824.3
42.5°	461.2	481.8	554.5	648.1	737.6
45°	357.9	379.5	443.4	529.7	612.2
47.5°	272.3	295.8	351.8	429.9	505.2
50°	221.7	245.1	300.4	369.2	441.4
52.5°	181.0	203.7	253.5	318.4	384.6
55°	128.6	150.2	193.8	248.9	306.1
57.5°	88.9	107.4	146.6	192.6	237.4
60°	64.3	82.1	119.0	156.3	192.9
62.5°	42.8	59.1	95.2	123.8	148.4
65°	14.4	27.5	61.4	74.1	82.5
67.5°	7.3	8.8	32.2	34.0	36.8
70°	5.8	5.8	15.4	16.4	19.2
72.5°	4.2	4.2	6.1	7.9	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)