

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: P518730

Luminaire Tested: **SQ4-BB-100U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518730
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

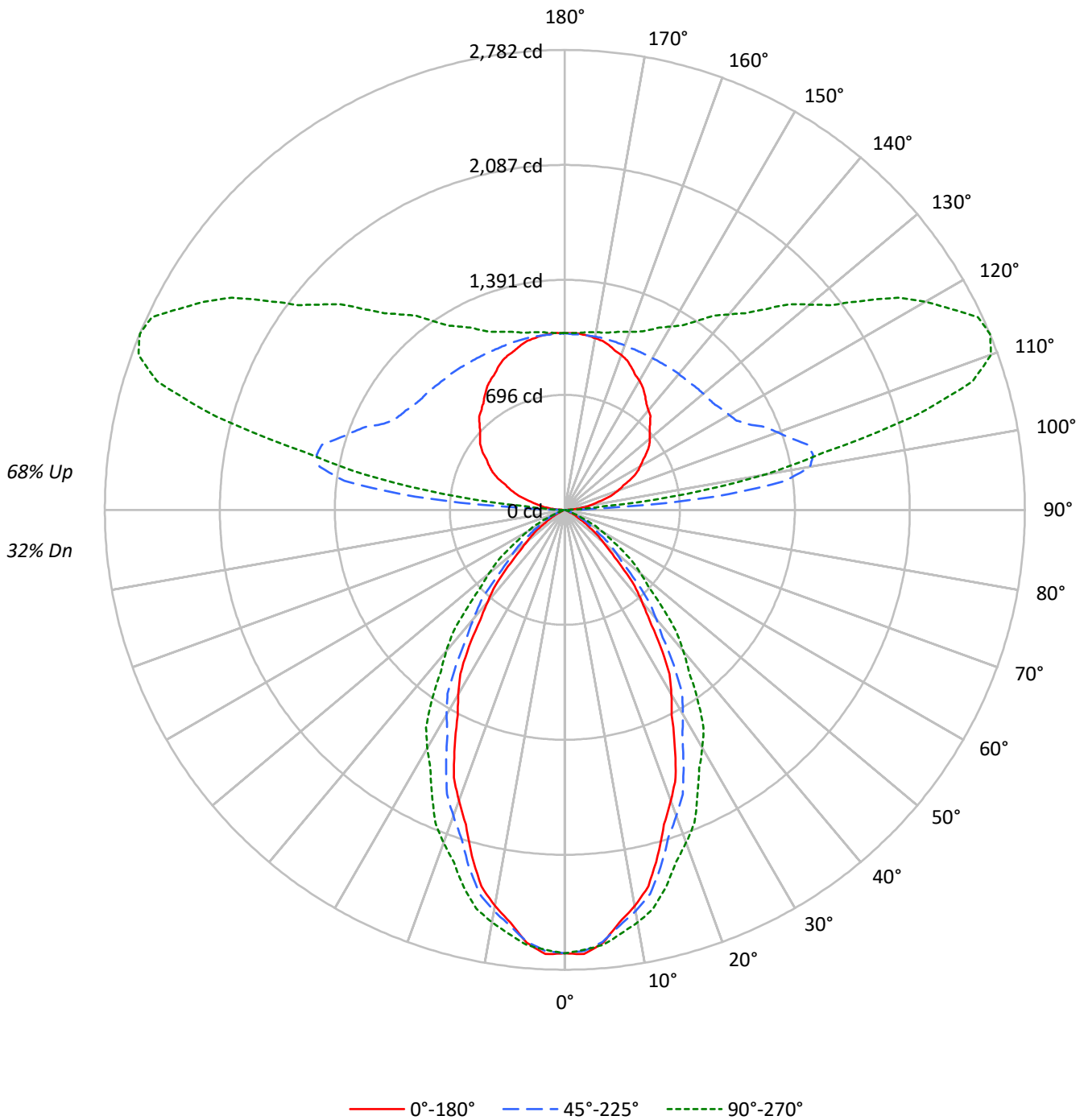
Lumens per Lamp: N/A
Luminaire Lumens: 10146.9 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 103.9
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3159	3912	5402
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	213	907	1218
70°	105	281	351
75°	46	23	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.9	2.4
10°-20°	626.2	6.2
20°-30°	783.9	7.7
30°-40°	724.1	7.1
40°-50°	486.5	4.8
50°-60°	251.3	2.5
60°-70°	78.7	0.8
70°-80°	5.0	0.0
80°-90°	2.3	0.0
90°-100°	500.5	4.9
100°-110°	1381.7	13.6
110°-120°	1425.0	14.0
120°-130°	1145.1	11.3
130°-140°	899.9	8.9
140°-150°	690.2	6.8
150°-160°	496.0	4.9
160°-170°	303.4	3.0
170°-180°	102.3	1.0
0°-30°	1654.9	16.3
0°-40°	2379.0	23.4
0°-60°	3116.8	30.7
0°-90°	3202.8	31.6
90°-120°	3307.2	32.6
90°-150°	6042.4	59.5
90°-180°	6944.0	68.4
0°-180°	10146.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2683	2683	2683	2683	2683	
5°	2630	2603	2623	2633	2643	244
15°	2169	2161	2238	2313	2362	604
25°	1573	1586	1698	1814	1899	721
35°	1010	1035	1148	1282	1399	626
45°	484	513	600	716	828	380
55°	174	203	262	337	414	162
65°	20	37	83	100	112	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	7	14	15	17	5
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2683.0	2683.0	2683.0	2683.0	2683.0
2.5°	2689.2	2663.9	2670.5	2670.4	2663.3
5°	2629.8	2603.1	2623.3	2632.6	2642.8
7.5°	2518.7	2497.9	2536.6	2565.6	2586.7
10°	2432.5	2414.7	2464.9	2504.5	2533.7
12.5°	2332.8	2319.1	2379.8	2434.1	2471.4
15°	2169.0	2161.4	2237.8	2312.9	2362.4
17.5°	1993.5	1993.2	2080.5	2173.7	2233.4
20°	1873.0	1876.9	1970.4	2073.2	2143.0
22.5°	1752.6	1761.5	1861.4	1968.6	2048.5
25°	1573.2	1585.9	1697.8	1814.0	1899.0
27.5°	1400.8	1419.4	1537.1	1657.8	1761.4
30°	1287.6	1309.2	1429.1	1556.2	1662.8
32.5°	1176.5	1202.2	1319.0	1453.4	1562.0
35°	1009.9	1035.2	1147.5	1282.5	1399.3
37.5°	837.7	862.6	972.2	1105.1	1231.3
40°	725.6	753.5	858.0	986.8	1115.0
42.5°	623.8	651.8	750.0	876.6	997.7
45°	484.2	513.4	599.7	716.4	828.1
47.5°	368.4	400.1	475.9	581.5	683.3
50°	299.8	331.6	406.3	499.4	597.1
52.5°	244.8	275.5	342.9	430.6	520.2
55°	173.9	203.1	262.2	336.6	414.1
57.5°	120.2	145.3	198.3	260.5	321.1
60°	87.0	111.1	161.0	211.4	260.9
62.5°	57.9	80.0	128.8	167.4	200.7
65°	19.5	37.2	83.1	100.2	111.6
67.5°	9.9	11.9	43.6	46.0	49.8
70°	7.8	7.8	20.8	22.2	26.0
72.5°	5.7	5.7	8.3	10.7	11.4
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°	0.7	1.4	2.7	3.1	3.4
90°	3.4	6.8	13.7	15.4	17.1
92.5°	30.8	127.8	228.5	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.8
97.5°	121.7	303.3	1345.1	1035.6	750.0
100°	157.3	322.8	1506.5	1517.1	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.2	2320.8	2185.3
107.5°	304.4	423.4	1435.3	2536.0	2585.5
110°	345.4	452.4	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.7	2782.5
115°	441.2	533.1	1224.3	2423.8	2756.5
117.5°	492.5	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.9	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.2
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.5	1087.2	1609.9	1841.6
135°	728.4	807.0	1079.0	1521.2	1715.1
137.5°	766.1	837.6	1074.9	1446.6	1612.2
140°	786.6	856.8	1072.2	1396.9	1542.4
142.5°	809.8	874.7	1069.4	1352.8	1480.8
145°	844.7	903.2	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.3	1322.8
150°	902.9	944.7	1060.2	1217.2	1279.1
152.5°	922.0	961.1	1058.8	1192.3	1243.5
155°	952.5	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.6	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.3	1130.6
165°	1031.1	1044.5	1061.9	1103.1	1111.5
167.5°	1046.8	1054.9	1063.6	1095.1	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.7	1070.4	1063.6	1078.9	1075.6
177.5°	1071.5	1070.1	1063.3	1072.8	1070.1
180°	1068.7	1068.7	1068.7	1068.7	1068.7

(END OF REPORT)