

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: P518944

Luminaire Tested: **SQ4-BB-150U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518944
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

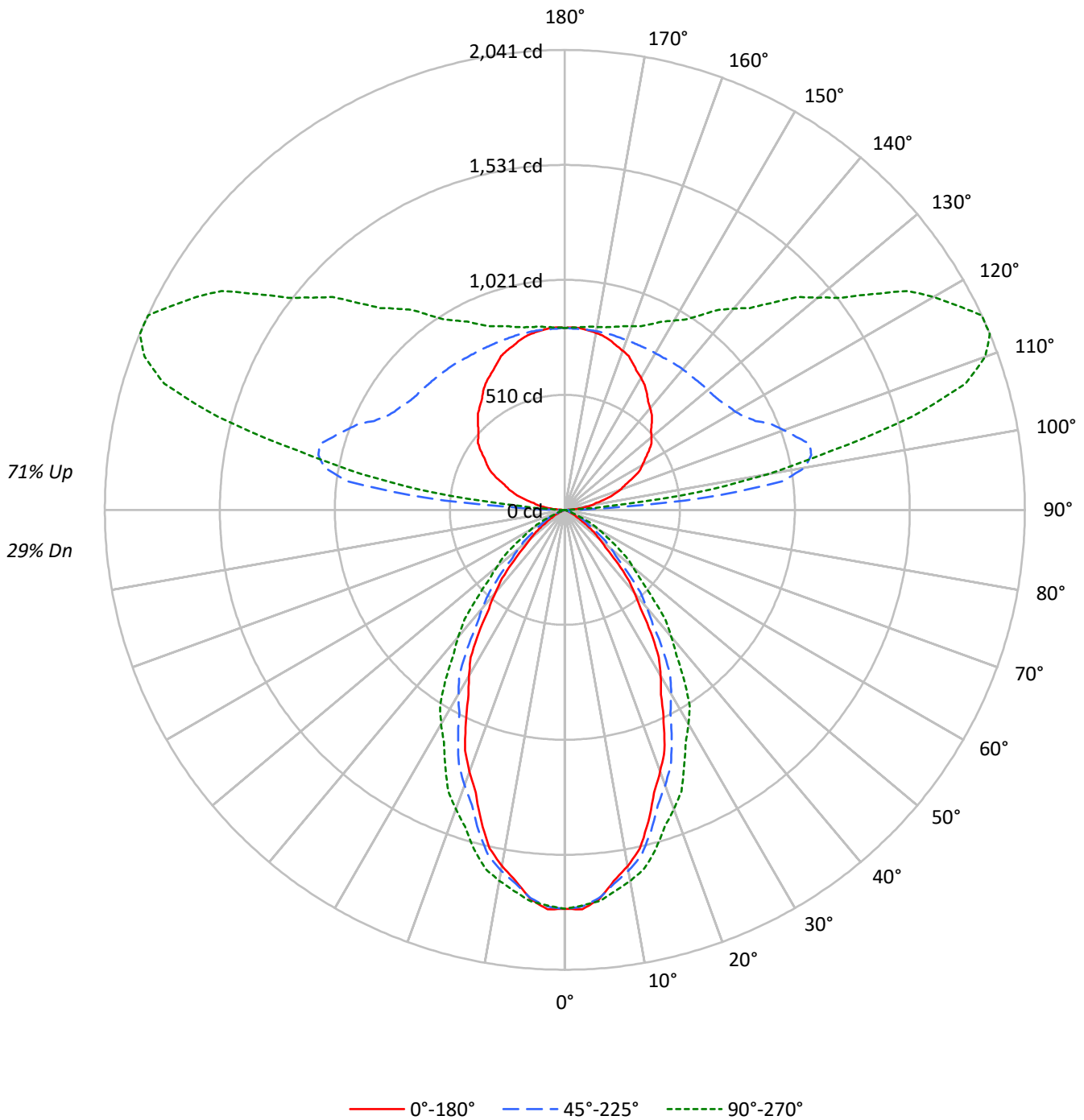
Lumens per Lamp: N/A
Luminaire Lumens: 7321.1 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	0
RCR																		
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13669	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5767	6818	8861
45°	4169	5163	7129
50°	2839	3848	5655
55°	1847	2783	4395
60°	1059	1960	3176
65°	279	1196	1609
70°	138	370	461
75°	61	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	2.2
10°-20°	413.2	5.6
20°-30°	517.2	7.1
30°-40°	477.8	6.5
40°-50°	321.0	4.4
50°-60°	165.8	2.3
60°-70°	51.9	0.7
70°-80°	3.3	0.0
80°-90°	1.7	0.0
90°-100°	375.4	5.1
100°-110°	1014.9	13.9
110°-120°	1067.1	14.6
120°-130°	866.7	11.8
130°-140°	679.9	9.3
140°-150°	521.8	7.1
150°-160°	375.3	5.1
160°-170°	229.3	3.1
170°-180°	77.3	1.1
0°-30°	1091.9	14.9
0°-40°	1569.7	21.4
0°-60°	2056.5	28.1
0°-90°	2113.5	28.9
90°-120°	2457.4	33.6
90°-150°	4525.8	61.8
90°-180°	5208.0	71.1
0°-180°	7321.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1735	1718	1731	1737	1744	161
15°	1431	1426	1476	1526	1559	399
25°	1038	1046	1120	1197	1253	476
35°	666	683	757	846	923	413
45°	320	339	396	473	546	251
55°	115	134	173	222	273	107
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	11	12	11	4
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2041	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	681	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.3	1770.3	1770.3	1770.3	1770.3
2.5°	1774.4	1757.7	1762.1	1762.0	1757.3
5°	1735.2	1717.6	1730.9	1737.0	1743.7
7.5°	1661.9	1648.1	1673.7	1692.8	1706.7
10°	1605.0	1593.3	1626.4	1652.5	1671.8
12.5°	1539.2	1530.2	1570.2	1606.1	1630.7
15°	1431.1	1426.1	1476.5	1526.1	1558.8
17.5°	1315.3	1315.2	1372.7	1434.3	1473.6
20°	1235.9	1238.4	1300.1	1368.0	1414.0
22.5°	1156.4	1162.3	1228.2	1298.9	1351.7
25°	1038.0	1046.4	1120.2	1196.9	1253.0
27.5°	924.3	936.5	1014.2	1093.9	1162.2
30°	849.6	863.8	943.0	1026.8	1097.1
32.5°	776.3	793.2	870.3	959.0	1030.7
35°	666.3	683.1	757.1	846.2	923.3
37.5°	552.8	569.2	641.5	729.2	812.4
40°	478.8	497.2	566.1	651.1	735.7
42.5°	411.6	430.0	494.9	578.4	658.3
45°	319.5	338.7	395.7	472.7	546.4
47.5°	243.1	264.0	314.0	383.7	450.8
50°	197.8	218.8	268.1	329.5	394.0
52.5°	161.5	181.8	226.3	284.1	343.3
55°	114.8	134.0	173.0	222.1	273.2
57.5°	79.3	95.9	130.9	171.9	211.9
60°	57.4	73.3	106.2	139.5	172.1
62.5°	38.2	52.8	85.0	110.5	132.4
65°	12.8	24.6	54.8	66.1	73.7
67.5°	6.5	7.8	28.8	30.4	32.9
70°	5.1	5.1	13.7	14.6	17.1
72.5°	3.8	3.8	5.5	7.0	7.5
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.3	1.0	2.3	2.4	2.3
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.7	90.0	177.5	77.1	55.8
95°	58.3	204.5	624.3	323.1	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.6	1081.6	1128.0	912.0
102.5°	144.3	263.5	1119.8	1372.6	1211.1
105°	188.7	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.6	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.9	1888.9	1984.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.6	1879.2	2040.6
115°	332.1	406.1	933.8	1807.6	2040.6
117.5°	373.2	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.0	1619.8	1889.3
122.5°	421.9	488.5	858.1	1535.7	1807.2
125°	454.7	521.0	841.6	1420.2	1668.5
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.8	1465.0
132.5°	519.1	585.5	823.5	1215.3	1396.8
135°	545.1	609.7	819.0	1146.7	1298.1
137.5°	571.4	632.4	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.1
145°	633.8	681.4	807.7	981.6	1056.4
147.5°	658.3	700.5	803.9	944.0	1001.4
150°	676.4	713.8	802.5	923.5	969.4
152.5°	693.1	725.8	801.8	904.6	942.3
155°	715.5	743.6	800.8	880.5	909.4
157.5°	738.8	758.4	800.9	863.8	882.8
160°	752.1	768.2	801.6	853.2	866.8
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.6	839.9
167.5°	790.3	795.6	804.4	827.8	829.8
170°	797.3	799.8	805.1	824.2	824.2
172.5°	802.8	803.3	805.1	820.0	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)