

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: P518743

Luminaire Tested: **SQ4-BB-100U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518743
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-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

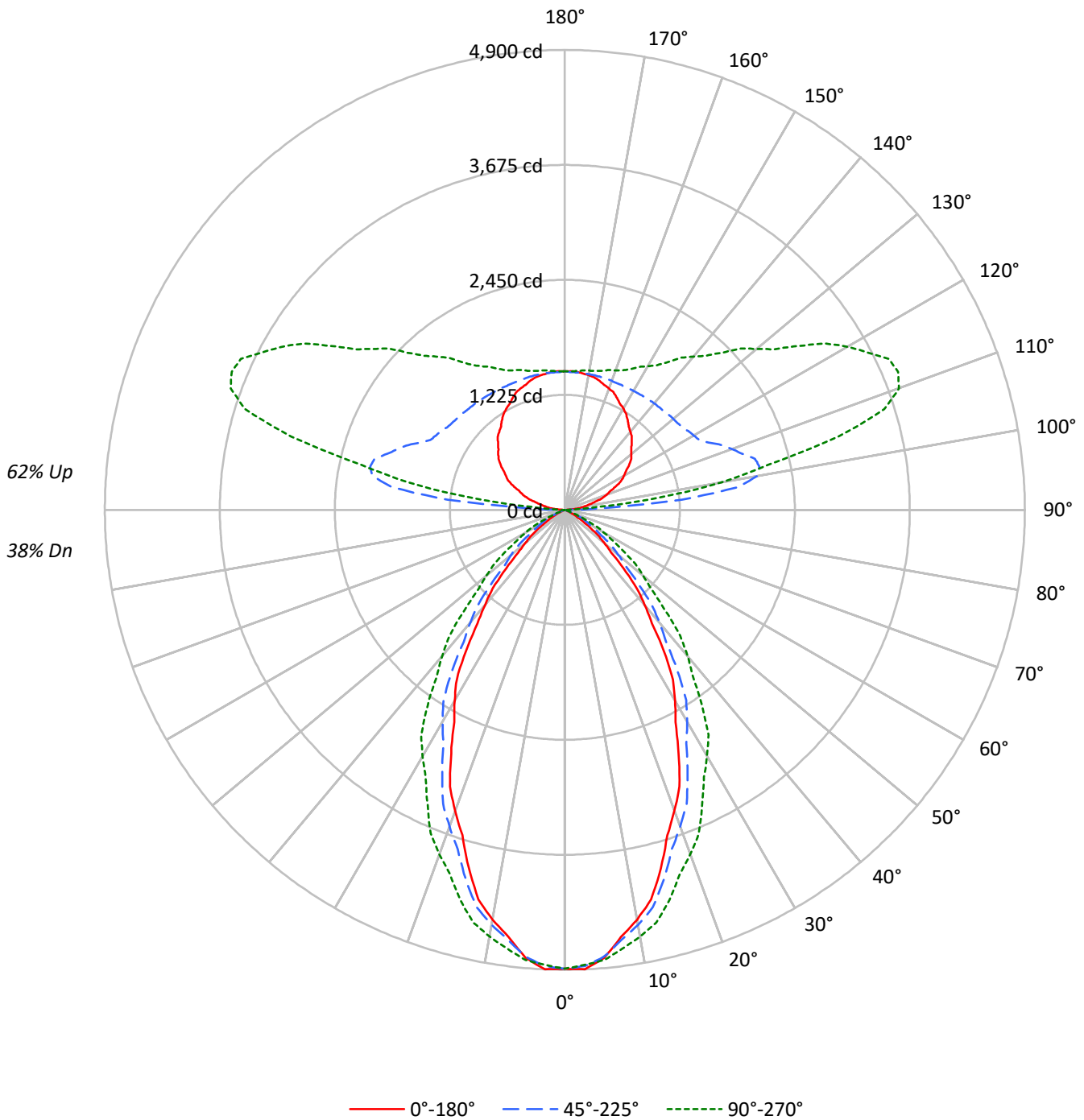
Lumens per Lamp: N/A
Luminaire Lumens: 15422.9 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 182.2
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11170	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	975	1804	2924
65°	258	1102	1480
70°	128	340	425
75°	56	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.1	2.9
10°-20°	1140.9	7.4
20°-30°	1428.3	9.3
30°-40°	1319.3	8.6
40°-50°	886.5	5.7
50°-60°	457.9	3.0
60°-70°	143.4	0.9
70°-80°	9.1	0.1
80°-90°	3.2	0.0
90°-100°	691.1	4.5
100°-110°	1907.8	12.4
110°-120°	1967.5	12.8
120°-130°	1581.1	10.3
130°-140°	1242.6	8.1
140°-150°	953.0	6.2
150°-160°	684.9	4.4
160°-170°	418.9	2.7
170°-180°	141.2	0.9
0°-30°	3015.4	19.6
0°-40°	4334.7	28.1
0°-60°	5679.1	36.8
0°-90°	5834.8	37.8
90°-120°	4566.4	29.6
90°-150°	8343.0	54.1
90°-180°	9588.0	62.2
0°-180°	15422.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4889	4889	4889	4889	4889	
5°	4792	4743	4780	4797	4815	444
15°	3952	3938	4077	4214	4304	1101
25°	2866	2890	3094	3305	3460	1314
35°	1840	1886	2091	2337	2550	1140
45°	882	935	1093	1305	1509	693
55°	317	370	478	613	754	296
65°	36	68	151	183	203	60
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	5	9	19	21	24	7
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

TEST NUMBER: P518743

CATALOG NUMBER: SQ4-BB-100U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4888.7	4888.7	4888.7	4888.7	4888.7
2.5°	4900.0	4853.8	4866.0	4865.7	4852.7
5°	4791.7	4743.1	4779.9	4796.9	4815.4
7.5°	4589.3	4551.3	4621.9	4674.8	4713.2
10°	4432.2	4399.8	4491.3	4563.5	4616.7
12.5°	4250.6	4225.6	4336.2	4435.2	4503.2
15°	3952.1	3938.2	4077.4	4214.3	4304.5
17.5°	3632.3	3631.9	3790.8	3960.7	4069.4
20°	3412.9	3419.8	3590.2	3777.6	3904.8
22.5°	3193.4	3209.6	3391.6	3586.9	3732.6
25°	2866.5	2889.6	3093.6	3305.2	3460.2
27.5°	2552.4	2586.2	2800.8	3020.7	3209.5
30°	2346.2	2385.5	2604.0	2835.4	3029.7
32.5°	2143.7	2190.4	2403.4	2648.2	2846.2
35°	1840.1	1886.3	2090.8	2336.8	2549.6
37.5°	1526.4	1571.8	1771.5	2013.7	2243.5
40°	1322.1	1373.0	1563.3	1798.1	2031.6
42.5°	1136.7	1187.5	1366.6	1597.2	1817.8
45°	882.2	935.4	1092.7	1305.4	1508.9
47.5°	671.2	729.0	867.0	1059.5	1245.0
50°	546.3	604.2	740.3	909.9	1087.9
52.5°	446.1	502.0	624.9	784.7	947.9
55°	316.9	370.1	477.8	613.4	754.5
57.5°	219.0	264.8	361.4	474.6	585.1
60°	158.5	202.4	293.3	385.2	475.4
62.5°	105.5	145.7	234.6	305.1	365.6
65°	35.5	67.9	151.4	182.6	203.4
67.5°	18.0	21.7	79.5	83.9	90.8
70°	14.2	14.2	37.8	40.4	47.3
72.5°	10.4	10.4	15.1	19.4	20.8
75°	4.7	4.7	2.4	0.0	0.0
77.5°	2.4	2.4	1.9	0.0	0.0
80°	2.4	2.4	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	1.9	3.8	4.3	4.7
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1

TEST NUMBER: P518743

CATALOG NUMBER: SQ4-BB-100U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>527.9</i>	670.1	1806.2	3515.0	3841.9
115°	<i>609.1</i>	736.1	1690.5	3346.6	3806.0
117.5°	<i>680.0</i>	806.5	1614.5	3109.6	3632.2
120°	<i>727.2</i>	851.9	1584.3	2949.1	3475.5
122.5°	<i>772.5</i>	891.7	1559.7	2799.3	3297.9
125°	<i>835.8</i>	951.2	1532.3	2593.2	3043.4
127.5°	<i>889.6</i>	1005.1	1516.3	2419.0	2807.3
130°	<i>925.5</i>	1041.0	1508.7	2312.4	2665.6
132.5°	<i>959.5</i>	1069.4	1501.2	2222.9	2542.8
135°	<i>1005.8</i>	1114.3	1489.8	2100.3	2368.1
137.5°	<i>1057.7</i>	1156.6	1484.2	1997.4	2226.0
140°	<i>1086.1</i>	1183.0	1480.4	1928.8	2129.7
142.5°	<i>1118.2</i>	1207.8	1476.6	1867.8	2044.7
145°	<i>1166.4</i>	1247.2	1470.9	1788.0	1924.3
147.5°	<i>1212.6</i>	1283.3	1465.7	1720.8	1826.5
150°	<i>1246.6</i>	1304.3	1463.8	1680.6	1766.1
152.5°	<i>1273.1</i>	1327.1	1462.0	1646.3	1717.0
155°	<i>1315.1</i>	1359.0	1459.1	1604.3	1655.1
157.5°	<i>1353.8</i>	1387.5	1459.6	1573.7	1608.3
160°	<i>1376.5</i>	1406.5	1461.5	1556.5	1581.9
162.5°	<i>1395.4</i>	1421.7	1463.4	1541.3	1561.1
165°	<i>1423.7</i>	1442.2	1466.2	1523.1	1534.7
167.5°	<i>1445.4</i>	1456.5	1468.6	1512.1	1515.8
170°	<i>1456.8</i>	1466.0	1468.6	1506.3	1506.3
172.5°	<i>1466.2</i>	1471.7	1468.6	1498.7	1496.9
175°	<i>1475.7</i>	1478.0	1468.6	1489.7	1485.1
177.5°	<i>1479.4</i>	1477.6	1468.1	1481.2	1477.5
180°	<i>1475.7</i>	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)