

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: P518775

Luminaire Tested: **SQ4-BB-100U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518775
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-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

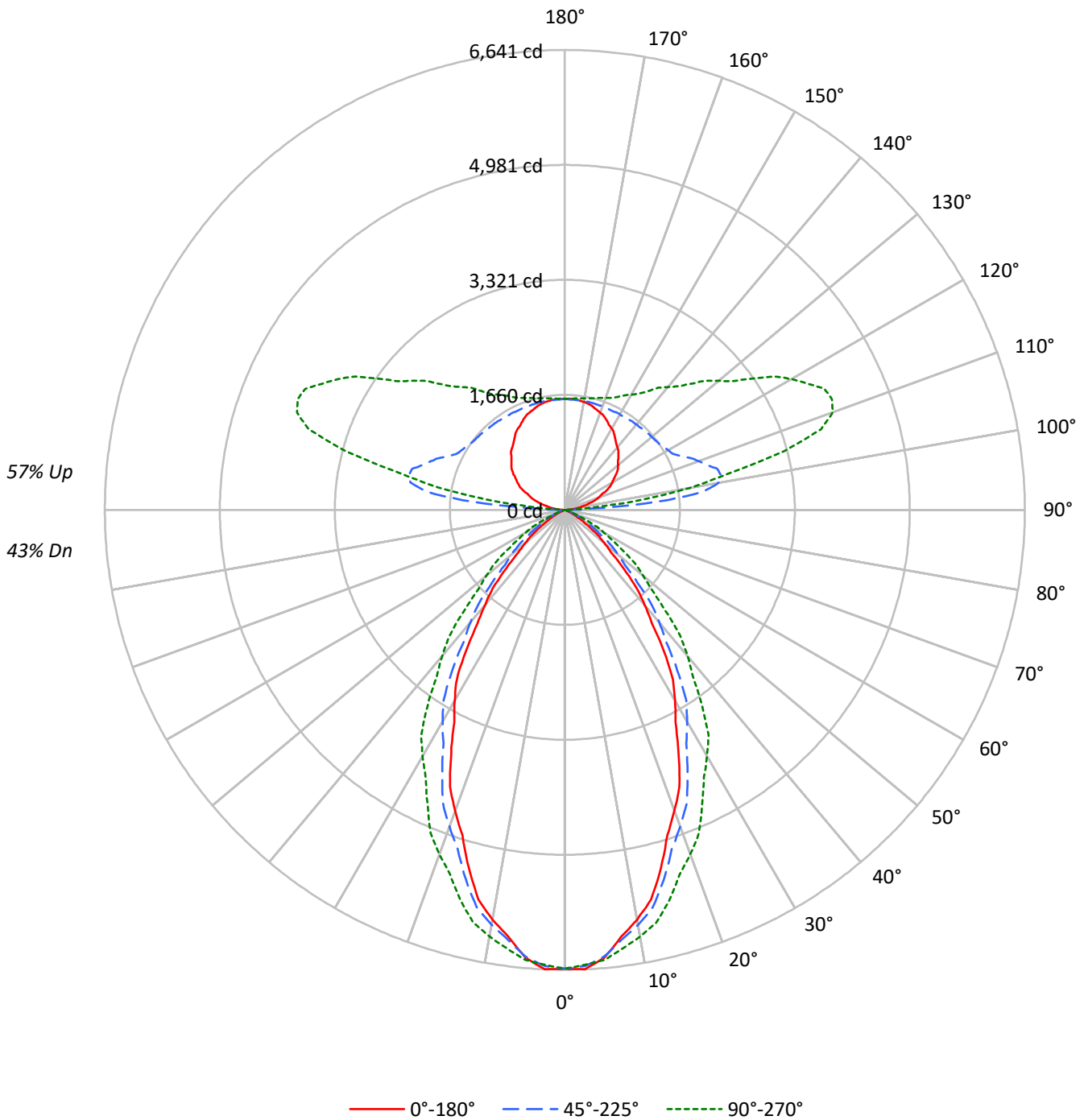
Lumens per Lamp: N/A
Luminaire Lumens: 18323.2 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20376	20376	20376
5°	20049	19999	20148
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14582
35°	9363	10638	12973
40°	7193	8506	11054
45°	5200	6441	8895
50°	3543	4800	7055
55°	2303	3472	5482
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.7	3.3
10°-20°	1546.3	8.4
20°-30°	1935.8	10.6
30°-40°	1788.1	9.8
40°-50°	1201.5	6.6
50°-60°	620.6	3.4
60°-70°	194.4	1.1
70°-80°	12.3	0.1
80°-90°	3.5	0.0
90°-100°	750.7	4.1
100°-110°	2072.5	11.3
110°-120°	2137.5	11.7
120°-130°	1717.6	9.4
130°-140°	1349.9	7.4
140°-150°	1035.3	5.7
150°-160°	744.1	4.1
160°-170°	455.0	2.5
170°-180°	153.4	0.8
0°-30°	4086.8	22.3
0°-40°	5874.9	32.1
0°-60°	7696.9	42.0
0°-90°	7907.1	43.2
90°-120°	4960.7	27.1
90°-150°	9063.6	49.5
90°-180°	10416.0	56.8
0°-180°	18323.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6626	6626	6626	6626	6626	
5°	6494	6428	6478	6501	6526	602
15°	5356	5338	5526	5712	5834	1492
25°	3885	3916	4193	4480	4690	1781
35°	2494	2556	2834	3167	3456	1545
45°	1196	1268	1481	1769	2045	939
55°	430	502	648	831	1022	401
65°	48	92	205	248	276	81
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	5	10	20	23	26	8
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6625.6	6625.6	6625.6	6625.6	6625.6
2.5°	6641.0	6578.3	6594.9	6594.5	6576.9
5°	6494.2	6428.4	6478.2	6501.2	6526.3
7.5°	6219.8	6168.4	6264.1	6335.8	6387.8
10°	6007.0	5963.1	6087.1	6184.9	6257.0
12.5°	5760.8	5727.0	5876.9	6011.0	6103.2
15°	5356.3	5337.5	5526.2	5711.7	5833.9
17.5°	4922.9	4922.3	5137.7	5368.0	5515.3
20°	4625.5	4634.9	4865.9	5119.8	5292.2
22.5°	4328.0	4349.9	4596.6	4861.4	5058.8
25°	3885.0	3916.3	4192.7	4479.6	4689.6
27.5°	3459.3	3505.1	3795.9	4094.0	4349.8
30°	3179.8	3233.1	3529.2	3842.9	4106.2
32.5°	2905.4	2968.7	3257.4	3589.1	3857.4
35°	2493.8	2556.5	2833.6	3167.1	3455.5
37.5°	2068.8	2130.2	2400.9	2729.1	3040.7
40°	1791.8	1860.8	2118.8	2436.9	2753.5
42.5°	1540.5	1609.5	1852.1	2164.7	2463.7
45°	1195.6	1267.7	1480.9	1769.3	2045.1
47.5°	909.7	988.1	1175.1	1436.0	1687.3
50°	740.5	818.8	1003.3	1233.2	1474.5
52.5°	604.5	680.4	846.9	1063.5	1284.7
55°	429.5	501.6	647.5	831.3	1022.5
57.5°	296.8	358.9	489.8	643.2	793.0
60°	214.8	274.3	397.5	522.1	644.3
62.5°	143.0	197.5	318.0	413.4	495.6
65°	48.1	92.0	205.1	247.5	275.7
67.5°	24.4	29.4	107.7	113.7	123.1
70°	19.2	19.2	51.3	54.7	64.1
72.5°	14.1	14.1	20.5	26.3	28.2
75°	6.4	6.4	3.2	0.0	0.0
77.5°	3.2	3.2	2.6	0.0	0.0
80°	3.2	3.2	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	2.0	4.1	4.6	5.1
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)