

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: P518771

Luminaire Tested: **SQ4-BB-100U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518771
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

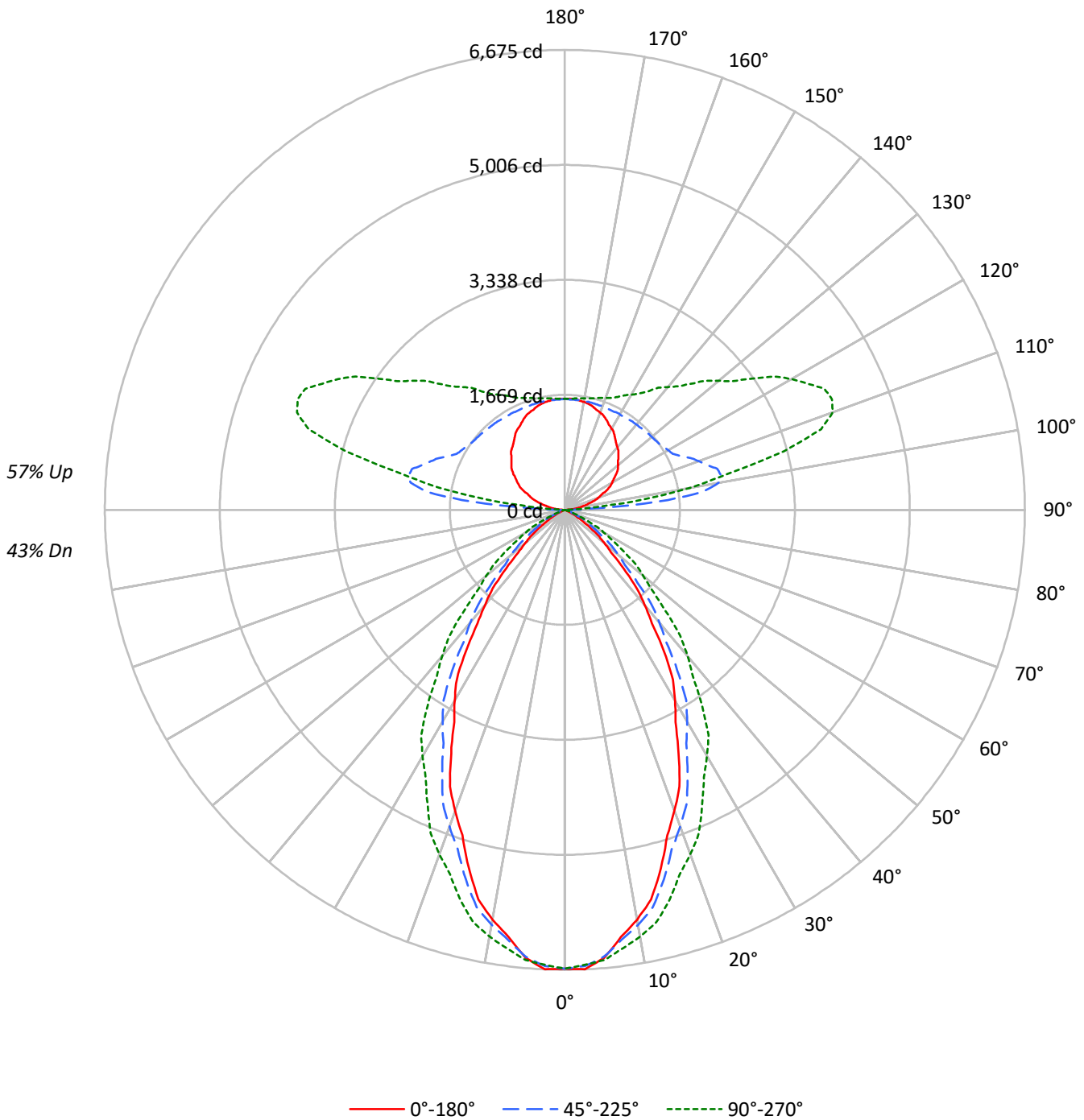
Lumens per Lamp: N/A
Luminaire Lumens: 18416.8 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39				39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36				36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32				32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29				29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26				26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24				24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22				22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20				20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19				19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17				17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20481	20481	20481
5°	20151	20101	20250
10°	18855	19106	19640
15°	17141	17685	18669
20°	15215	16006	17409
25°	13250	14300	15994
30°	11350	12597	14656
35°	9411	10693	13039
40°	7230	8550	11111
45°	5227	6474	8940
50°	3561	4825	7091
55°	2315	3489	5511
60°	1328	2457	3983
65°	351	1501	2016
70°	174	463	579
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	607.8	3.3
10°-20°	1554.2	8.4
20°-30°	1945.7	10.6
30°-40°	1797.2	9.8
40°-50°	1207.6	6.6
50°-60°	623.8	3.4
60°-70°	195.4	1.1
70°-80°	12.3	0.1
80°-90°	3.6	0.0
90°-100°	754.6	4.1
100°-110°	2083.1	11.3
110°-120°	2148.4	11.7
120°-130°	1726.4	9.4
130°-140°	1356.8	7.4
140°-150°	1040.6	5.7
150°-160°	747.9	4.1
160°-170°	457.3	2.5
170°-180°	154.2	0.8
0°-30°	4107.7	22.3
0°-40°	5904.9	32.1
0°-60°	7736.2	42.0
0°-90°	7947.5	43.2
90°-120°	4986.1	27.1
90°-150°	9109.9	49.5
90°-180°	10469.0	56.8
0°-180°	18416.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6660	6660	6660	6660	6660	
5°	6527	6461	6511	6534	6560	605
15°	5384	5365	5554	5741	5864	1499
25°	3905	3936	4214	4502	4714	1790
35°	2507	2570	2848	3183	3473	1553
45°	1202	1274	1488	1778	2056	944
55°	432	504	651	836	1028	403
65°	48	92	206	249	277	82
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	5	10	21	23	26	8
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6659.5	6659.5	6659.5	6659.5	6659.5
2.5°	6674.9	6611.9	6628.5	6628.1	6610.5
5°	6527.4	6461.2	6511.3	6534.4	6559.6
7.5°	6251.6	6199.9	6296.0	6368.1	6420.4
10°	6037.7	5993.6	6118.2	6216.5	6289.0
12.5°	5790.2	5756.2	5906.8	6041.7	6134.3
15°	5383.6	5364.7	5554.4	5740.8	5863.7
17.5°	4948.0	4947.4	5163.9	5395.4	5543.4
20°	4649.1	4658.5	4890.7	5145.9	5319.2
22.5°	4350.1	4372.1	4620.1	4886.2	5084.6
25°	3904.8	3936.3	4214.1	4502.4	4713.5
27.5°	3477.0	3523.0	3815.3	4114.9	4372.0
30°	3196.0	3249.6	3547.2	3862.5	4127.1
32.5°	2920.2	2983.9	3274.0	3607.5	3877.1
35°	2506.6	2569.6	2848.1	3183.3	3473.1
37.5°	2079.4	2141.1	2413.1	2743.1	3056.2
40°	1801.0	1870.3	2129.6	2449.4	2767.5
42.5°	1548.4	1617.7	1861.6	2175.7	2476.3
45°	1201.7	1274.2	1488.5	1778.3	2055.5
47.5°	914.3	993.1	1181.1	1443.3	1696.0
50°	744.2	823.0	1008.4	1239.5	1482.0
52.5°	607.6	683.9	851.2	1068.9	1291.3
55°	431.7	504.2	650.8	835.6	1027.8
57.5°	298.3	360.7	492.3	646.5	797.1
60°	215.9	275.7	399.5	524.7	647.6
62.5°	143.7	198.5	319.6	415.6	498.1
65°	48.3	92.4	206.2	248.7	277.1
67.5°	24.5	29.5	108.3	114.3	123.7
70°	19.3	19.3	51.5	55.0	64.4
72.5°	14.2	14.2	20.6	26.5	28.4
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	4.7	5.2
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)