

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: P518962

Luminaire Tested: **SQ4-BB-150U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518962
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-125D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

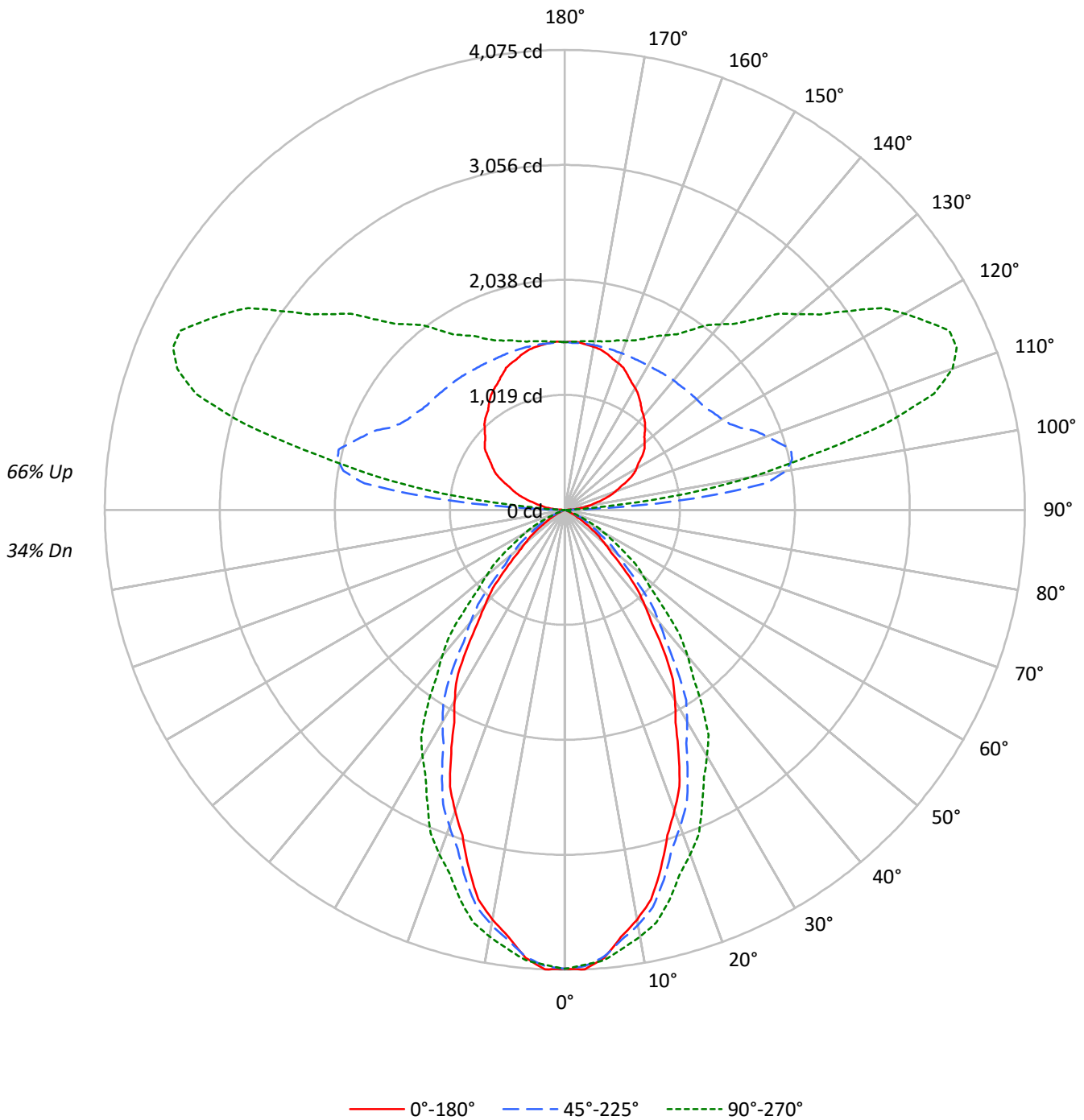
Lumens per Lamp: N/A
Luminaire Lumens: 14440.6 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 167.8
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34				
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31				
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28				
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25				
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23				
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21				
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19				
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17				
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16				
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15				
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18756	18756	18756
5°	18455	18409	18546
10°	17268	17498	17986
15°	15698	16196	17098
20°	13935	14659	15943
25°	12135	13096	14648
30°	10394	11536	13422
35°	8619	9793	11942
40°	6622	7830	10175
45°	4787	5929	8188
50°	3261	4419	6494
55°	2120	3195	5047
60°	1216	2250	3648
65°	322	1374	1847
70°	159	425	530
75°	70	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.1	2.6
10°-20°	948.9	6.6
20°-30°	1188.0	8.2
30°-40°	1097.3	7.6
40°-50°	737.3	5.1
50°-60°	380.8	2.6
60°-70°	119.3	0.8
70°-80°	7.6	0.1
80°-90°	3.2	0.0
90°-100°	691.1	4.8
100°-110°	1868.5	12.9
110°-120°	1964.4	13.6
120°-130°	1595.6	11.0
130°-140°	1251.7	8.7
140°-150°	960.7	6.7
150°-160°	690.9	4.8
160°-170°	422.1	2.9
170°-180°	142.3	1.0
0°-30°	2507.9	17.4
0°-40°	3605.2	25.0
0°-60°	4723.4	32.7
0°-90°	4853.4	33.6
90°-120°	4524.0	31.3
90°-150°	8331.9	57.7
90°-180°	9587.0	66.4
0°-180°	14440.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4066	4066	4066	4066	4066	
5°	3985	3945	3976	3990	4005	369
15°	3287	3275	3391	3505	3580	915
25°	2384	2403	2573	2749	2878	1093
35°	1530	1569	1739	1944	2120	948
45°	734	778	909	1086	1255	576
55°	264	308	397	510	628	246
65°	30	56	126	152	169	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	3	10	21	22	21	7
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1122	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4065.9	4065.9	4065.9	4065.9	4065.9
2.5°	4075.4	4036.9	4047.1	4046.8	4036.0
5°	3985.3	3944.9	3975.5	3989.6	4005.0
7.5°	3816.9	3785.4	3844.1	3888.1	3920.0
10°	3686.3	3659.4	3735.5	3795.5	3839.7
12.5°	3535.2	3514.5	3606.4	3688.8	3745.3
15°	3287.0	3275.4	3391.2	3505.1	3580.1
17.5°	3021.0	3020.6	3152.8	3294.1	3384.5
20°	2838.5	2844.3	2986.0	3141.9	3247.6
22.5°	2655.9	2669.4	2820.8	2983.3	3104.4
25°	2384.1	2403.3	2572.9	2749.0	2877.8
27.5°	2122.9	2150.9	2329.4	2512.4	2669.3
30°	1951.3	1984.0	2165.7	2358.3	2519.8
32.5°	1783.0	1821.8	1998.9	2202.5	2367.2
35°	1530.4	1568.9	1738.9	1943.6	2120.5
37.5°	1269.5	1307.2	1473.3	1674.8	1866.0
40°	1099.6	1141.9	1300.2	1495.5	1689.7
42.5°	945.4	987.7	1136.6	1328.4	1511.9
45°	733.7	778.0	908.8	1085.7	1255.0
47.5°	558.3	606.3	721.1	881.2	1035.5
50°	454.4	502.5	615.7	756.8	904.9
52.5°	371.0	417.5	519.7	652.6	788.4
55°	263.6	307.8	397.3	510.2	627.5
57.5°	182.2	220.2	300.6	394.7	486.7
60°	131.8	168.3	243.9	320.4	395.4
62.5°	87.7	121.2	195.1	253.7	304.1
65°	29.5	56.4	125.9	151.9	169.2
67.5°	14.9	18.0	66.1	69.8	75.5
70°	11.8	11.8	31.5	33.6	39.3
72.5°	8.7	8.7	12.6	16.2	17.3
75°	3.9	3.9	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.9	4.2	4.5	4.2
90°	3.2	9.5	20.8	22.4	20.8
92.5°	45.5	165.7	326.8	141.9	102.8
95°	107.2	376.4	1149.3	594.8	353.7
97.5°	172.2	431.7	1791.4	1482.5	1088.8
100°	220.9	454.1	1991.2	2076.6	1679.1
102.5°	265.7	485.1	2061.6	2527.0	2229.7
105°	347.3	536.7	2072.8	3057.6	2932.4
107.5°	422.9	595.7	1982.2	3388.5	3430.2
110°	481.8	638.3	1901.6	3477.4	3654.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.6	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.4	2982.1	3478.2
122.5°	776.6	899.3	1579.8	2827.2	3327.1
125°	837.1	959.2	1549.4	2614.6	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.1
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.5	1507.8	2111.2	2389.7
137.5°	1051.9	1164.3	1500.8	2008.8	2235.8
140°	1085.2	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.3
145°	1166.9	1254.5	1487.0	1807.0	1944.8
147.5°	1212.0	1289.6	1479.9	1737.8	1843.6
150°	1245.3	1314.2	1477.4	1700.2	1784.7
152.5°	1276.0	1336.1	1476.1	1665.3	1734.8
155°	1317.3	1369.0	1474.2	1621.1	1674.3
157.5°	1360.2	1396.2	1474.5	1590.2	1625.3
160°	1384.5	1414.3	1475.8	1570.8	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.2	1448.3	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.6
170°	1467.8	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.4
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.8
180°	1487.0	1487.0	1487.0	1487.0	1487.0

(END OF REPORT)