

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: P518938

Luminaire Tested: **SQ4-BB-150U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518938
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-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

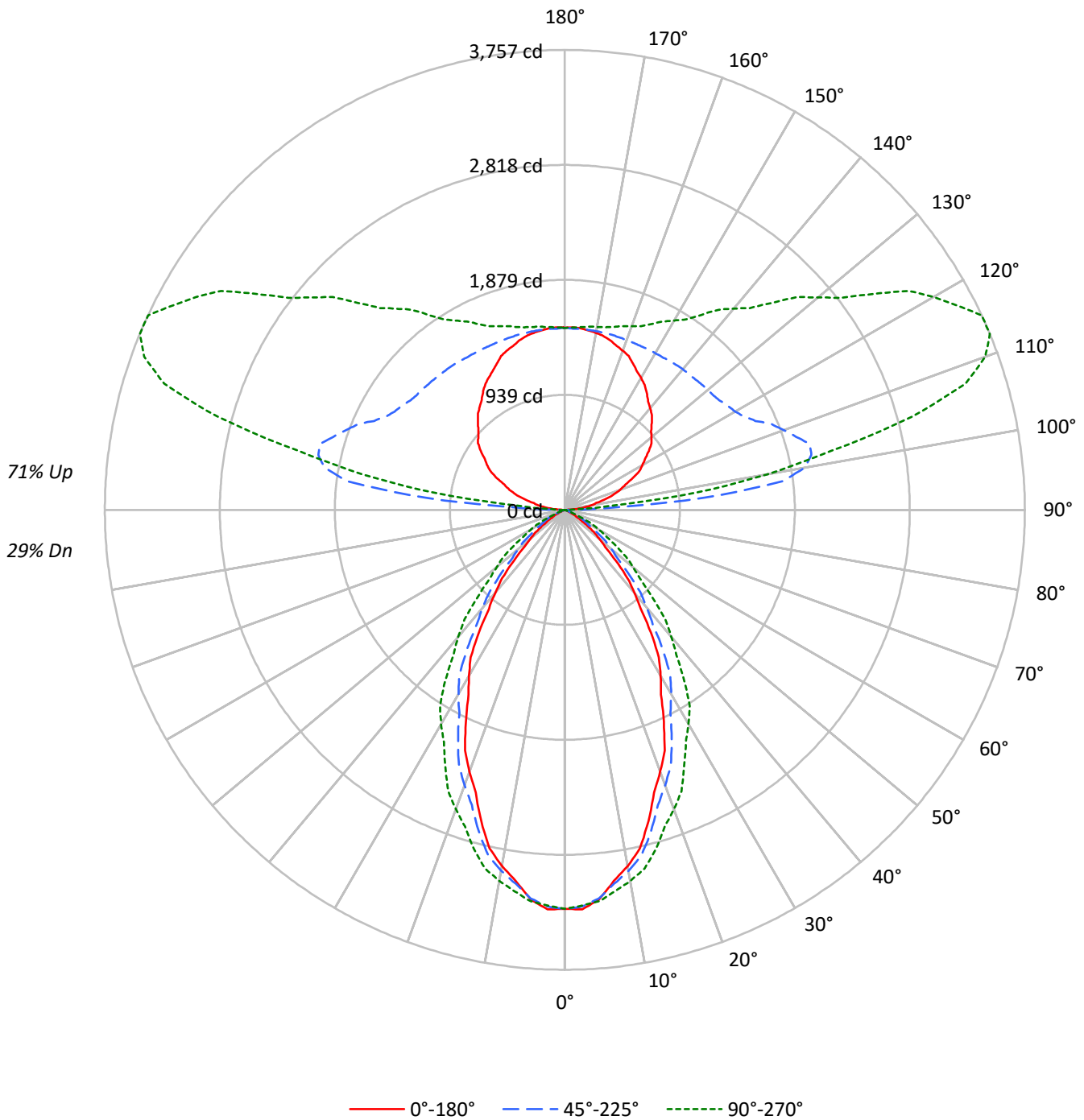
Lumens per Lamp: N/A
Luminaire Lumens: 13478.1 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7849	9572
40°	5308	6276	8156
45°	3837	4753	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1804	2924
65°	259	1101	1480
70°	128	340	425
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.4	2.2
10°-20°	760.6	5.6
20°-30°	952.2	7.1
30°-40°	879.5	6.5
40°-50°	591.0	4.4
50°-60°	305.3	2.3
60°-70°	95.6	0.7
70°-80°	6.1	0.0
80°-90°	3.2	0.0
90°-100°	691.1	5.1
100°-110°	1868.5	13.9
110°-120°	1964.4	14.6
120°-130°	1595.6	11.8
130°-140°	1251.7	9.3
140°-150°	960.7	7.1
150°-160°	690.9	5.1
160°-170°	422.1	3.1
170°-180°	142.3	1.1
0°-30°	2010.3	14.9
0°-40°	2889.8	21.4
0°-60°	3786.1	28.1
0°-90°	3890.9	28.9
90°-120°	4524.0	33.6
90°-150°	8331.9	61.8
90°-180°	9587.0	71.1
0°-180°	13478.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3259	3259	3259	3259	3259	
5°	3194	3162	3187	3198	3210	296
15°	2635	2626	2718	2810	2870	734
25°	1911	1926	2062	2204	2307	876
35°	1227	1258	1394	1558	1700	760
45°	588	624	728	870	1006	462
55°	211	247	318	409	503	197
65°	24	45	101	122	136	40
75°	3	3	2	0	0	5
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°	3259.1	3259.1	3259.1	3259.1	3259.1
2.5°	3266.7	3235.9	3244.0	3243.8	3235.2
5°	3194.5	3162.1	3186.6	3197.9	3210.2
7.5°	3059.5	3034.2	3081.3	3116.5	3142.1
10°	2954.8	2933.2	2994.2	3042.3	3077.8
12.5°	2833.7	2817.1	2890.8	2956.8	3002.1
15°	2634.7	2625.5	2718.3	2809.5	2869.7
17.5°	2421.6	2421.2	2527.2	2640.5	2712.9
20°	2275.2	2279.9	2393.5	2518.4	2603.2
22.5°	2128.9	2139.7	2261.0	2391.3	2488.4
25°	1911.0	1926.4	2062.4	2203.5	2306.8
27.5°	1701.6	1724.1	1867.2	2013.8	2139.6
30°	1564.1	1590.3	1736.0	1890.3	2019.8
32.5°	1429.2	1460.3	1602.3	1765.5	1897.4
35°	1226.7	1257.5	1393.8	1557.9	1699.7
37.5°	1017.6	1047.8	1181.0	1342.4	1495.7
40°	881.4	915.3	1042.2	1198.7	1354.4
42.5°	757.8	791.7	911.0	1064.8	1211.9
45°	588.1	623.6	728.5	870.3	1006.0
47.5°	447.5	486.0	578.0	706.4	830.0
50°	364.2	402.8	493.5	606.6	725.3
52.5°	297.4	334.7	416.6	523.1	632.0
55°	211.3	246.7	318.5	408.9	503.0
57.5°	146.0	176.5	240.9	316.4	390.1
60°	105.6	134.9	195.5	256.8	316.9
62.5°	70.3	97.1	156.4	203.4	243.8
65°	23.7	45.2	100.9	121.7	135.6
67.5°	12.0	14.4	53.0	55.9	60.5
70°	9.5	9.5	25.2	26.9	31.5
72.5°	6.9	6.9	10.1	13.0	13.9
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	0.0	0.0	0.0
82.5°	0.3	0.3	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)