

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: P518914

Luminaire Tested: **SQ4-BB-150U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518914
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-075D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

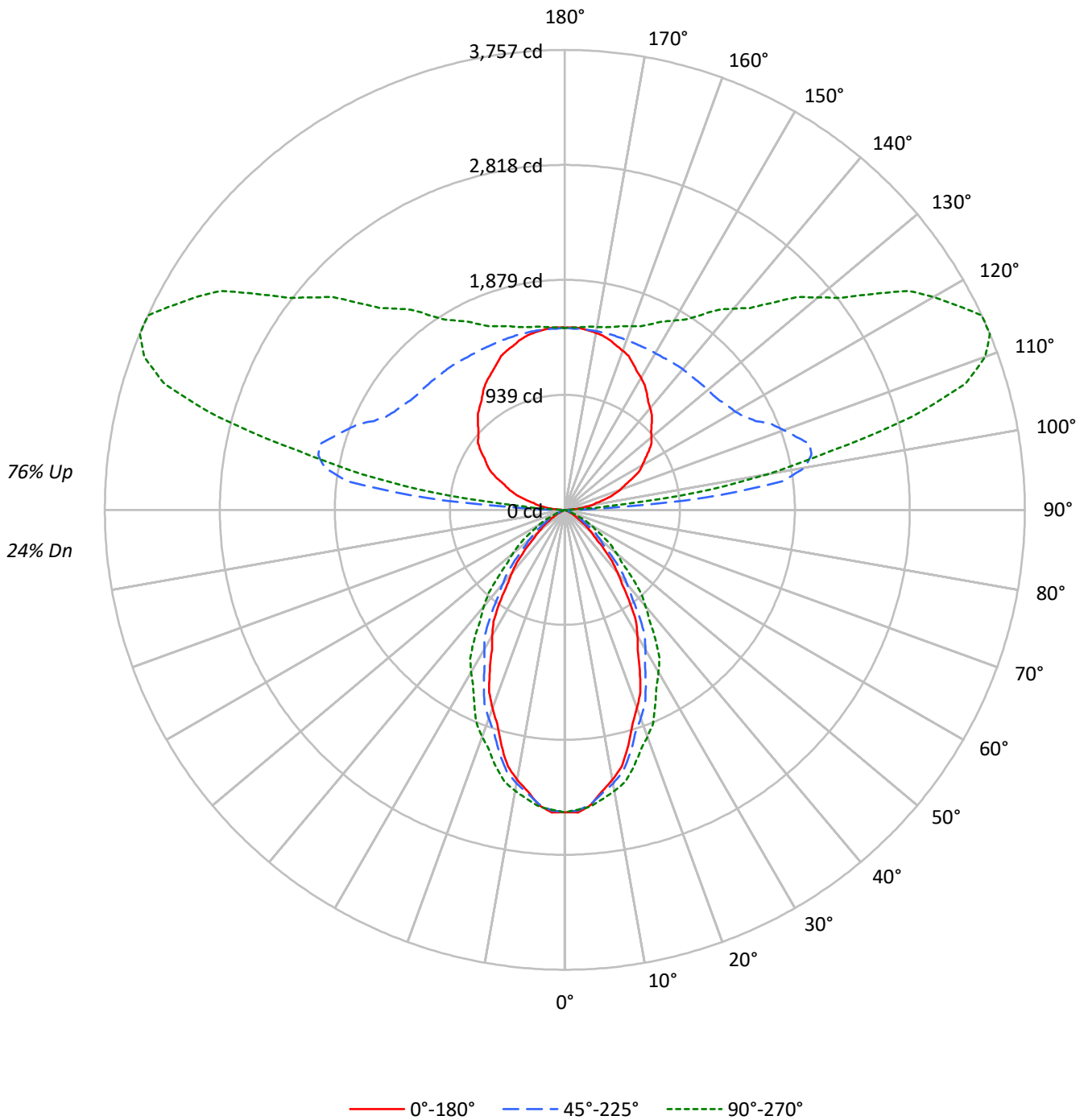
Lumens per Lamp: N/A
Luminaire Lumens: 12536.5 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.1
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10925
15°	9535	9838	10386
20°	8464	8904	9684
25°	7371	7955	8897
30°	6314	7007	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2908	3601	4973
50°	1981	2684	3944
55°	1288	1942	3066
60°	739	1367	2216
65°	195	835	1122
70°	97	258	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.4	1.8
10°-20°	576.4	4.6
20°-30°	721.6	5.8
30°-40°	666.5	5.3
40°-50°	447.9	3.6
50°-60°	231.3	1.8
60°-70°	72.5	0.6
70°-80°	4.6	0.0
80°-90°	3.2	0.0
90°-100°	691.1	5.5
100°-110°	1868.5	14.9
110°-120°	1964.4	15.7
120°-130°	1595.6	12.7
130°-140°	1251.7	10.0
140°-150°	960.7	7.7
150°-160°	690.9	5.5
160°-170°	422.1	3.4
170°-180°	142.3	1.1
0°-30°	1523.4	12.2
0°-40°	2189.9	17.5
0°-60°	2869.0	22.9
0°-90°	2949.3	23.5
90°-120°	4524.0	36.1
90°-150°	8331.9	66.5
90°-180°	9587.0	76.5
0°-180°	12536.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2470	2470	2470	2470	2470	
5°	2421	2396	2415	2423	2433	224
15°	1997	1990	2060	2129	2175	556
25°	1448	1460	1563	1670	1748	664
35°	930	953	1056	1180	1288	576
45°	446	472	552	660	762	350
55°	160	187	241	310	381	149
65°	18	34	76	92	103	30
75°	2	2	1	0	0	3
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	

TEST NUMBER: P518914

CATALOG NUMBER: SQ4-BB-150U-075D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2469.7	2469.7	2469.7	2469.7	2469.7
2.5°	2475.4	2452.1	2458.2	2458.1	2451.6
5°	2420.7	2396.2	2414.7	2423.3	2432.7
7.5°	2318.4	2299.3	2334.9	2361.7	2381.1
10°	2239.1	2222.8	2269.0	2305.4	2332.3
12.5°	2147.3	2134.7	2190.6	2240.6	2275.0
15°	1996.6	1989.5	2059.9	2129.0	2174.6
17.5°	1835.0	1834.8	1915.1	2000.9	2055.8
20°	1724.1	1727.6	1813.8	1908.4	1972.7
22.5°	1613.3	1621.4	1713.4	1812.1	1885.7
25°	1448.1	1459.8	1562.8	1669.8	1748.0
27.5°	1289.5	1306.5	1414.9	1526.1	1621.4
30°	1185.3	1205.1	1315.5	1432.4	1530.6
32.5°	1083.0	1106.6	1214.2	1337.9	1437.9
35°	929.6	952.9	1056.2	1180.5	1288.0
37.5°	771.1	794.0	894.9	1017.3	1133.4
40°	667.9	693.6	789.8	908.4	1026.4
42.5°	574.2	599.9	690.4	806.9	918.3
45°	445.7	472.5	552.0	659.5	762.3
47.5°	339.1	368.3	438.0	535.3	629.0
50°	276.0	305.2	374.0	459.7	549.6
52.5°	225.3	253.6	315.7	396.4	478.9
55°	160.1	187.0	241.4	309.9	381.2
57.5°	110.6	133.8	182.6	239.8	295.6
60°	80.1	102.3	148.2	194.6	240.2
62.5°	53.3	73.6	118.5	154.1	184.7
65°	17.9	34.3	76.5	92.2	102.8
67.5°	9.1	10.9	40.1	42.4	45.9
70°	7.2	7.2	19.1	20.4	23.9
72.5°	5.3	5.3	7.6	9.8	10.5
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	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

TEST NUMBER: P518914

CATALOG NUMBER: SQ4-BB-150U-075D-930-1D-UNV-STD-W-8

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)