

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521324

Luminaire Tested: **SQ4-BB-150U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521324
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-100D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

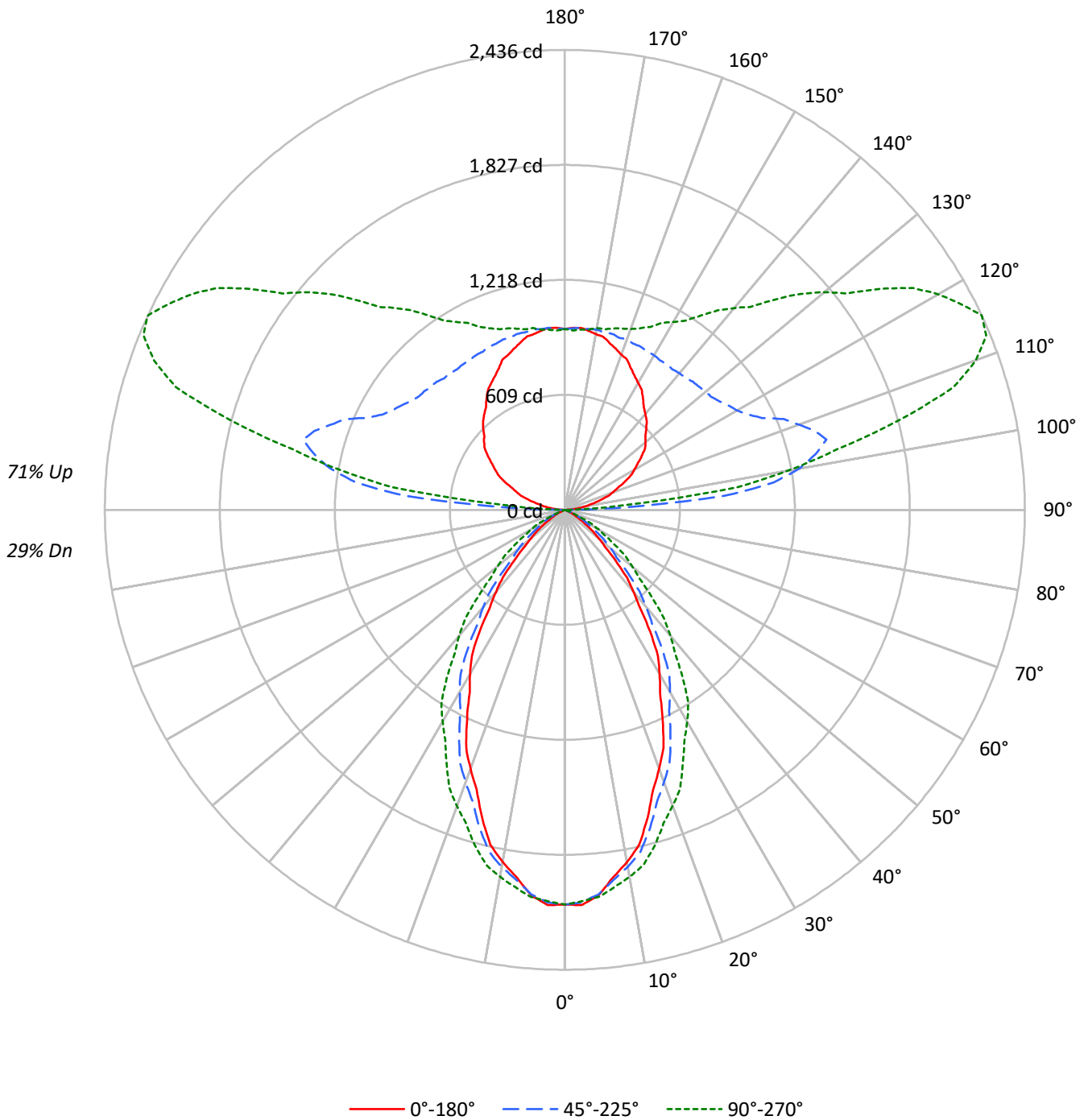
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8695.3 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 93.5
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	71	71	71	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	51	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	23	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	22	21	18
6	62	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	17	15
8	54	43	36	31	49	39	33	29	32	28	24	25	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	42	33	27	23	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19286	19286	19286
5°	18976	18929	19069
10°	17755	17992	18494
15°	16141	16653	17581
20°	14328	15073	16394
25°	12478	13466	15062
30°	10688	11863	13802
35°	8862	10069	12279
40°	6808	8051	10463
45°	4922	6096	8418
50°	3353	4543	6677
55°	2180	3286	5189
60°	1251	2314	3751
65°	332	1412	1899
70°	165	437	545
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	2.2
10°-20°	487.9	5.6
20°-30°	610.8	7.0
30°-40°	564.1	6.5
40°-50°	379.1	4.4
50°-60°	195.8	2.3
60°-70°	61.3	0.7
70°-80°	3.9	0.0
80°-90°	0.1	0.0
90°-100°	493.7	5.7
100°-110°	1193.3	13.7
110°-120°	1272.7	14.6
120°-130°	1030.8	11.9
130°-140°	798.1	9.2
140°-150°	608.8	7.0
150°-160°	440.7	5.1
160°-170°	271.4	3.1
170°-180°	91.9	1.1
0°-30°	1289.4	14.8
0°-40°	1853.5	21.3
0°-60°	2428.4	27.9
0°-90°	2493.6	28.7
90°-120°	2959.8	34.0
90°-150°	5397.5	62.1
90°-180°	6202.0	71.3
0°-180°	8695.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2049	2028	2044	2051	2059	190
15°	1690	1684	1744	1802	1841	471
25°	1226	1236	1323	1413	1480	562
35°	787	807	894	999	1090	487
45°	377	400	467	558	645	296
55°	136	158	204	262	323	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	247	846	550	385	55
105°	191	330	1434	1856	1832	201
115°	349	446	1152	2184	2436	345
125°	497	572	1000	1737	2041	443
135°	611	682	960	1370	1576	471
145°	722	776	941	1164	1256	451
155°	828	863	954	1031	1069	382
165°	915	929	966	980	994	258
175°	968	964	968	960	958	91
180°	958	958	958	958	958	



TEST NUMBER: P521324

CATALOG NUMBER: SQ4-BB-150U-100D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2090.4	2090.4	2090.4	2090.4	2090.4
2.5°	2095.2	2075.5	2080.7	2080.6	2075.0
5°	2048.9	2028.2	2043.9	2051.1	2059.0
7.5°	1962.4	1946.1	1976.3	1998.9	2015.3
10°	1895.2	1881.4	1920.5	1951.3	1974.1
12.5°	1817.5	1806.9	1854.1	1896.5	1925.5
15°	1689.9	1684.0	1743.5	1802.0	1840.6
17.5°	1553.2	1553.0	1620.9	1693.6	1740.1
20°	1459.3	1462.3	1535.2	1615.3	1669.7
22.5°	1365.5	1372.4	1450.2	1533.8	1596.1
25°	1225.7	1235.6	1322.8	1413.3	1479.6
27.5°	1091.4	1105.8	1197.6	1291.7	1372.4
30°	1003.2	1020.0	1113.5	1212.4	1295.5
32.5°	916.7	936.6	1027.7	1132.4	1217.0
35°	786.8	806.6	894.0	999.2	1090.2
37.5°	652.7	672.1	757.5	861.0	959.3
40°	565.3	587.1	668.5	768.8	868.7
42.5°	486.0	507.8	584.3	683.0	777.3
45°	377.2	400.0	467.2	558.2	645.2
47.5°	287.0	311.7	370.7	453.1	532.4
50°	233.6	258.3	316.5	389.1	465.2
52.5°	190.7	214.7	267.2	335.5	405.3
55°	135.5	158.3	204.3	262.3	322.6
57.5°	93.6	113.2	154.5	202.9	250.2
60°	67.8	86.5	125.4	164.7	203.3
62.5°	45.1	62.3	100.3	130.4	156.3
65°	15.2	29.0	64.7	78.1	87.0
67.5°	7.7	9.3	34.0	35.9	38.8
70°	6.1	6.1	16.2	17.3	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	133.7	314.8	153.1	103.9
95°	48.7	247.0	845.9	550.1	385.4
97.5°	86.4	273.7	1114.1	1073.3	921.4
100°	115.6	290.2	1261.8	1332.0	1207.0
102.5°	143.2	305.1	1359.2	1547.4	1473.2
105°	190.7	329.5	1434.2	1855.7	1831.9
107.5°	237.3	358.3	1390.0	2102.9	2158.9
110°	269.8	382.9	1318.6	2209.5	2314.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	302.3	407.4	1255.3	2235.6	2415.3
115°	348.9	446.1	1152.3	2184.5	2436.4
117.5°	395.2	486.8	1091.8	2067.0	2362.1
120°	426.0	511.3	1052.9	1974.8	2284.2
122.5°	458.5	537.4	1028.5	1880.6	2185.2
125°	497.0	572.4	1000.1	1737.3	2040.8
127.5°	535.2	606.2	980.2	1616.0	1882.6
130°	557.9	627.3	973.7	1531.5	1793.3
132.5°	579.0	651.6	964.0	1470.5	1692.7
135°	610.6	682.0	959.5	1370.0	1576.2
137.5°	640.6	712.4	945.3	1301.9	1457.4
140°	663.4	728.8	945.3	1252.9	1395.7
142.5°	686.1	751.5	937.2	1210.2	1330.8
145°	722.2	775.7	941.3	1164.5	1255.7
147.5°	755.9	807.8	938.9	1111.8	1187.2
150°	777.0	822.6	945.3	1088.7	1148.2
152.5°	799.7	843.7	943.7	1064.2	1117.4
155°	827.7	863.4	953.5	1031.4	1069.1
157.5°	861.4	891.9	951.4	1018.9	1041.1
160°	874.3	900.1	959.5	1002.5	1018.4
162.5°	895.4	918.1	956.3	997.5	1007.0
165°	914.9	928.8	965.6	980.1	994.0
167.5°	938.9	948.0	963.2	979.0	979.4
170°	945.3	951.3	969.7	967.9	977.8
172.5°	956.7	961.1	964.8	969.1	963.2
175°	967.7	963.7	967.7	959.5	957.5
177.5°	965.6	965.6	962.4	959.0	951.0
180°	957.5	957.5	957.5	957.5	957.5

(END OF REPORT)