

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: P518945

Luminaire Tested: **SQ4-BB-150U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518945
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

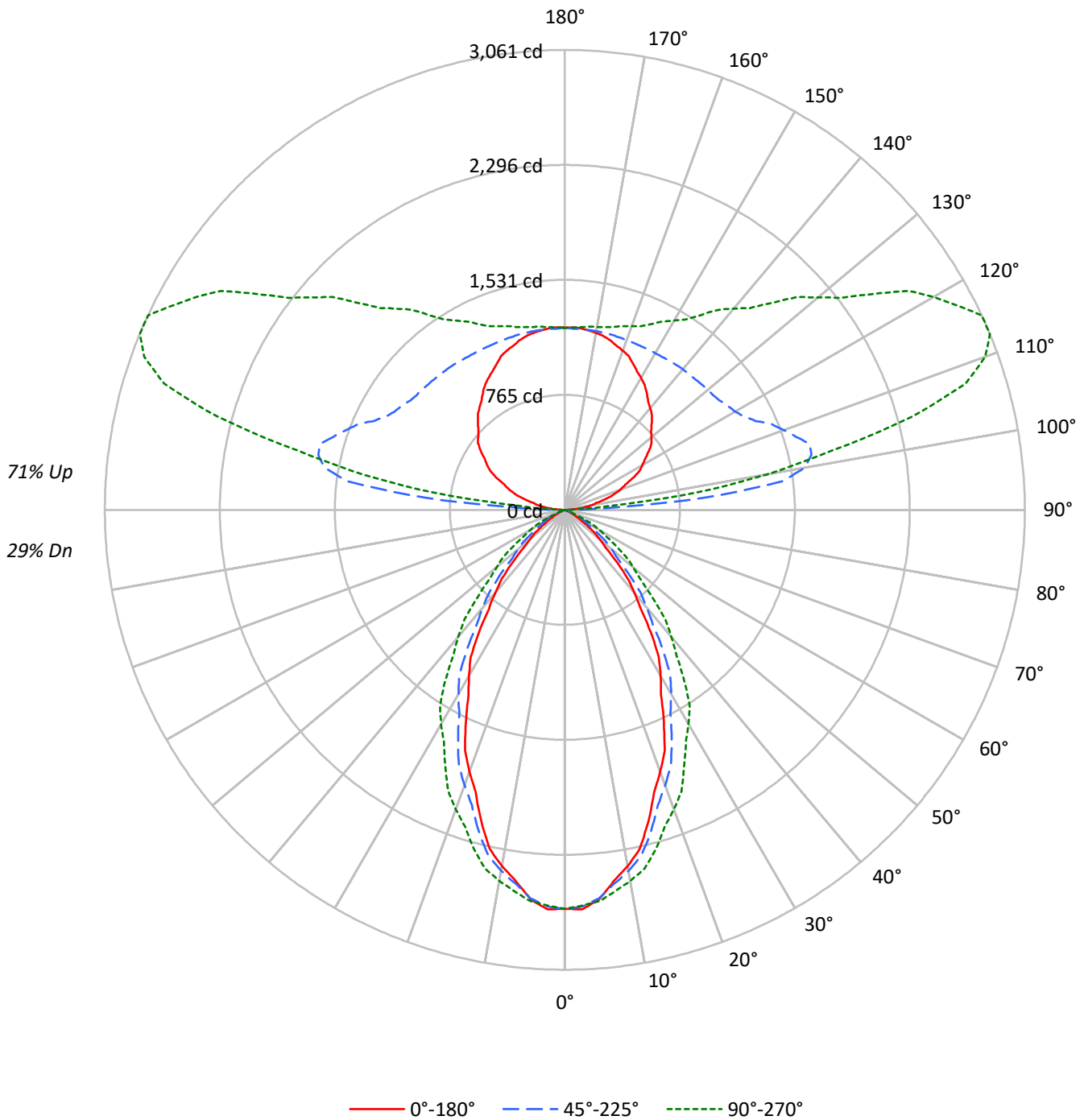
Lumens per Lamp: N/A
Luminaire Lumens: 10981.7 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8528	10399
40°	5766	6818	8860
45°	4168	5163	7129
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	281	1196	1608
70°	138	370	462
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	2.2
10°-20°	619.7	5.6
20°-30°	775.8	7.1
30°-40°	716.6	6.5
40°-50°	481.5	4.4
50°-60°	248.7	2.3
60°-70°	77.9	0.7
70°-80°	4.9	0.0
80°-90°	2.6	0.0
90°-100°	563.1	5.1
100°-110°	1522.4	13.9
110°-120°	1600.6	14.6
120°-130°	1300.1	11.8
130°-140°	1019.8	9.3
140°-150°	782.7	7.1
150°-160°	562.9	5.1
160°-170°	343.9	3.1
170°-180°	115.9	1.1
0°-30°	1637.9	14.9
0°-40°	2354.6	21.4
0°-60°	3084.8	28.1
0°-90°	3170.3	28.9
90°-120°	3686.0	33.6
90°-150°	6788.7	61.8
90°-180°	7811.0	71.1
0°-180°	10981.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2655	2655	2655	2655	2655	
5°	2603	2576	2596	2606	2616	241
15°	2147	2139	2215	2289	2338	598
25°	1557	1570	1680	1795	1880	714
35°	1000	1025	1136	1269	1385	619
45°	479	508	594	709	820	376
55°	172	201	260	333	410	161
65°	19	37	82	99	110	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	8	17	18	17	6
95°	87	307	936	485	288	91
105°	283	437	1689	2491	2389	298
115°	498	609	1401	2712	3061	492
125°	682	782	1262	2130	2503	608
135°	818	915	1228	1720	1947	632
145°	951	1022	1212	1472	1585	595
155°	1073	1115	1201	1321	1364	495
165°	1168	1180	1206	1253	1260	329
175°	1213	1212	1208	1223	1221	115
180°	1212	1212	1212	1212	1212	



TEST NUMBER: P518945

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2655.4	2655.4	2655.4	2655.4	2655.4
2.5°	2661.6	2636.5	2643.1	2643.0	2635.9
5°	2602.8	2576.4	2596.4	2605.6	2615.6
7.5°	2492.8	2472.2	2510.5	2539.3	2560.1
10°	2407.5	2389.9	2439.6	2478.8	2507.7
12.5°	2308.8	2295.3	2355.3	2409.1	2446.0
15°	2146.7	2139.2	2214.8	2289.1	2338.1
17.5°	1973.0	1972.8	2059.1	2151.4	2210.4
20°	1853.8	1857.6	1950.2	2051.9	2121.0
22.5°	1734.6	1743.4	1842.2	1948.4	2027.5
25°	1557.0	1569.6	1680.4	1795.3	1879.5
27.5°	1386.4	1404.8	1521.3	1640.8	1743.3
30°	1274.4	1295.8	1414.4	1540.2	1645.7
32.5°	1164.4	1189.8	1305.5	1438.5	1546.0
35°	999.5	1024.6	1135.7	1269.3	1384.9
37.5°	829.1	853.8	962.2	1093.8	1218.7
40°	718.1	745.8	849.2	976.7	1103.5
42.5°	617.4	645.1	742.3	867.6	987.4
45°	479.2	508.1	593.5	709.1	819.6
47.5°	364.6	396.0	471.0	575.5	676.3
50°	296.8	328.2	402.1	494.2	591.0
52.5°	242.3	272.7	339.4	426.2	514.9
55°	172.1	201.0	259.5	333.2	409.8
57.5°	119.0	143.8	196.3	257.8	317.8
60°	86.1	109.9	159.3	209.2	258.2
62.5°	57.3	79.2	127.4	165.7	198.6
65°	19.3	36.9	82.2	99.2	110.5
67.5°	9.8	11.8	43.2	45.6	49.3
70°	7.7	7.7	20.6	21.9	25.7
72.5°	5.7	5.7	8.2	10.6	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.5	1.5	3.4	3.6	3.4
90°	2.6	7.7	17.0	18.2	17.0
92.5°	37.0	135.0	266.3	115.6	83.7
95°	87.4	306.7	936.4	484.6	288.2
97.5°	140.3	351.8	1459.6	1207.9	887.1
100°	180.0	370.0	1622.4	1692.0	1368.1
102.5°	216.5	395.3	1679.8	2059.0	1816.7
105°	283.0	437.3	1688.9	2491.2	2389.2
107.5°	344.6	485.3	1615.1	2760.9	2794.8
110°	392.6	520.1	1549.3	2833.3	2977.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	554.7	1488.8	2818.8	3060.9
115°	498.2	609.1	1400.7	2711.5	3060.9
117.5°	559.7	663.8	1342.5	2547.4	2943.5
120°	597.3	699.3	1308.1	2429.7	2833.9
122.5°	632.8	732.8	1287.2	2303.5	2710.8
125°	682.1	781.5	1262.4	2130.3	2502.7
127.5°	727.5	825.1	1247.8	1989.0	2316.4
130°	752.5	853.2	1241.6	1901.7	2197.5
132.5°	778.6	878.3	1235.3	1822.9	2095.3
135°	817.7	914.6	1228.5	1720.1	1947.1
137.5°	857.1	948.6	1222.8	1636.7	1821.6
140°	884.2	969.7	1220.7	1583.1	1747.6
142.5°	910.3	990.6	1216.5	1534.6	1678.7
145°	950.7	1022.1	1211.6	1472.3	1584.6
147.5°	987.5	1050.8	1205.8	1415.9	1502.1
150°	1014.6	1070.7	1203.7	1385.3	1454.1
152.5°	1039.7	1088.6	1202.7	1356.8	1413.4
155°	1073.3	1115.4	1201.1	1320.8	1364.1
157.5°	1108.3	1137.6	1201.4	1295.7	1324.2
160°	1128.1	1152.3	1202.4	1279.8	1300.2
162.5°	1143.7	1163.9	1203.5	1267.2	1282.5
165°	1168.5	1180.0	1206.3	1253.4	1259.8
167.5°	1185.5	1193.4	1206.6	1241.6	1244.7
170°	1195.9	1199.7	1207.6	1236.3	1236.3
172.5°	1204.3	1205.0	1207.6	1230.1	1229.0
175°	1212.9	1211.6	1207.6	1223.2	1220.7
177.5°	1215.7	1212.7	1207.4	1217.8	1214.7
180°	1211.6	1211.6	1211.6	1211.6	1211.6

(END OF REPORT)