

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: P518901

Luminaire Tested: **SQ4-BB-150U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518901
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

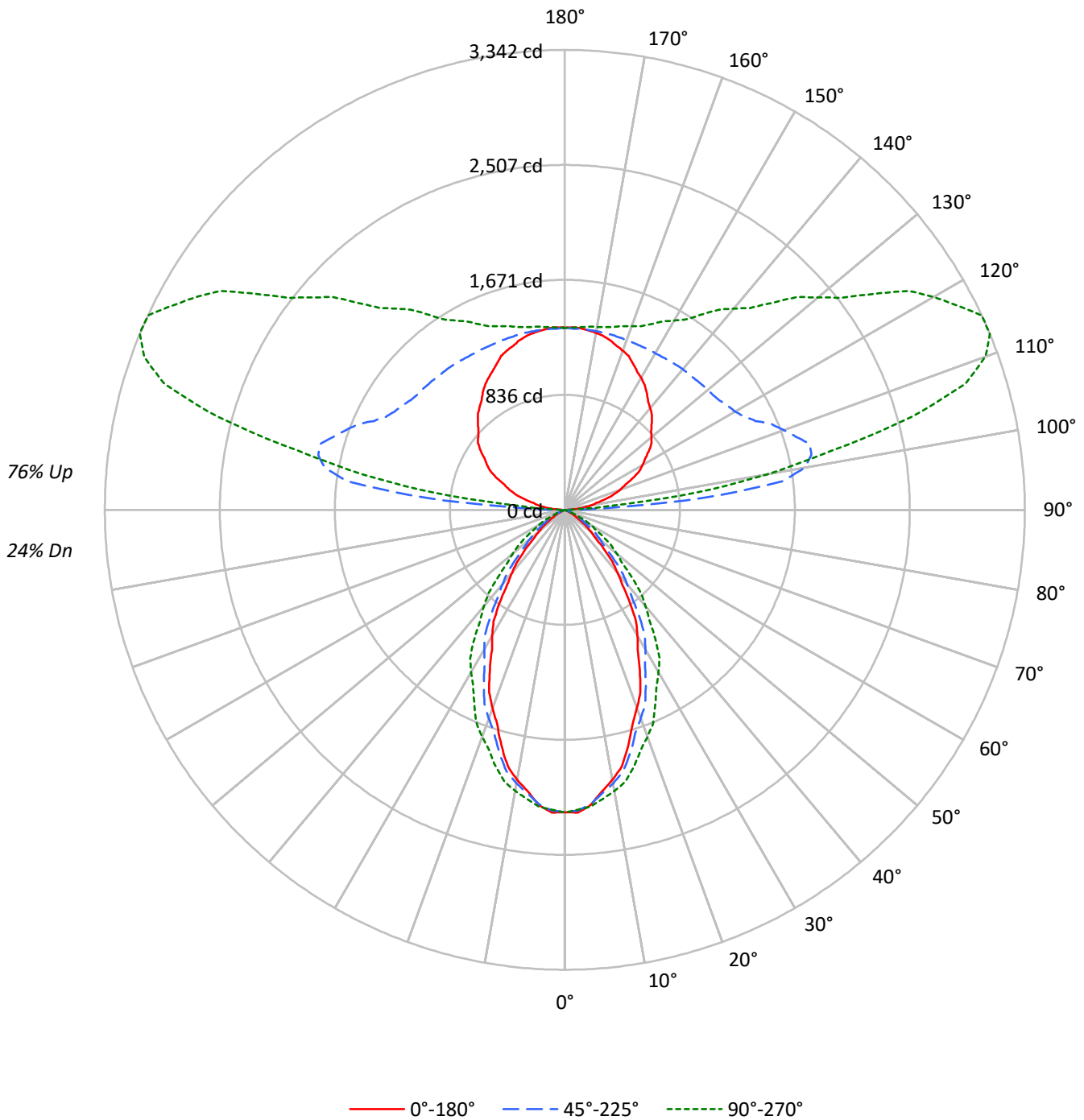
Lumens per Lamp: N/A
Luminaire Lumens: 11152.7 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
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	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°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10561	11487
25°	8743	9435	10554
30°	7489	8312	9671
35°	6210	7055	8604
40°	4771	5641	7332
45°	3449	4272	5899
50°	2349	3184	4679
55°	1527	2302	3636
60°	876	1621	2629
65°	231	990	1330
70°	115	306	383
75°	50	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.5	1.8
10°-20°	512.8	4.6
20°-30°	641.9	5.8
30°-40°	592.9	5.3
40°-50°	398.4	3.6
50°-60°	205.8	1.8
60°-70°	64.4	0.6
70°-80°	4.1	0.0
80°-90°	2.8	0.0
90°-100°	614.8	5.5
100°-110°	1662.2	14.9
110°-120°	1747.6	15.7
120°-130°	1419.5	12.7
130°-140°	1113.5	10.0
140°-150°	854.6	7.7
150°-160°	614.6	5.5
160°-170°	375.5	3.4
170°-180°	126.6	1.1
0°-30°	1355.2	12.2
0°-40°	1948.1	17.5
0°-60°	2552.4	22.9
0°-90°	2623.7	23.5
90°-120°	4024.6	36.1
90°-150°	7412.3	66.5
90°-180°	8529.0	76.5
0°-180°	11152.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2154	2132	2148	2156	2164	200
15°	1776	1770	1832	1894	1935	495
25°	1288	1299	1390	1486	1555	591
35°	827	848	940	1050	1146	512
45°	396	420	491	587	678	311
55°	142	166	215	276	339	133
65°	16	30	68	82	91	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	8	18	20	18	6
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2202.2	2181.4	2186.9	2186.8	2180.9
5°	2153.5	2131.7	2148.2	2155.8	2164.2
7.5°	2062.5	2045.5	2077.2	2101.0	2118.2
10°	1992.0	1977.4	2018.5	2051.0	2074.9
12.5°	1910.3	1899.1	1948.8	1993.3	2023.8
15°	1776.2	1769.9	1832.5	1894.0	1934.6
17.5°	1632.5	1632.3	1703.7	1780.1	1828.9
20°	1533.8	1536.9	1613.5	1697.8	1754.9
22.5°	1435.2	1442.5	1524.3	1612.1	1677.5
25°	1288.3	1298.7	1390.3	1485.5	1555.1
27.5°	1147.1	1162.3	1258.7	1357.6	1442.4
30°	1054.4	1072.1	1170.3	1274.3	1361.6
32.5°	963.5	984.4	1080.2	1190.2	1279.1
35°	827.0	847.8	939.6	1050.2	1145.9
37.5°	686.0	706.4	796.1	905.0	1008.3
40°	594.2	617.1	702.6	808.1	913.1
42.5°	510.9	533.7	614.2	717.8	817.0
45°	396.5	420.4	491.1	586.7	678.2
47.5°	301.7	327.6	389.7	476.2	559.5
50°	245.5	271.5	332.7	408.9	489.0
52.5°	200.5	225.6	280.8	352.7	426.0
55°	142.4	166.3	214.7	275.7	339.1
57.5°	98.4	119.0	162.4	213.3	263.0
60°	71.2	91.0	131.8	173.1	213.7
62.5°	47.4	65.5	105.4	137.1	164.3
65°	15.9	30.5	68.0	82.1	91.4
67.5°	8.1	9.7	35.7	37.7	40.8
70°	6.4	6.4	17.0	18.1	21.3
72.5°	4.7	4.7	6.8	8.7	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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	1.7	3.7	4.0	3.7
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)