

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: P518937

Luminaire Tested: **SQ4-BB-150U-100D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518937
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-6
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

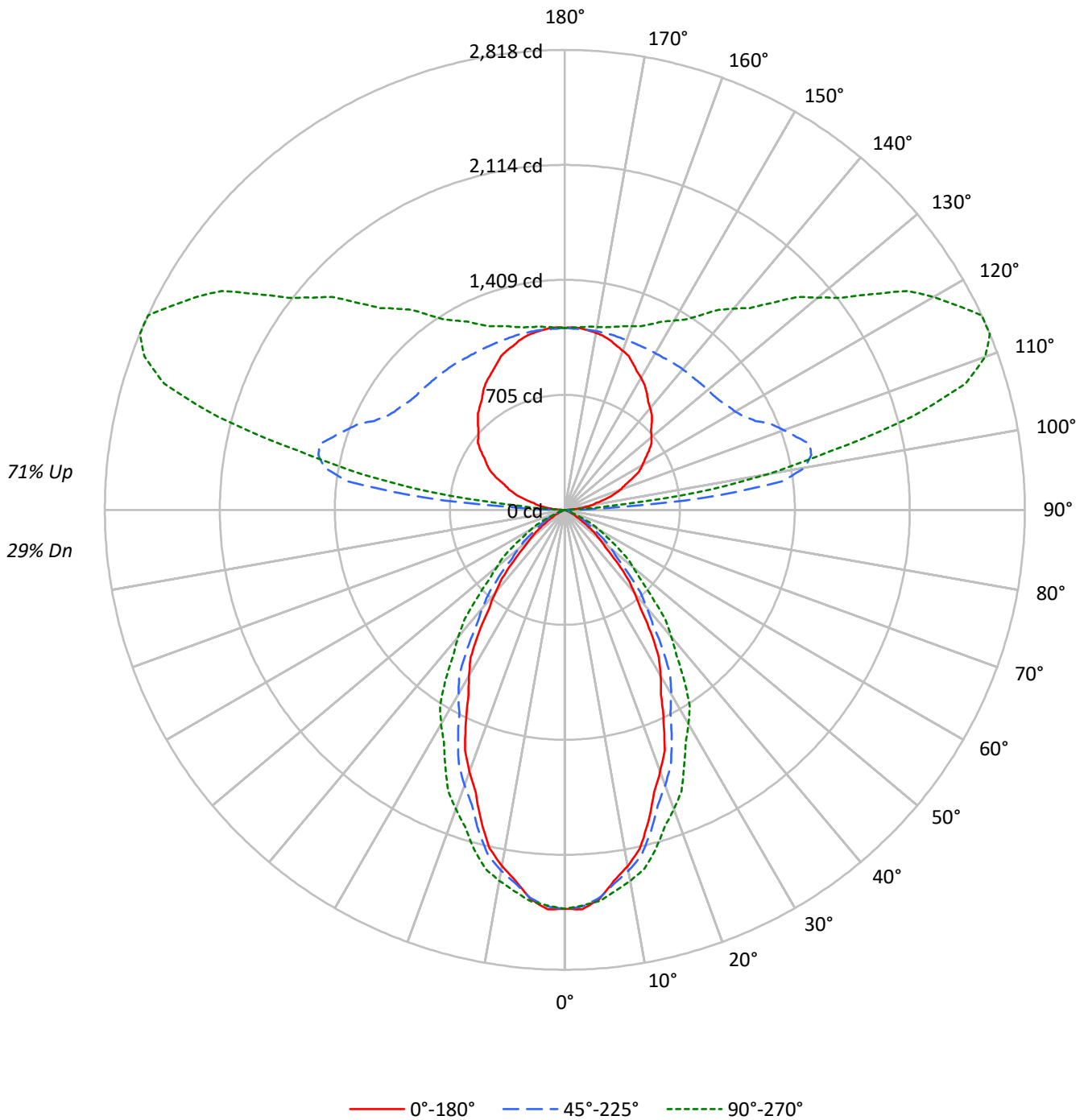
Lumens per Lamp: N/A
Luminaire Lumens: 10108.6 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	15034	15034	15034
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	7850	9572
40°	5307	6277	8156
45°	3837	4752	6563
50°	2614	3541	5206
55°	1700	2562	4045
60°	974	1803	2924
65°	258	1102	1480
70°	128	340	426
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.1	2.2
10°-20°	570.5	5.6
20°-30°	714.2	7.1
30°-40°	659.7	6.5
40°-50°	443.3	4.4
50°-60°	228.9	2.3
60°-70°	71.7	0.7
70°-80°	4.5	0.0
80°-90°	2.4	0.0
90°-100°	518.3	5.1
100°-110°	1401.4	13.9
110°-120°	1473.3	14.6
120°-130°	1196.7	11.8
130°-140°	938.7	9.3
140°-150°	720.5	7.1
150°-160°	518.2	5.1
160°-170°	316.5	3.1
170°-180°	106.7	1.1
0°-30°	1507.7	14.9
0°-40°	2167.4	21.4
0°-60°	2839.6	28.1
0°-90°	2918.2	28.9
90°-120°	3393.0	33.6
90°-150°	6249.0	61.8
90°-180°	7190.0	71.1
0°-180°	10108.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2444	2444	2444	2444	2444	
5°	2396	2372	2390	2398	2408	222
15°	1976	1969	2039	2107	2152	550
25°	1433	1445	1547	1653	1730	657
35°	920	943	1045	1168	1275	570
45°	441	468	546	653	754	346
55°	158	185	239	307	377	148
65°	18	34	76	91	102	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	16	17	16	5
95°	80	282	862	446	265	84
105°	260	402	1555	2293	2199	274
115°	459	561	1289	2496	2818	453
125°	628	719	1162	1961	2304	560
135°	753	842	1131	1583	1792	582
145°	875	941	1115	1355	1459	547
155°	988	1027	1106	1216	1256	456
165°	1076	1086	1110	1154	1160	303
175°	1116	1115	1112	1126	1124	106
180°	1115	1115	1115	1115	1115	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2444.3	2444.3	2444.3	2444.3	2444.3
2.5°	2450.0	2426.9	2433.0	2432.8	2426.4
5°	2395.9	2371.6	2389.9	2398.4	2407.7
7.5°	2294.6	2275.7	2310.9	2337.4	2356.6
10°	2216.1	2199.9	2245.7	2281.8	2308.3
12.5°	2125.3	2112.8	2168.1	2217.6	2251.6
15°	1976.0	1969.1	2038.7	2107.2	2152.2
17.5°	1816.2	1815.9	1895.4	1980.4	2034.7
20°	1706.4	1709.9	1795.1	1888.8	1952.4
22.5°	1596.7	1604.8	1695.8	1793.5	1866.3
25°	1433.3	1444.8	1546.8	1652.6	1730.1
27.5°	1276.2	1293.1	1400.4	1510.4	1604.7
30°	1173.1	1192.8	1302.0	1417.7	1514.9
32.5°	1071.9	1095.2	1201.7	1324.1	1423.1
35°	920.0	943.2	1045.4	1168.4	1274.8
37.5°	763.2	785.9	885.7	1006.8	1121.8
40°	661.0	686.5	781.7	899.0	1015.8
42.5°	568.3	593.8	683.3	798.6	908.9
45°	441.1	467.7	546.3	652.7	754.5
47.5°	335.6	364.5	433.5	529.8	622.5
50°	273.2	302.1	370.1	454.9	544.0
52.5°	223.0	251.0	312.4	392.3	474.0
55°	158.5	185.1	238.9	306.7	377.2
57.5°	109.5	132.4	180.7	237.3	292.6
60°	79.2	101.2	146.6	192.6	237.7
62.5°	52.7	72.9	117.3	152.5	182.8
65°	17.7	33.9	75.7	91.3	101.7
67.5°	9.0	10.8	39.7	41.9	45.4
70°	7.1	7.1	18.9	20.2	23.7
72.5°	5.2	5.2	7.6	9.7	10.4
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	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°	0.5	1.4	3.1	3.4	3.1
90°	2.4	7.1	15.6	16.8	15.6
92.5°	34.1	124.2	245.1	106.4	77.1
95°	80.4	282.3	861.9	446.1	265.3
97.5°	129.2	323.8	1343.6	1111.9	816.6
100°	165.7	340.6	1493.4	1557.4	1259.3
102.5°	199.3	363.8	1546.2	1895.3	1672.3
105°	260.5	402.5	1554.6	2293.2	2199.3
107.5°	317.2	446.8	1486.7	2541.4	2572.6
110°	361.3	478.7	1426.2	2608.0	2740.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	400.7	510.6	1370.5	2594.7	2817.5
115°	458.6	560.7	1289.3	2495.9	2817.5
117.5°	515.2	611.0	1235.8	2344.9	2709.5
120°	549.8	643.7	1204.1	2236.5	2608.6
122.5°	582.5	674.5	1184.9	2120.4	2495.3
125°	627.8	719.4	1162.1	1961.0	2303.7
127.5°	669.6	759.5	1148.6	1830.9	2132.3
130°	692.7	785.4	1142.9	1750.5	2022.8
132.5°	716.7	808.5	1137.1	1678.0	1928.7
135°	752.7	841.9	1130.8	1583.4	1792.3
137.5°	789.0	873.2	1125.6	1506.6	1676.8
140°	813.9	892.6	1123.6	1457.2	1608.6
142.5°	837.9	911.9	1119.8	1412.6	1545.3
145°	875.1	940.9	1115.2	1355.3	1458.6
147.5°	909.0	967.2	1110.0	1303.4	1382.7
150°	934.0	985.6	1108.0	1275.1	1338.5
152.5°	957.0	1002.1	1107.1	1249.0	1301.1
155°	988.0	1026.7	1105.6	1215.8	1255.7
157.5°	1020.2	1047.2	1105.9	1192.7	1219.0
160°	1038.4	1060.7	1106.8	1178.1	1196.9
162.5°	1052.8	1071.4	1107.8	1166.5	1180.5
165°	1075.6	1086.2	1110.4	1153.8	1159.7
167.5°	1091.2	1098.5	1110.7	1142.9	1145.7
170°	1100.8	1104.4	1111.6	1138.1	1138.1
172.5°	1108.5	1109.2	1111.6	1132.3	1131.3
175°	1116.4	1115.3	1111.6	1126.0	1123.6
177.5°	1119.1	1116.3	1111.4	1120.9	1118.1
180°	1115.2	1115.2	1115.2	1115.2	1115.2

(END OF REPORT)