

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: P518925

Luminaire Tested: **SQ4-BB-150U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518925
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-830-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

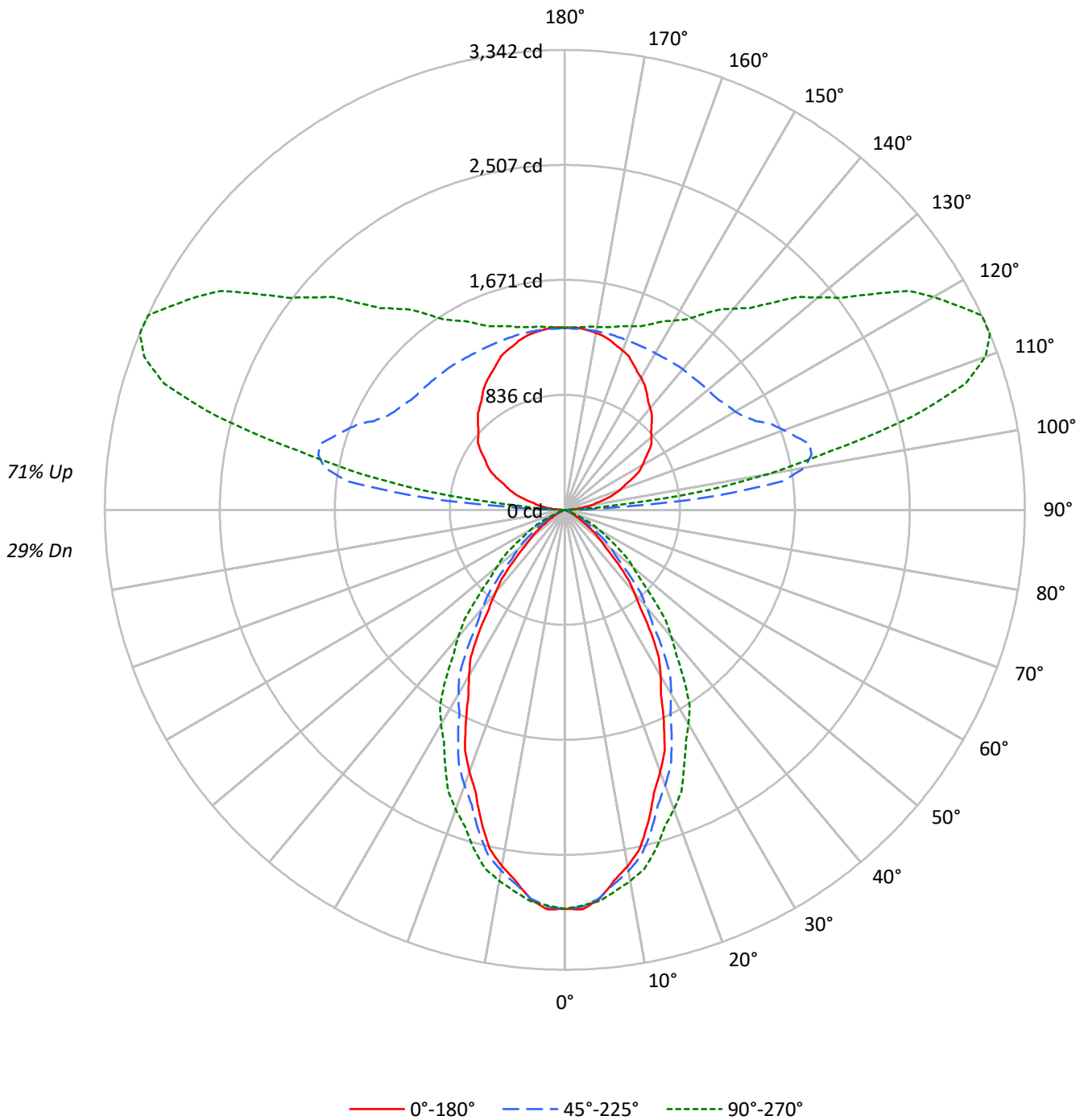
Lumens per Lamp: N/A
Luminaire Lumens: 11990.4 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	17834	17834	17834
5°	17547	17504	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12451	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2016	3038	4799
60°	1156	2139	3468
65°	306	1307	1755
70°	151	403	505
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	2.2
10°-20°	676.7	5.6
20°-30°	847.1	7.1
30°-40°	782.5	6.5
40°-50°	525.8	4.4
50°-60°	271.6	2.3
60°-70°	85.0	0.7
70°-80°	5.4	0.0
80°-90°	2.9	0.0
90°-100°	614.8	5.1
100°-110°	1662.2	13.9
110°-120°	1747.6	14.6
120°-130°	1419.5	11.8
130°-140°	1113.5	9.3
140°-150°	854.6	7.1
150°-160°	614.6	5.1
160°-170°	375.5	3.1
170°-180°	126.6	1.1
0°-30°	1788.4	14.9
0°-40°	2570.8	21.4
0°-60°	3368.2	28.1
0°-90°	3461.4	28.9
90°-120°	4024.6	33.6
90°-150°	7412.3	61.8
90°-180°	8529.0	71.1
0°-180°	11990.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2842	2813	2835	2845	2856	263
15°	2344	2336	2418	2499	2553	653
25°	1700	1714	1835	1960	2052	779
35°	1091	1119	1240	1386	1512	676
45°	523	555	648	774	895	411
55°	188	220	283	364	448	175
65°	21	40	90	108	121	36
75°	3	3	1	0	0	4
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°	2899.4	2899.4	2899.4	2899.4	2899.4
2.5°	2906.1	2878.7	2885.9	2885.7	2878.1
5°	2841.9	2813.1	2834.9	2844.9	2855.9
7.5°	2721.8	2699.3	2741.2	2772.5	2795.3
10°	2628.7	2609.5	2663.7	2706.5	2738.1
12.5°	2520.9	2506.1	2571.7	2630.4	2670.7
15°	2343.9	2335.7	2418.3	2499.4	2552.9
17.5°	2154.3	2154.0	2248.2	2349.0	2413.5
20°	2024.1	2028.2	2129.3	2240.4	2315.9
22.5°	1893.9	1903.5	2011.5	2127.3	2213.7
25°	1700.1	1713.8	1834.7	1960.3	2052.1
27.5°	1513.8	1533.8	1661.1	1791.5	1903.5
30°	1391.5	1414.8	1544.4	1681.6	1796.9
32.5°	1271.4	1299.1	1425.4	1570.6	1688.0
35°	1091.3	1118.7	1240.0	1385.9	1512.1
37.5°	905.3	932.2	1050.6	1194.3	1330.6
40°	784.1	814.3	927.2	1066.4	1204.9
42.5°	674.1	704.3	810.5	947.3	1078.1
45°	523.2	554.8	648.0	774.2	894.9
47.5°	398.1	432.4	514.2	628.4	738.4
50°	324.0	358.3	439.0	539.6	645.2
52.5°	264.5	297.7	370.6	465.4	562.2
55°	188.0	219.5	283.3	363.8	447.5
57.5°	129.9	157.0	214.3	281.5	347.0
60°	94.0	120.0	173.9	228.5	281.9
62.5°	62.6	86.4	139.1	180.9	216.9
65°	21.0	40.2	89.8	108.3	120.6
67.5°	10.7	12.9	47.1	49.7	53.9
70°	8.4	8.4	22.4	23.9	28.1
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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°	0.6	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



TEST NUMBER: P518925

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-6

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)