

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: P518493

Luminaire Tested: **SQ4-BB-075U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518493
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

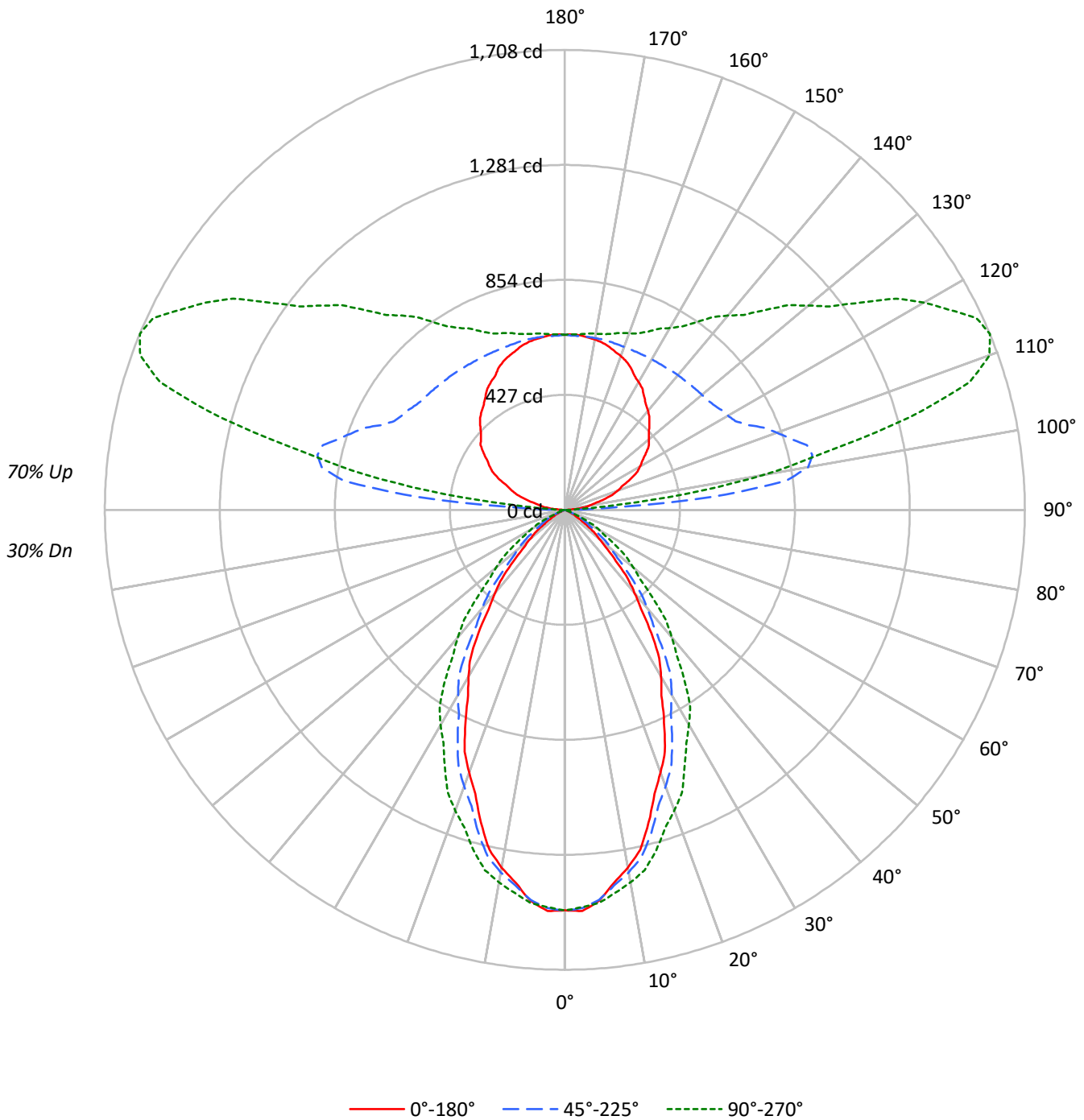
Lumens per Lamp: N/A
Luminaire Lumens: 6015.0 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4204	4777	5826
40°	3230	3820	4964
45°	2336	2892	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1097	1780
65°	157	671	901
70°	77	207	259
75°	33	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	2.3
10°-20°	347.2	5.8
20°-30°	434.7	7.2
30°-40°	401.5	6.7
40°-50°	269.8	4.5
50°-60°	139.3	2.3
60°-70°	43.6	0.7
70°-80°	2.8	0.0
80°-90°	1.7	0.0
90°-100°	306.9	5.1
100°-110°	844.3	14.0
110°-120°	871.5	14.5
120°-130°	698.2	11.6
130°-140°	548.4	9.1
140°-150°	420.3	7.0
150°-160°	302.2	5.0
160°-170°	184.8	3.1
170°-180°	62.3	1.0
0°-30°	917.6	15.3
0°-40°	1319.1	21.9
0°-60°	1728.2	28.7
0°-90°	1776.3	29.5
90°-120°	2022.6	33.6
90°-150°	3689.5	61.3
90°-180°	4239.0	70.5
0°-180°	6015.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1458	1443	1455	1460	1465	135
15°	1203	1198	1241	1282	1310	335
25°	872	879	941	1006	1053	400
35°	560	574	636	711	776	347
45°	268	285	332	397	459	211
55°	96	113	145	187	230	90
65°	11	21	46	56	62	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	5	10	12	12	3
95°	46	168	543	232	148	48
105°	151	232	930	1417	1322	159
115°	267	325	746	1486	1686	264
125°	368	420	677	1145	1341	328
135°	444	493	658	926	1048	343
145°	514	549	648	789	850	322
155°	581	600	644	709	730	267
165°	628	637	646	673	677	177
175°	651	652	648	656	655	62
180°	651	651	651	651	651	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.7	1487.7	1487.7	1487.7	1487.7
2.5°	1491.1	1477.1	1480.8	1480.7	1476.7
5°	1458.2	1443.4	1454.6	1459.7	1465.4
7.5°	1396.6	1385.0	1406.5	1422.6	1434.3
10°	1348.8	1338.9	1366.8	1388.7	1404.9
12.5°	1293.5	1285.9	1319.5	1349.7	1370.4
15°	1202.7	1198.4	1240.8	1282.5	1309.9
17.5°	1105.4	1105.2	1153.6	1205.3	1238.4
20°	1038.6	1040.7	1092.5	1149.6	1188.3
22.5°	971.8	976.7	1032.1	1091.5	1135.9
25°	872.3	879.3	941.4	1005.8	1053.0
27.5°	776.7	787.0	852.3	919.2	976.7
30°	714.0	725.9	792.4	862.9	922.0
32.5°	652.4	666.6	731.4	805.9	866.1
35°	559.9	574.0	636.2	711.1	775.9
37.5°	464.5	478.3	539.1	612.8	682.7
40°	402.3	417.8	475.7	547.2	618.2
42.5°	345.9	361.4	415.9	486.0	553.2
45°	268.5	284.6	332.5	397.3	459.2
47.5°	204.3	221.9	263.9	322.4	378.9
50°	166.3	183.8	225.3	276.9	331.1
52.5°	135.7	152.8	190.2	238.8	288.5
55°	96.4	112.6	145.4	186.7	229.6
57.5°	66.6	80.6	110.0	144.4	178.1
60°	48.2	61.6	89.2	117.2	144.7
62.5°	32.1	44.3	71.4	92.8	111.3
65°	10.8	20.6	46.1	55.6	61.9
67.5°	5.5	6.6	24.2	25.5	27.6
70°	4.3	4.3	11.5	12.3	14.4
72.5°	3.2	3.2	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.1	1.9	2.5	2.5
90°	1.4	5.4	9.7	12.5	12.5
92.5°	19.1	81.6	141.5	54.3	44.6
95°	45.7	167.5	542.7	232.0	148.1
97.5°	74.5	185.7	828.1	638.1	450.2
100°	95.5	197.0	917.8	926.4	755.9
102.5°	115.5	210.5	941.1	1149.3	992.9
105°	150.9	232.1	930.3	1416.8	1322.1
107.5°	184.7	258.9	877.4	1547.8	1576.0
110°	209.0	276.7	837.5	1580.4	1677.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.2	296.7	797.7	1559.4	1707.7
115°	267.2	325.4	746.2	1485.8	1686.1
117.5°	301.5	355.1	713.5	1382.6	1609.2
120°	322.6	374.0	699.1	1305.2	1539.4
122.5°	341.4	392.8	689.1	1237.4	1459.7
125°	368.2	419.7	677.0	1145.2	1341.4
127.5°	393.7	442.7	668.9	1068.2	1240.4
130°	407.0	457.1	664.5	1022.5	1179.5
132.5°	422.5	472.6	661.2	982.2	1124.1
135°	444.4	493.1	657.6	926.1	1048.0
137.5°	464.9	510.1	654.5	880.8	981.2
140°	480.4	522.3	653.4	850.7	941.4
142.5°	493.7	532.4	651.2	823.8	901.5
145°	513.6	548.8	647.9	789.1	850.0
147.5°	534.9	565.2	646.2	758.4	807.1
150°	548.2	575.3	645.1	741.5	779.4
152.5°	560.4	585.3	644.0	726.9	758.4
155°	581.4	600.4	643.7	709.3	729.6
157.5°	596.7	612.1	643.7	694.7	708.8
160°	607.7	619.9	643.7	686.9	697.7
162.5°	616.6	626.6	644.8	680.2	688.9
165°	628.5	636.6	646.5	672.9	677.0
167.5°	636.8	643.0	647.9	666.7	667.8
170°	642.3	646.4	647.9	664.5	664.5
172.5°	646.8	648.7	647.9	661.1	660.1
175°	650.6	652.0	647.9	656.2	654.8
177.5°	651.8	651.8	647.3	653.9	651.8
180°	650.6	650.6	650.6	650.6	650.6

(END OF REPORT)