

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521296

Luminaire Tested: **SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521296
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

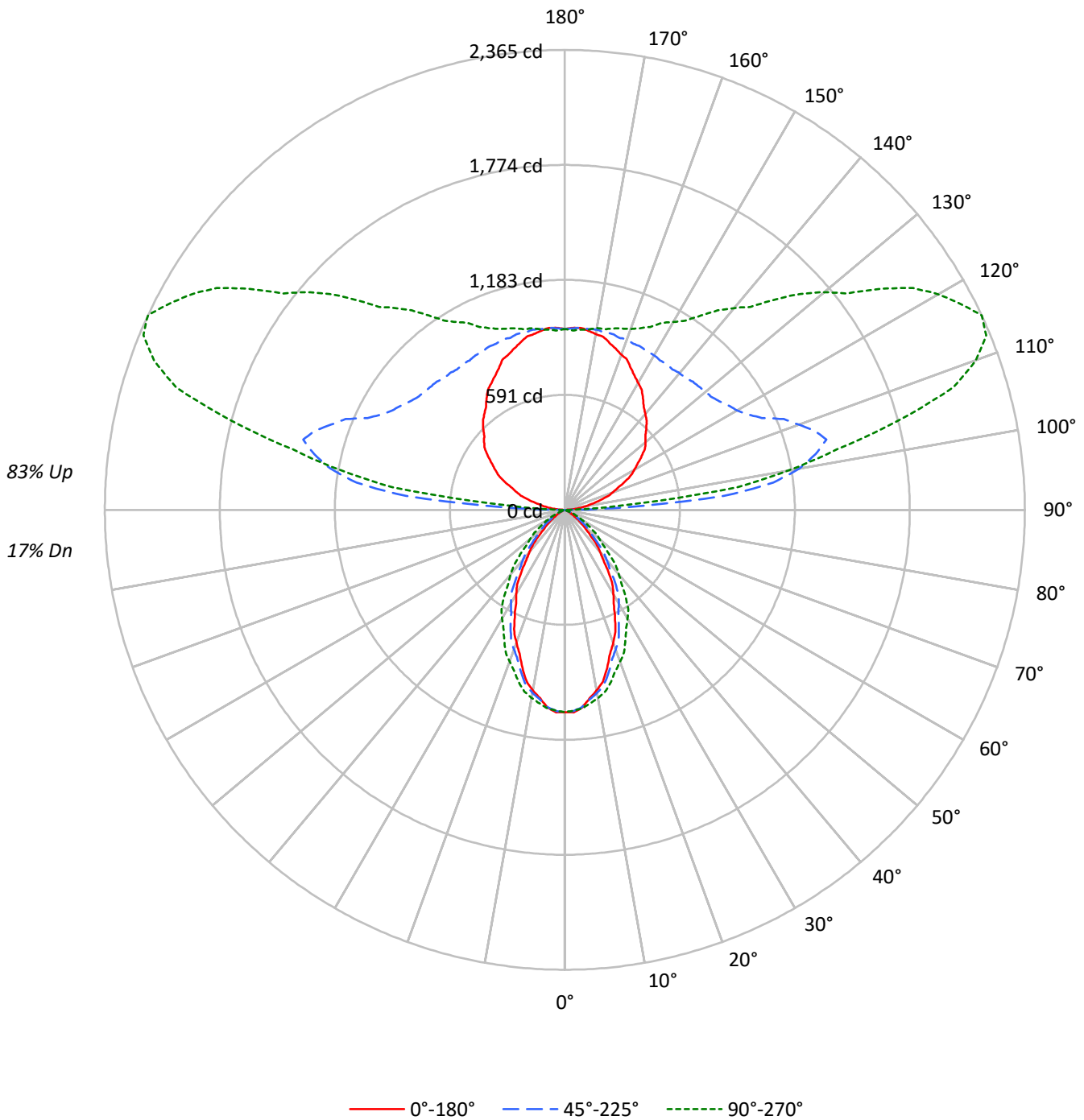
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7262.3 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17				
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16				
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14				
3	76	68	61	56	67	60	55	50	46	42	39	32	30	28	20	19	18	13				
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12				
5	64	54	47	41	57	48	42	37	37	33	29	26	24	22	17	15	14	10				
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10				
7	55	44	37	31	48	39	33	29	30	26	23	22	19	17	14	13	12	9				
8	51	40	33	28	45	36	30	25	28	23	20	20	17	16	13	12	11	8				
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	7				
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9600	9600	9600
5°	9446	9422	9492
10°	8837	8955	9206
15°	8035	8289	8751
20°	7132	7502	8160
25°	6211	6703	7497
30°	5320	5904	6869
35°	4411	5012	6111
40°	3389	4007	5208
45°	2450	3035	4191
50°	1669	2262	3324
55°	1086	1636	2583
60°	622	1151	1867
65°	166	703	945
70°	81	219	272
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.3
10°-20°	242.8	3.3
20°-30°	304.0	4.2
30°-40°	280.8	3.9
40°-50°	188.7	2.6
50°-60°	97.5	1.3
60°-70°	30.5	0.4
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	479.4	6.6
100°-110°	1158.6	16.0
110°-120°	1235.7	17.0
120°-130°	1000.8	13.8
130°-140°	774.9	10.7
140°-150°	591.1	8.1
150°-160°	427.9	5.9
160°-170°	263.5	3.6
170°-180°	89.2	1.2
0°-30°	641.8	8.8
0°-40°	922.6	12.7
0°-60°	1208.7	16.6
0°-90°	1241.2	17.1
90°-120°	2873.6	39.6
90°-150°	5240.4	72.2
90°-180°	6021.0	82.9
0°-180°	7262.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1020	1010	1017	1021	1025	95
15°	841	838	868	897	916	234
25°	610	615	658	704	736	280
35°	392	402	445	497	543	243
45°	188	199	233	278	321	147
55°	68	79	102	131	161	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	47	240	821	534	374	53
105°	185	320	1392	1802	1778	196
115°	339	433	1119	2121	2365	335
125°	482	556	971	1687	1981	431
135°	593	662	932	1330	1530	458
145°	701	753	914	1131	1219	438
155°	804	838	926	1001	1038	371
165°	888	902	938	952	965	251
175°	940	936	940	932	930	89
180°	930	930	930	930	930	



TEST NUMBER: P521296

CATALOG NUMBER: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1042.9	1033.1	1035.7	1035.6	1032.8
5°	1019.9	1009.5	1017.3	1020.9	1024.9
7.5°	976.8	968.7	983.7	995.0	1003.1
10°	943.3	936.4	955.9	971.3	982.6
12.5°	904.7	899.4	922.9	944.0	958.4
15°	841.2	838.2	867.8	897.0	916.2
17.5°	773.1	773.0	806.8	843.0	866.1
20°	726.4	727.9	764.1	804.0	831.1
22.5°	679.7	683.1	721.8	763.4	794.4
25°	610.1	615.0	658.4	703.5	736.4
27.5°	543.2	550.4	596.1	642.9	683.1
30°	499.4	507.7	554.2	603.5	644.8
32.5°	456.3	466.2	511.5	563.6	605.8
35°	391.6	401.5	445.0	497.4	542.6
37.5°	324.9	334.5	377.0	428.6	477.5
40°	281.4	292.2	332.7	382.7	432.4
42.5°	241.9	252.8	290.9	339.9	386.9
45°	187.8	199.1	232.6	277.8	321.2
47.5°	142.9	155.2	184.5	225.5	265.0
50°	116.3	128.6	157.6	193.7	231.6
52.5°	94.9	106.8	133.0	167.0	201.8
55°	67.5	78.8	101.7	130.6	160.6
57.5°	46.6	56.4	76.9	101.0	124.5
60°	33.7	43.1	62.4	82.0	101.2
62.5°	22.5	31.0	49.9	64.9	77.8
65°	7.6	14.4	32.2	38.9	43.3
67.5°	3.8	4.6	16.9	17.9	19.3
70°	3.0	3.0	8.1	8.6	10.1
72.5°	2.2	2.2	3.2	4.1	4.4
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	129.8	305.7	148.6	100.8
95°	47.3	239.8	821.3	534.1	374.2
97.5°	83.9	265.7	1081.7	1042.1	894.6
100°	112.3	281.7	1225.1	1293.2	1171.9
102.5°	139.1	296.2	1319.6	1502.3	1430.3
105°	185.1	319.9	1392.5	1801.6	1778.5
107.5°	230.4	347.9	1349.5	2041.7	2096.0
110°	262.0	371.7	1280.2	2145.2	2247.3



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CATALOG NUMBER: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.5	395.5	1218.8	2170.5	2345.0
115°	338.8	433.1	1118.7	2120.9	2365.4
117.5°	383.7	472.6	1060.0	2006.8	2293.4
120°	413.6	496.4	1022.2	1917.3	2217.7
122.5°	445.1	521.8	998.6	1825.8	2121.6
125°	482.5	555.7	971.0	1686.7	1981.4
127.5°	519.6	588.5	951.7	1568.9	1827.7
130°	541.6	609.0	945.4	1486.9	1741.1
132.5°	562.1	632.6	935.9	1427.7	1643.4
135°	592.8	662.2	931.6	1330.1	1530.3
137.5°	622.0	691.7	917.8	1263.9	1414.9
140°	644.0	707.6	917.8	1216.4	1355.1
142.5°	666.1	729.7	909.9	1174.9	1292.0
145°	701.2	753.2	913.9	1130.6	1219.2
147.5°	733.9	784.3	911.5	1079.4	1152.6
150°	754.3	798.6	917.8	1057.0	1114.8
152.5°	776.4	819.2	916.2	1033.2	1084.8
155°	803.6	838.2	925.7	1001.4	1038.0
157.5°	836.3	865.9	923.7	989.2	1010.8
160°	848.9	873.9	931.6	973.3	988.7
162.5°	869.4	891.3	928.4	968.4	977.7
165°	888.3	901.8	937.5	951.6	965.1
167.5°	911.5	920.4	935.1	950.5	950.9
170°	917.8	923.6	941.4	939.7	949.3
172.5°	928.8	933.1	936.7	940.9	935.1
175°	939.5	935.6	939.5	931.6	929.6
177.5°	937.5	937.5	934.4	931.0	923.3
180°	929.6	929.6	929.6	929.6	929.6

(END OF REPORT)