

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: P521298

Luminaire Tested: **SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521298
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

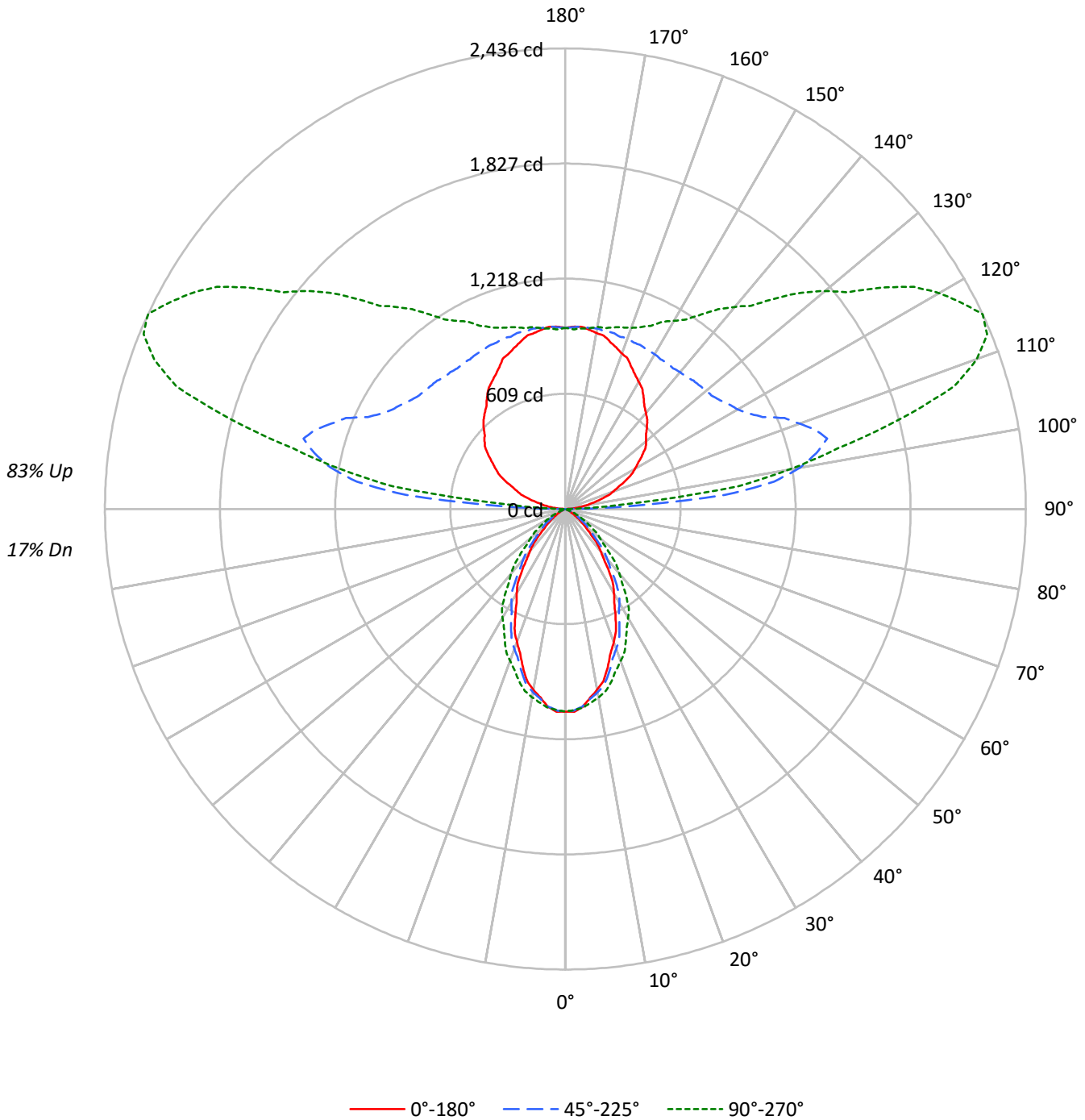
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7480.1 lumens
Efficiency: N/A
Efficacy: 104.0 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°	9888	9888	9888
5°	9728	9704	9776
10°	9102	9224	9482
15°	8276	8538	9013
20°	7346	7728	8404
25°	6397	6904	7722
30°	5479	6081	7076
35°	4544	5162	6295
40°	3490	4127	5364
45°	2523	3125	4316
50°	1720	2330	3423
55°	1118	1684	2661
60°	640	1186	1923
65°	170	725	974
70°	84	224	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.3
10°-20°	250.1	3.3
20°-30°	313.1	4.2
30°-40°	289.2	3.9
40°-50°	194.3	2.6
50°-60°	100.4	1.3
60°-70°	31.4	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	493.7	6.6
100°-110°	1193.3	16.0
110°-120°	1272.7	17.0
120°-130°	1030.8	13.8
130°-140°	798.1	10.7
140°-150°	608.8	8.1
150°-160°	440.7	5.9
160°-170°	271.4	3.6
170°-180°	91.9	1.2
0°-30°	661.0	8.8
0°-40°	950.3	12.7
0°-60°	1245.0	16.6
0°-90°	1278.4	17.1
90°-120°	2959.8	39.6
90°-150°	5397.5	72.2
90°-180°	6202.0	82.9
0°-180°	7480.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1050	1040	1048	1052	1056	97
15°	866	863	894	924	944	241
25°	628	634	678	725	758	288
35°	403	414	458	512	559	250
45°	193	205	240	286	331	152
55°	70	81	105	134	165	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	247	846	550	385	55
105°	191	330	1434	1856	1832	201
115°	349	446	1152	2184	2436	345
125°	497	572	1000	1737	2041	443
135°	611	682	960	1370	1576	471
145°	722	776	941	1164	1256	451
155°	828	863	954	1031	1069	382
165°	915	929	966	980	994	258
175°	968	964	968	960	958	91
180°	958	958	958	958	958	



TEST NUMBER: P521298

CATALOG NUMBER: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1074.2	1064.0	1066.7	1066.7	1063.8
5°	1050.4	1039.8	1047.8	1051.6	1055.6
7.5°	1006.1	997.7	1013.2	1024.8	1033.2
10°	971.6	964.5	984.6	1000.4	1012.1
12.5°	931.8	926.3	950.6	972.3	987.2
15°	866.4	863.3	893.9	923.9	943.6
17.5°	796.3	796.2	831.0	868.3	892.1
20°	748.2	749.7	787.1	828.1	856.0
22.5°	700.1	703.6	743.5	786.3	818.3
25°	628.4	633.5	678.2	724.6	758.5
27.5°	559.5	566.9	614.0	662.2	703.6
30°	514.3	523.0	570.8	621.6	664.2
32.5°	470.0	480.2	526.9	580.5	623.9
35°	403.4	413.5	458.3	512.3	558.9
37.5°	334.6	344.6	388.3	441.4	491.8
40°	289.8	301.0	342.7	394.2	445.4
42.5°	249.2	260.3	299.6	350.1	398.5
45°	193.4	205.1	239.5	286.2	330.8
47.5°	147.1	159.8	190.1	232.3	272.9
50°	119.8	132.4	162.3	199.5	238.5
52.5°	97.8	110.1	137.0	172.0	207.8
55°	69.5	81.1	104.7	134.5	165.4
57.5°	48.0	58.0	79.2	104.0	128.3
60°	34.7	44.4	64.3	84.4	104.2
62.5°	23.1	31.9	51.4	66.9	80.2
65°	7.8	14.9	33.2	40.0	44.6
67.5°	3.9	4.8	17.4	18.4	19.9
70°	3.1	3.1	8.3	8.8	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
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°	16.2	133.7	314.8	153.1	103.9
95°	48.7	247.0	845.9	550.1	385.4
97.5°	86.4	273.7	1114.1	1073.3	921.4
100°	115.6	290.2	1261.8	1332.0	1207.0
102.5°	143.2	305.1	1359.2	1547.4	1473.2
105°	190.7	329.5	1434.2	1855.7	1831.9
107.5°	237.3	358.3	1390.0	2102.9	2158.9
110°	269.8	382.9	1318.6	2209.5	2314.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	302.3	407.4	1255.3	2235.6	2415.3
115°	348.9	446.1	1152.3	2184.5	2436.4
117.5°	395.2	486.8	1091.8	2067.0	2362.1
120°	426.0	511.3	1052.9	1974.8	2284.2
122.5°	458.5	537.4	1028.5	1880.6	2185.2
125°	497.0	572.4	1000.1	1737.3	2040.8
127.5°	535.2	606.2	980.2	1616.0	1882.6
130°	557.9	627.3	973.7	1531.5	1793.3
132.5°	579.0	651.6	964.0	1470.5	1692.7
135°	610.6	682.0	959.5	1370.0	1576.2
137.5°	640.6	712.4	945.3	1301.9	1457.4
140°	663.4	728.8	945.3	1252.9	1395.7
142.5°	686.1	751.5	937.2	1210.2	1330.8
145°	722.2	775.7	941.3	1164.5	1255.7
147.5°	755.9	807.8	938.9	1111.8	1187.2
150°	777.0	822.6	945.3	1088.7	1148.2
152.5°	799.7	843.7	943.7	1064.2	1117.4
155°	827.7	863.4	953.5	1031.4	1069.1
157.5°	861.4	891.9	951.4	1018.9	1041.1
160°	874.3	900.1	959.5	1002.5	1018.4
162.5°	895.4	918.1	956.3	997.5	1007.0
165°	914.9	928.8	965.6	980.1	994.0
167.5°	938.9	948.0	963.2	979.0	979.4
170°	945.3	951.3	969.7	967.9	977.8
172.5°	956.7	961.1	964.8	969.1	963.2
175°	967.7	963.7	967.7	959.5	957.5
177.5°	965.6	965.6	962.4	959.0	951.0
180°	957.5	957.5	957.5	957.5	957.5

(END OF REPORT)