

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: P521299

Luminaire Tested: **SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521299
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

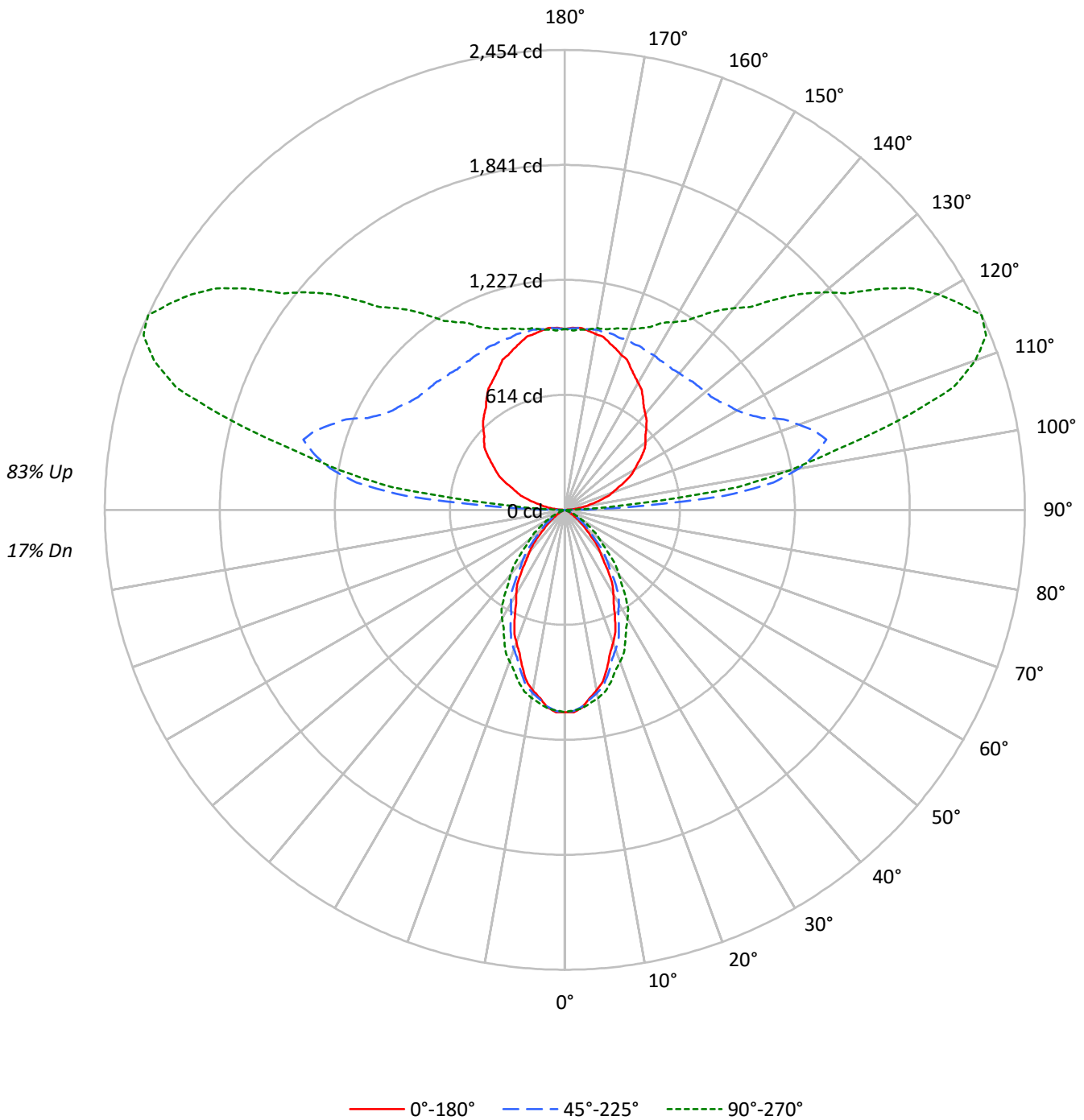
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7532.9 lumens
Efficiency: N/A
Efficacy: 104.9 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): 71.8
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	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°	9958	9958	9958
5°	9798	9774	9846
10°	9167	9290	9548
15°	8334	8598	9077
20°	7398	7782	8464
25°	6442	6953	7776
30°	5519	6125	7126
35°	4575	5199	6340
40°	3516	4156	5402
45°	2542	3147	4346
50°	1731	2345	3448
55°	1126	1697	2680
60°	646	1194	1938
65°	170	729	980
70°	84	227	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.3
10°-20°	251.9	3.3
20°-30°	315.3	4.2
30°-40°	291.3	3.9
40°-50°	195.7	2.6
50°-60°	101.1	1.3
60°-70°	31.7	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	497.2	6.6
100°-110°	1201.7	16.0
110°-120°	1281.7	17.0
120°-130°	1038.1	13.8
130°-140°	803.7	10.7
140°-150°	613.1	8.1
150°-160°	443.8	5.9
160°-170°	273.4	3.6
170°-180°	92.6	1.2
0°-30°	665.7	8.8
0°-40°	957.0	12.7
0°-60°	1253.8	16.6
0°-90°	1287.5	17.1
90°-120°	2980.7	39.6
90°-150°	5435.7	72.2
90°-180°	6245.0	82.9
0°-180°	7532.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1058	1047	1055	1059	1063	98
15°	872	869	900	930	950	243
25°	633	638	683	730	764	290
35°	406	416	462	516	563	252
45°	195	206	241	288	333	153
55°	70	82	106	135	167	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	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	



TEST NUMBER: P521299

CATALOG NUMBER: SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1079.3	1079.3	1079.3	1079.3	1079.3
2.5°	1081.8	1071.6	1074.3	1074.2	1071.3
5°	1057.9	1047.1	1055.3	1059.0	1063.1
7.5°	1013.2	1004.8	1020.4	1032.1	1040.5
10°	978.5	971.4	991.6	1007.5	1019.2
12.5°	938.4	932.9	957.3	979.2	994.2
15°	872.5	869.4	900.2	930.4	950.3
17.5°	801.9	801.8	836.9	874.4	898.4
20°	753.5	755.0	792.6	834.0	862.1
22.5°	705.0	708.6	748.8	791.9	824.0
25°	632.8	637.9	683.0	729.7	763.9
27.5°	563.5	571.0	618.3	666.9	708.5
30°	518.0	526.6	574.9	626.0	668.9
32.5°	473.3	483.6	530.6	584.6	628.3
35°	406.2	416.4	461.6	515.9	562.9
37.5°	337.0	347.0	391.1	444.6	495.3
40°	291.9	303.1	345.1	397.0	448.5
42.5°	250.9	262.2	301.7	352.6	401.3
45°	194.8	206.5	241.2	288.2	333.1
47.5°	148.2	160.9	191.4	233.9	274.9
50°	120.6	133.4	163.4	200.9	240.2
52.5°	98.5	110.8	138.0	173.2	209.3
55°	70.0	81.7	105.5	135.4	166.6
57.5°	48.4	58.5	79.8	104.8	129.2
60°	35.0	44.7	64.7	85.0	105.0
62.5°	23.3	32.2	51.8	67.3	80.7
65°	7.8	15.0	33.4	40.3	44.9
67.5°	4.0	4.8	17.5	18.5	20.1
70°	3.1	3.1	8.4	8.9	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°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)