

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: P518888

Luminaire Tested: **SQ4-BB-150U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518888
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-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

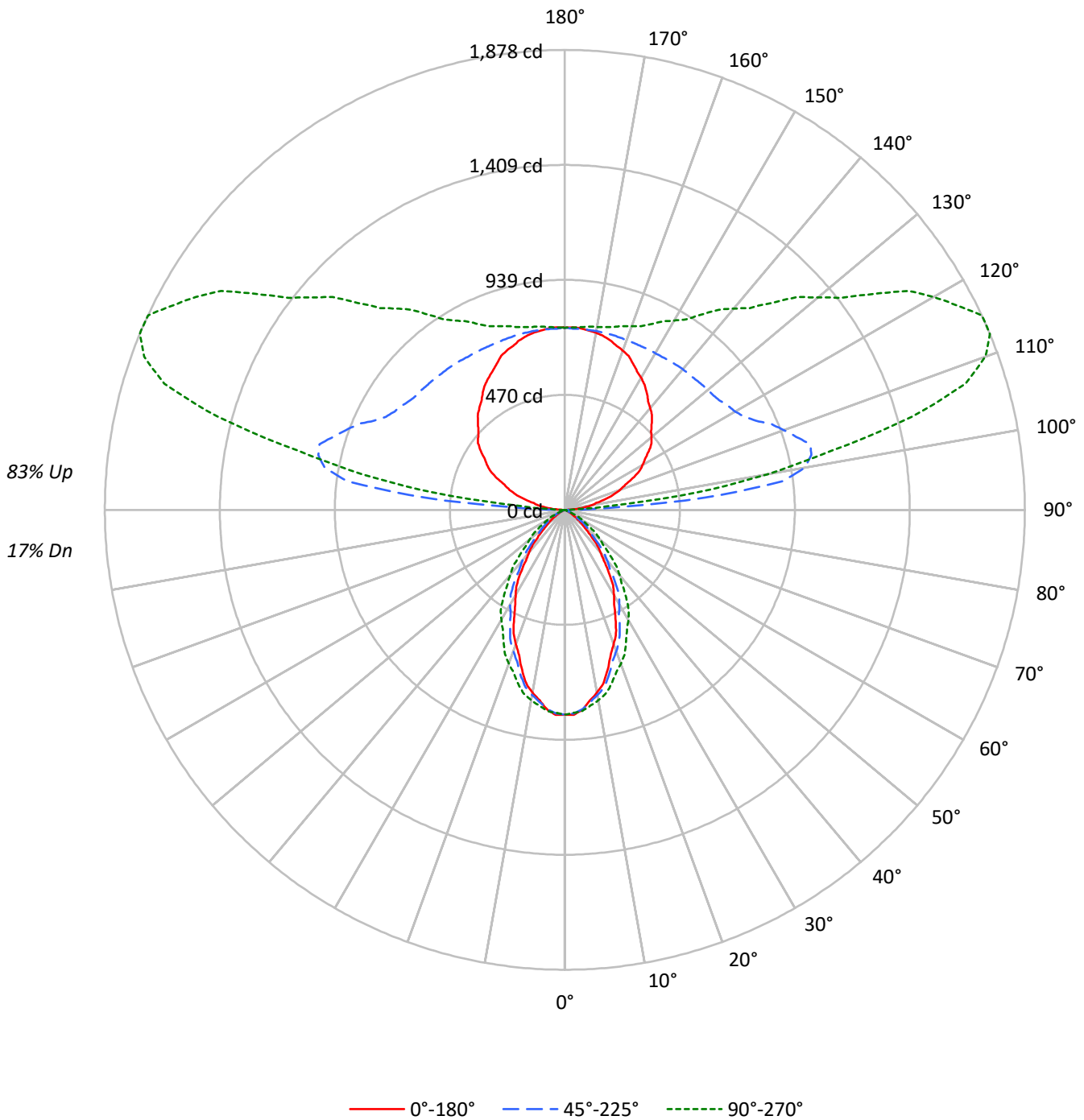
Lumens per Lamp: N/A
Luminaire Lumens: 5792.5 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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



TEST NUMBER: P518888
CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518888

CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-4

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	51	46	42	39	32	30	29	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	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	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	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
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°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6558
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4912
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2075
60°	500	926	1500
65°	133	565	760
70°	65	175	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



TEST NUMBER: P518888

CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	1.3
10°-20°	195.1	3.4
20°-30°	244.3	4.2
30°-40°	225.6	3.9
40°-50°	151.6	2.6
50°-60°	78.3	1.4
60°-70°	24.5	0.4
70°-80°	1.5	0.0
80°-90°	1.6	0.0
90°-100°	345.5	6.0
100°-110°	934.2	16.1
110°-120°	982.2	17.0
120°-130°	797.8	13.8
130°-140°	625.8	10.8
140°-150°	480.3	8.3
150°-160°	345.4	6.0
160°-170°	211.0	3.6
170°-180°	71.1	1.2
0°-30°	515.7	8.9
0°-40°	741.4	12.8
0°-60°	971.3	16.8
0°-90°	999.0	17.2
90°-120°	2262.0	39.0
90°-150°	4166.0	71.9
90°-180°	4794.0	82.8
0°-180°	5792.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	820	811	818	820	824	76
15°	676	674	697	721	736	188
25°	490	494	529	565	592	225
35°	315	323	358	400	436	195
45°	151	160	187	223	258	118
55°	54	63	82	105	129	51
65°	6	12	26	31	35	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	5	10	11	10	4
95°	54	188	575	297	177	56
105°	174	268	1036	1529	1466	183
115°	306	374	860	1664	1878	302
125°	419	480	775	1307	1536	373
135°	502	561	754	1056	1195	388
145°	583	627	744	904	972	365
155°	659	684	737	810	837	304
165°	717	724	740	769	773	202
175°	744	744	741	751	749	71
180°	744	744	744	744	744	



TEST NUMBER: P518888

CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.1	836.1	836.1	836.1	836.1
2.5°	838.1	830.2	832.2	832.2	830.0
5°	819.5	811.2	817.5	820.4	823.6
7.5°	784.9	778.4	790.5	799.5	806.1
10°	758.1	752.5	768.2	780.5	789.6
12.5°	727.0	722.7	741.6	758.6	770.2
15°	675.9	673.6	697.4	720.8	736.2
17.5°	621.3	621.2	648.4	677.4	696.0
20°	583.7	584.9	614.1	646.1	667.9
22.5°	546.2	548.9	580.1	613.5	638.4
25°	490.3	494.2	529.1	565.3	591.8
27.5°	436.6	442.3	479.0	516.6	548.9
30°	401.3	408.0	445.4	485.0	518.2
32.5°	366.7	374.6	411.1	452.9	486.8
35°	314.7	322.6	357.6	399.7	436.1
37.5°	261.1	268.8	303.0	344.4	383.7
40°	226.1	234.8	267.4	307.5	347.5
42.5°	194.4	203.1	233.7	273.2	310.9
45°	150.9	160.0	186.9	223.3	258.1
47.5°	114.8	124.7	148.3	181.2	212.9
50°	93.4	103.3	126.6	155.6	186.1
52.5°	76.3	85.9	106.9	134.2	162.1
55°	54.2	63.3	81.7	104.9	129.0
57.5°	37.5	45.3	61.8	81.2	100.1
60°	27.1	34.6	50.2	65.9	81.3
62.5°	18.0	24.9	40.1	52.2	62.5
65°	6.1	11.6	25.9	31.2	34.8
67.5°	3.1	3.7	13.6	14.3	15.5
70°	2.4	2.4	6.5	6.9	8.1
72.5°	1.8	1.8	2.6	3.3	3.6
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	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	0.9	2.1	2.2	2.1
90°	1.6	4.7	10.4	11.2	10.4
92.5°	22.7	82.8	163.4	70.9	51.4
95°	53.6	188.2	574.6	297.4	176.9
97.5°	86.1	215.9	895.7	741.3	544.4
100°	110.4	227.0	995.6	1038.3	839.5
102.5°	132.9	242.6	1030.8	1263.5	1114.8
105°	173.7	268.4	1036.4	1528.8	1466.2
107.5°	211.4	297.8	991.1	1694.3	1715.1
110°	240.9	319.1	950.8	1738.7	1827.1



TEST NUMBER: P518888

CATALOG NUMBER: SQ4-BB-150U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	267.1	340.4	913.6	1729.8	1878.3
115°	305.7	373.8	859.5	1663.9	1878.3
117.5°	343.5	407.4	823.8	1563.3	1806.3
120°	366.5	429.1	802.7	1491.0	1739.1
122.5°	388.3	449.7	789.9	1413.6	1663.5
125°	418.6	479.6	774.7	1307.3	1535.8
127.5°	446.4	506.4	765.7	1220.6	1421.5
130°	461.8	523.6	761.9	1167.0	1348.5
132.5°	477.8	539.0	758.1	1118.6	1285.8
135°	501.8	561.3	753.9	1055.6	1194.9
137.5°	526.0	582.2	750.4	1004.4	1117.9
140°	542.6	595.0	749.1	971.5	1072.4
142.5°	558.6	607.9	746.5	941.7	1030.2
145°	583.4	627.3	743.5	903.5	972.4
147.5°	606.0	644.8	740.0	868.9	921.8
150°	622.6	657.1	738.7	850.1	892.4
152.5°	638.0	668.1	738.1	832.6	867.4
155°	658.7	684.5	737.1	810.5	837.1
157.5°	680.1	698.1	737.3	795.1	812.6
160°	692.3	707.1	737.9	785.4	797.9
162.5°	701.9	714.2	738.5	777.6	787.0
165°	717.1	724.1	740.3	769.2	773.1
167.5°	727.5	732.3	740.5	761.9	763.8
170°	733.9	736.2	741.1	758.7	758.7
172.5°	739.0	739.5	741.1	754.8	754.2
175°	744.3	743.5	741.1	750.7	749.1
177.5°	746.1	744.2	740.9	747.3	745.4
180°	743.5	743.5	743.5	743.5	743.5

(END OF REPORT)