

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: P518762

Luminaire Tested: **SQ4-BB-100U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518762
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

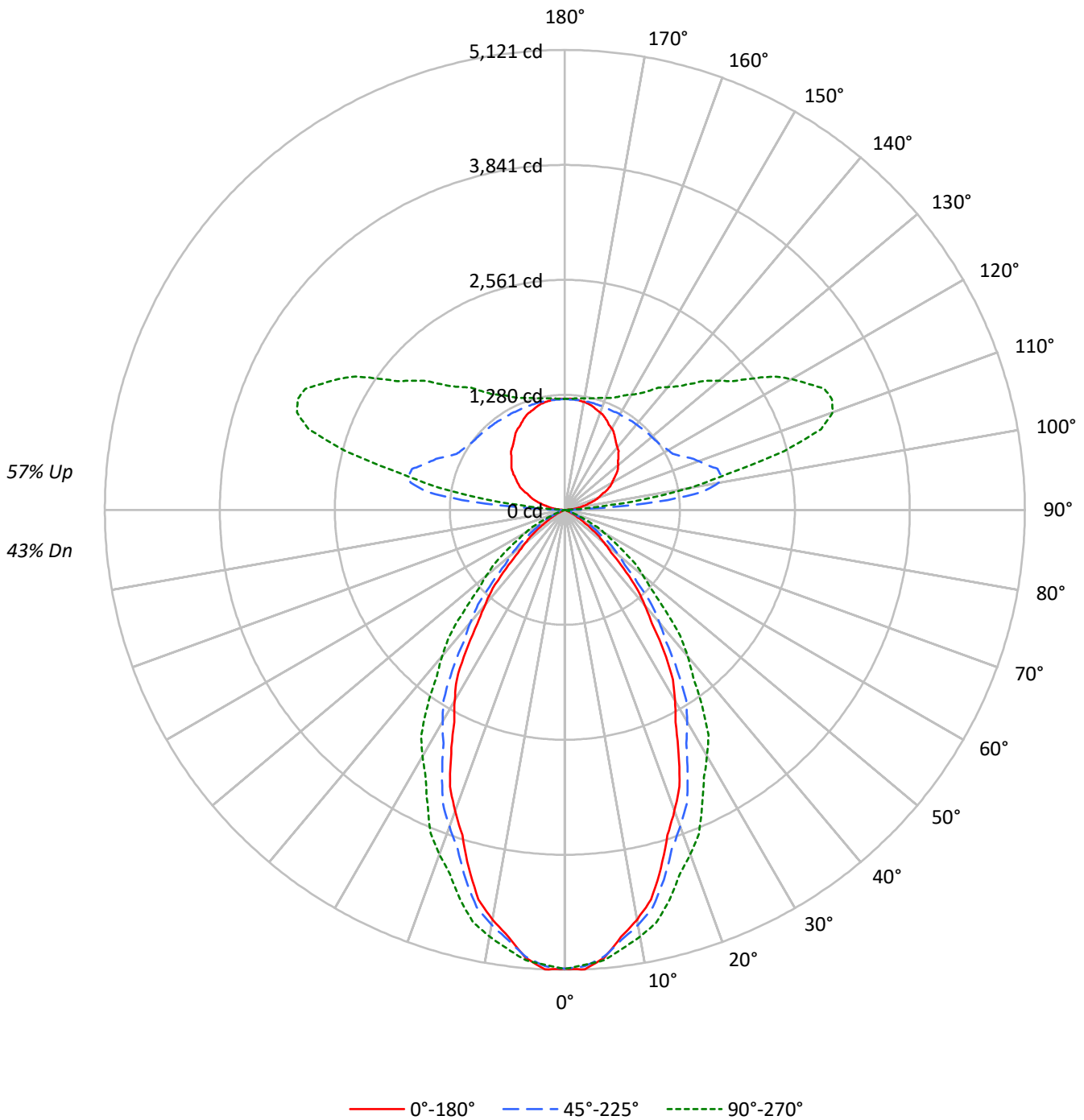
Lumens per Lamp: N/A
Luminaire Lumens: 14130.4 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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: P518762
CATALOG NUMBER: SQ4-BB-100U-125D-835-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518762

CATALOG NUMBER: SQ4-BB-100U-125D-835-1D-UNV-STD-W-8

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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16457	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	534	666
75°	87	45	0
80°	66	0	0
85°	0	0	0



TEST NUMBER: P518762

CATALOG NUMBER: SQ4-BB-100U-125D-835-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.3	3.3
10°-20°	1192.5	8.4
20°-30°	1492.9	10.6
30°-40°	1378.9	9.8
40°-50°	926.5	6.6
50°-60°	478.6	3.4
60°-70°	149.9	1.1
70°-80°	9.5	0.1
80°-90°	2.7	0.0
90°-100°	579.0	4.1
100°-110°	1598.3	11.3
110°-120°	1648.4	11.7
120°-130°	1324.6	9.4
130°-140°	1041.0	7.4
140°-150°	798.4	5.7
150°-160°	573.8	4.1
160°-170°	350.9	2.5
170°-180°	118.3	0.8
0°-30°	3151.6	22.3
0°-40°	4530.6	32.1
0°-60°	5935.7	42.0
0°-90°	6097.8	43.2
90°-120°	3825.6	27.1
90°-150°	6989.6	49.5
90°-180°	8033.0	56.8
0°-180°	14130.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5110	5110	5110	5110	5110	
5°	5008	4957	4996	5014	5033	464
15°	4131	4116	4262	4405	4499	1150
25°	2996	3020	3233	3454	3616	1374
35°	1923	1972	2185	2442	2665	1191
45°	922	978	1142	1364	1577	724
55°	331	387	499	641	789	309
65°	37	71	158	191	213	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	4	8	16	18	20	6
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

TEST NUMBER: P518762

CATALOG NUMBER: SQ4-BB-100U-125D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5121.4	5073.1	5085.8	5085.5	5072.0
5°	5008.2	4957.4	4995.8	5013.6	5032.9
7.5°	4796.6	4756.9	4830.7	4886.0	4926.1
10°	4632.5	4598.6	4694.2	4769.7	4825.3
12.5°	4442.6	4416.5	4532.1	4635.5	4706.6
15°	4130.6	4116.1	4261.7	4404.7	4499.0
17.5°	3796.4	3796.0	3962.1	4139.7	4253.3
20°	3567.0	3574.3	3752.4	3948.3	4081.2
22.5°	3337.6	3354.6	3544.8	3749.0	3901.2
25°	2996.0	3020.2	3233.3	3454.5	3616.5
27.5°	2667.7	2703.0	2927.3	3157.2	3354.4
30°	2452.2	2493.3	2721.6	2963.5	3166.6
32.5°	2240.6	2289.4	2512.0	2767.9	2974.8
35°	1923.2	1971.5	2185.2	2442.4	2664.8
37.5°	1595.4	1642.8	1851.5	2104.6	2344.9
40°	1381.8	1435.0	1634.0	1879.3	2123.4
42.5°	1188.0	1241.2	1428.3	1669.4	1899.9
45°	922.0	977.6	1142.0	1364.4	1577.1
47.5°	701.5	762.0	906.2	1107.4	1301.2
50°	571.0	631.4	773.7	951.0	1137.1
52.5°	466.2	524.7	653.1	820.1	990.8
55°	331.2	386.8	499.3	641.1	788.6
57.5°	228.9	276.8	377.7	496.0	611.6
60°	165.6	211.5	306.5	402.6	496.9
62.5°	110.2	152.3	245.2	318.8	382.2
65°	37.1	70.9	158.2	190.8	212.6
67.5°	18.8	22.7	83.1	87.7	94.9
70°	14.8	14.8	39.6	42.2	49.4
72.5°	10.9	10.9	15.8	20.3	21.8
75°	4.9	4.9	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	1.6	3.2	3.6	4.0
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8

TEST NUMBER: P518762

CATALOG NUMBER: SQ4-BB-100U-125D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)