

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: P844857

Luminaire Tested: **SQ4P-BB-100U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844857
REPORT IS A COMBINATION OF REPORTS P700075 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-100U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

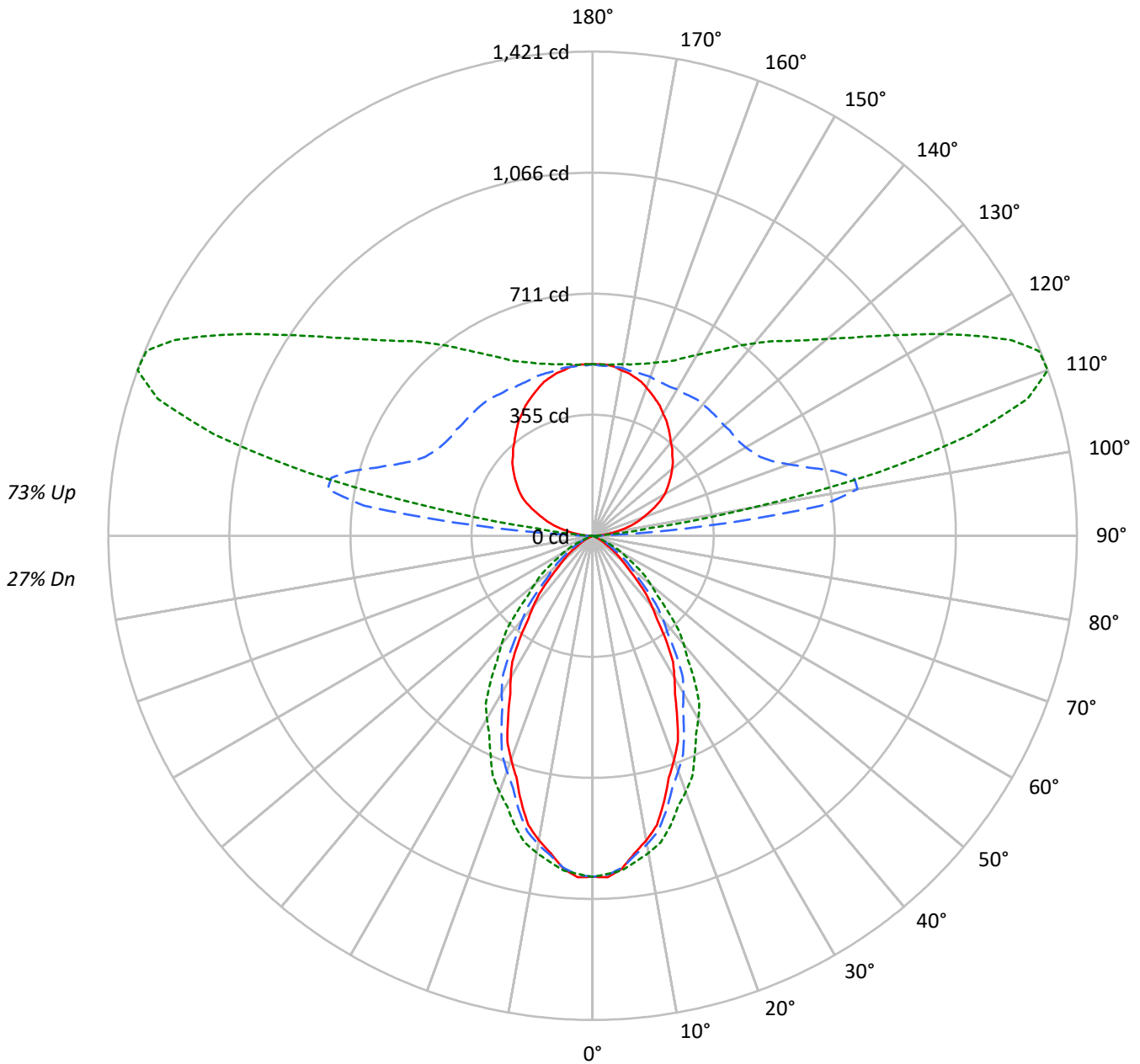
Lumens per Lamp: N/A
Luminaire Lumens: 4463.9 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

TEST NUMBER: P844857

CATALOG NUMBER: SQ4P-BB-100U-050D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P844857

CATALOG NUMBER: SQ4P-BB-100U-050D-B40-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27			
1	94	90	86	83	83	80	78	75	63	61	60	47	46	45	32	32	31	24			
2	86	79	74	70	77	71	67	63	56	53	51	42	41	39	29	29	28	22			
3	79	71	64	59	71	64	58	54	51	47	44	38	36	34	27	26	25	20			
4	73	63	56	51	65	57	51	47	46	41	38	35	32	30	25	23	22	18			
5	67	57	49	44	60	51	45	40	41	37	34	32	29	27	23	21	20	16			
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	19	18	15			
7	57	46	39	34	52	42	36	32	34	30	26	27	24	21	20	18	17	14			
8	53	42	35	30	48	38	32	28	31	27	24	25	22	19	18	16	15	13			
9	50	39	32	27	45	35	29	25	29	24	21	23	20	18	17	15	14	12			
10	47	36	29	25	42	32	27	23	27	22	19	21	18	16	16	14	13	11			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9234	9234	9234
5°	9085	9063	9130
10°	8500	8614	8854
15°	7728	7974	8418
20°	6860	7216	7849
25°	5974	6447	7212
30°	5118	5679	6607
35°	4243	4821	5878
40°	3260	3855	5009
45°	2356	2920	4030
50°	1605	2175	3198
55°	1044	1573	2485
60°	600	1109	1797
65°	159	677	910
70°	81	210	262
75°	36	18	0
80°	27	0	0
85°	0	0	0



TEST NUMBER: P844857

CATALOG NUMBER: SQ4P-BB-100U-050D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	2.0
10°-20°	233.6	5.2
20°-30°	292.4	6.6
30°-40°	270.1	6.1
40°-50°	181.5	4.1
50°-60°	93.8	2.1
60°-70°	29.4	0.7
70°-80°	1.9	0.0
80°-90°	1.3	0.0
90°-100°	200.5	4.5
100°-110°	697.4	15.6
110°-120°	675.6	15.1
120°-130°	530.0	11.9
130°-140°	419.5	9.4
140°-150°	323.7	7.3
150°-160°	232.1	5.2
160°-170°	141.9	3.2
170°-180°	48.0	1.1
0°-30°	617.3	13.8
0°-40°	887.4	19.9
0°-60°	1162.7	26.0
0°-90°	1195.2	26.8
90°-120°	1573.5	35.3
90°-150°	2846.7	63.8
90°-180°	3269.0	73.2
0°-180°	4463.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	981	971	979	982	986	91
15°	809	806	835	863	881	225
25°	587	592	633	677	708	269
35°	377	386	428	478	522	233
45°	181	192	224	267	309	142
55°	65	76	98	126	154	61
65°	7	14	31	37	42	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	8	11	11	8	4	5
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



TEST NUMBER: P844857

CATALOG NUMBER: SQ4P-BB-100U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.8	1000.8	1000.8	1000.8	1000.8
2.5°	1003.2	993.7	996.1	996.1	993.5
5°	981.0	971.0	978.6	982.0	985.8
7.5°	939.6	931.8	946.3	956.9	964.9
10°	907.3	900.7	919.5	934.2	945.1
12.5°	870.1	865.0	887.7	908.0	921.9
15°	809.1	806.3	834.8	862.8	881.3
17.5°	743.7	743.6	776.0	810.9	833.1
20°	698.7	700.1	735.0	773.4	799.4
22.5°	653.7	657.0	694.3	734.4	764.2
25°	586.8	591.5	633.3	676.7	708.4
27.5°	522.5	529.5	573.4	618.4	657.0
30°	480.4	488.4	533.1	580.5	620.2
32.5°	438.8	448.5	492.0	542.2	582.6
35°	376.7	386.2	428.0	478.4	521.9
37.5°	312.5	321.7	362.6	412.2	459.3
40°	270.7	281.0	320.1	368.1	415.9
42.5°	232.8	243.1	279.8	327.0	372.1
45°	180.6	191.5	223.8	267.3	308.9
47.5°	137.5	149.2	177.4	217.0	254.9
50°	111.8	123.7	151.5	186.3	222.8
52.5°	91.3	102.8	127.9	160.6	194.0
55°	64.9	75.8	97.8	125.6	154.5
57.5°	44.9	54.3	74.0	97.1	119.8
60°	32.5	41.5	60.1	78.8	97.4
62.5°	21.6	29.8	48.0	62.5	74.9
65°	7.3	14.0	31.0	37.4	41.7
67.5°	3.7	4.4	16.2	17.2	18.6
70°	3.0	3.0	7.8	8.2	9.7
72.5°	2.0	2.0	3.1	4.0	4.3
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



TEST NUMBER: P844857

CATALOG NUMBER: SQ4P-BB-100U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)