

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: P844856

Luminaire Tested: **SQ4P-BB-100U-050D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844856
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-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

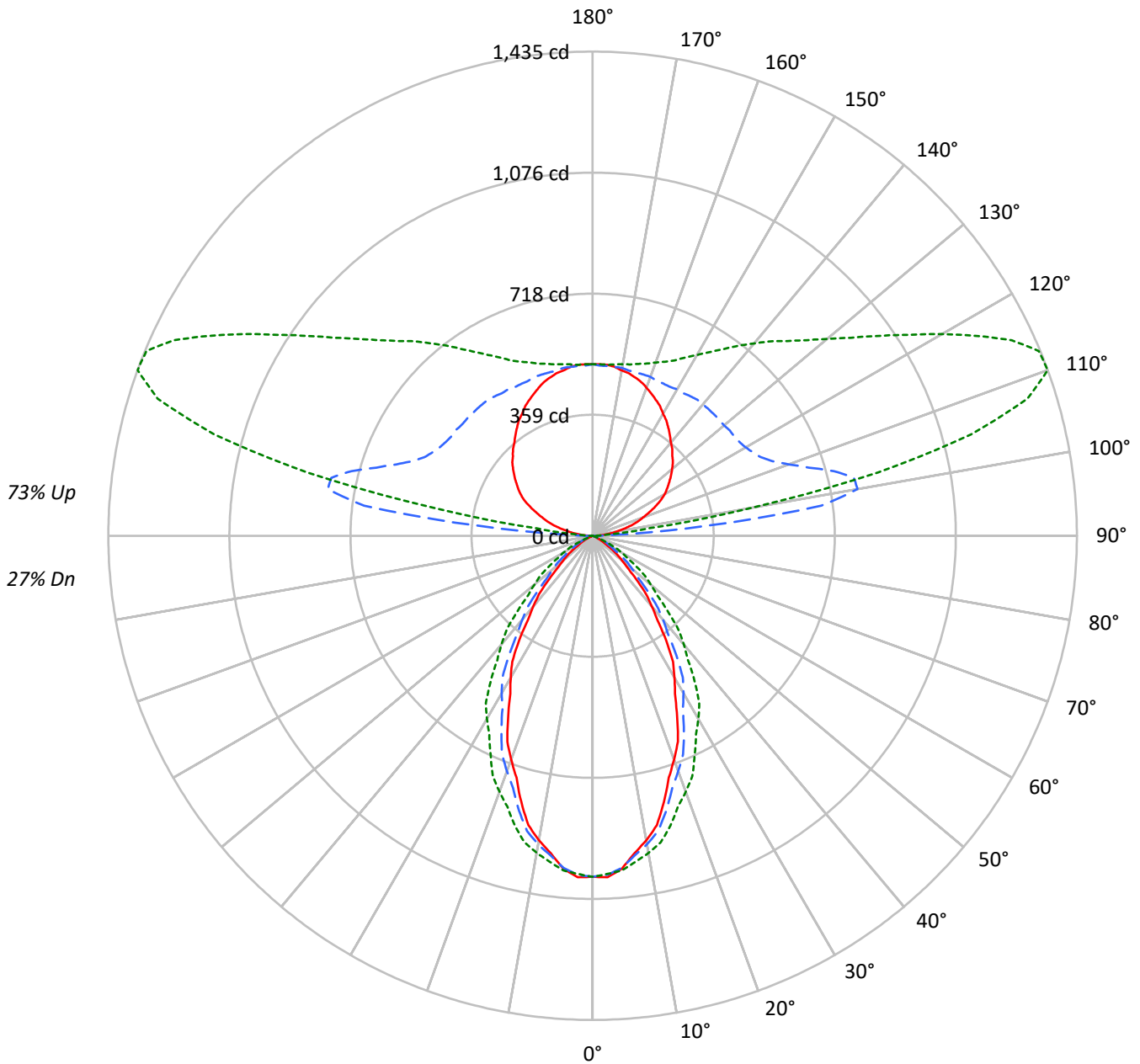
Lumens per Lamp: N/A
Luminaire Lumens: 4507.6 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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

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Luminous Intensity Polar Plot





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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°	9325	9325	9325
5°	9174	9152	9220
10°	8583	8700	8941
15°	7804	8051	8500
20°	6927	7287	7925
25°	6032	6510	7282
30°	5168	5735	6672
35°	4284	4868	5937
40°	3292	3893	5058
45°	2380	2949	4071
50°	1621	2195	3230
55°	1055	1588	2509
60°	605	1120	1814
65°	159	683	919
70°	81	210	264
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	2.0
10°-20°	235.9	5.2
20°-30°	295.3	6.6
30°-40°	272.7	6.1
40°-50°	183.3	4.1
50°-60°	94.7	2.1
60°-70°	29.6	0.7
70°-80°	1.9	0.0
80°-90°	1.3	0.0
90°-100°	202.4	4.5
100°-110°	704.3	15.6
110°-120°	682.2	15.1
120°-130°	535.2	11.9
130°-140°	423.6	9.4
140°-150°	326.9	7.3
150°-160°	234.3	5.2
160°-170°	143.3	3.2
170°-180°	48.5	1.1
0°-30°	623.4	13.8
0°-40°	896.1	19.9
0°-60°	1174.1	26.0
0°-90°	1206.9	26.8
90°-120°	1588.9	35.3
90°-150°	2874.6	63.8
90°-180°	3301.0	73.2
0°-180°	4507.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1011	1011	1011	1011	1011	
5°	991	980	988	992	996	92
15°	817	814	843	871	890	228
25°	592	597	640	683	715	272
35°	380	390	432	483	527	236
45°	182	193	226	270	312	143
55°	66	76	99	127	156	61
65°	7	14	31	38	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	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.7	1010.7	1010.7	1010.7	1010.7
2.5°	1013.0	1003.4	1005.9	1005.9	1003.2
5°	990.6	980.5	988.2	991.6	995.5
7.5°	948.8	940.9	955.6	966.3	974.4
10°	916.2	909.6	928.6	943.3	954.4
12.5°	878.7	873.5	896.4	916.9	930.9
15°	817.0	814.2	842.9	871.2	889.9
17.5°	751.0	750.9	783.6	818.9	841.3
20°	705.5	707.0	742.2	781.0	807.2
22.5°	660.1	663.5	701.1	741.6	771.7
25°	592.5	597.3	639.5	683.3	715.3
27.5°	527.6	534.7	579.0	624.4	663.5
30°	485.1	493.2	538.3	586.2	626.3
32.5°	443.1	452.9	496.8	547.5	588.3
35°	380.4	390.0	432.2	483.1	527.1
37.5°	315.6	324.9	366.2	416.3	463.8
40°	273.3	283.8	323.2	371.8	420.0
42.5°	235.1	245.5	282.5	330.2	375.8
45°	182.4	193.4	226.0	269.9	312.0
47.5°	138.9	150.7	179.2	219.1	257.4
50°	112.9	124.9	152.9	188.1	225.0
52.5°	92.2	103.8	129.2	162.1	195.9
55°	65.6	76.5	98.7	126.8	156.0
57.5°	45.3	54.8	74.8	98.1	121.0
60°	32.8	41.9	60.7	79.6	98.3
62.5°	21.8	30.1	48.4	63.1	75.6
65°	7.3	14.1	31.3	37.8	42.1
67.5°	3.7	4.4	16.3	17.4	18.8
70°	3.0	3.0	7.8	8.3	9.8
72.5°	2.1	2.1	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	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)