

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: P844940

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

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844940
REPORT IS A COMBINATION OF REPORTS P700079 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-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: -

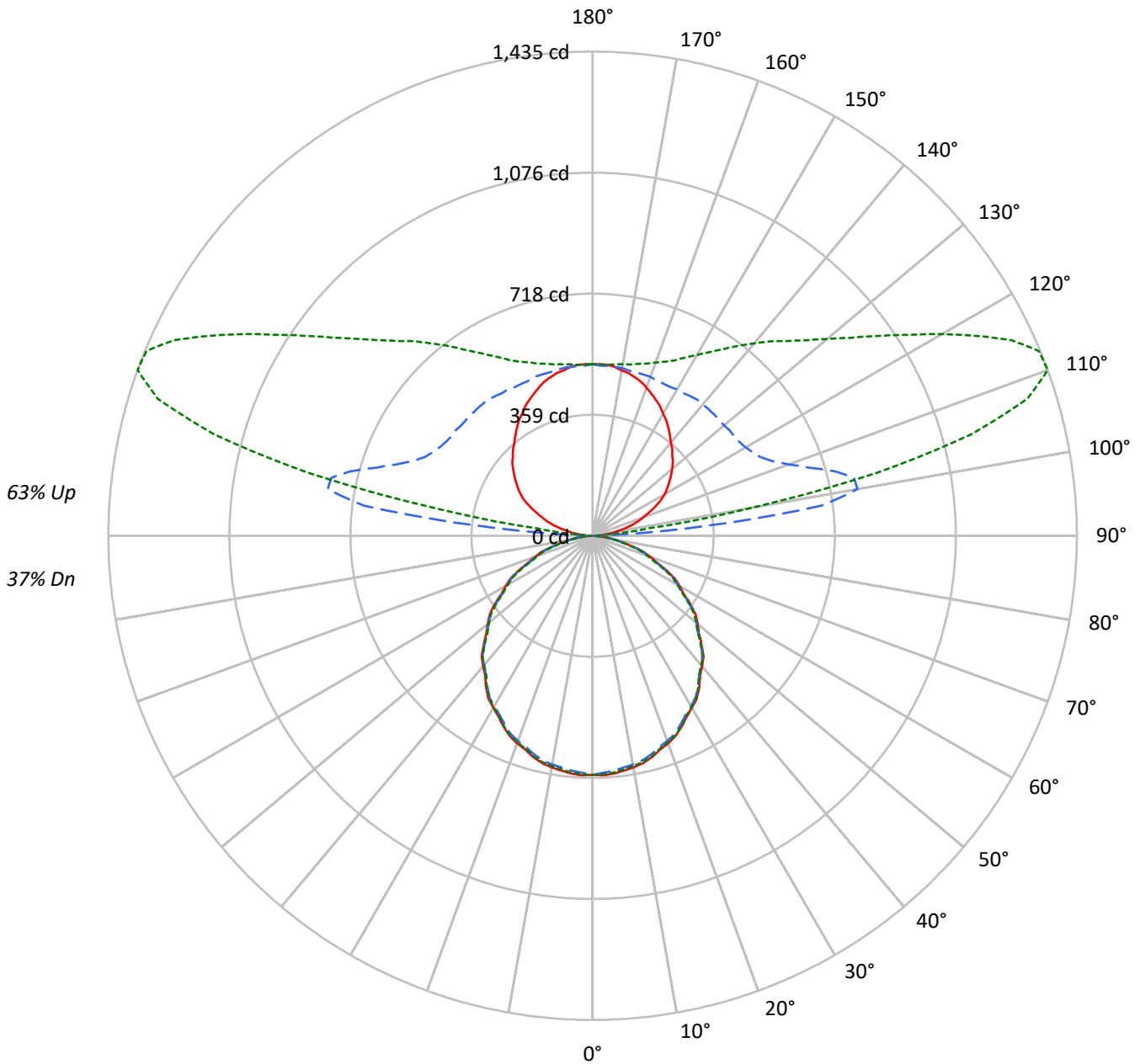
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5235.7 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
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: P844940
CATALOG NUMBER: SQ4P-F-100U-050D-B35-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P844940

CATALOG NUMBER: SQ4P-F-100U-050D-B35-1D-UNV

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	50	30	10	50	30	10	0		
RCR																										
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	44	44	44	44	44	44	37		
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	37	37	37	37	37	37	31		
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31	31	31	31	31	31	31	26		
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	26	26	26	26	26	26	22		
4	72	61	53	48	65	56	49	44	45	41	37	36	32	30	27	25	23	23	23	23	23	23	23	19		
5	66	54	46	41	59	50	43	38	41	35	31	32	28	26	24	22	20	20	20	20	20	20	20	16		
6	61	49	41	35	55	44	37	32	36	31	27	29	25	22	22	19	17	17	17	17	17	17	17	14		
7	56	44	36	31	50	40	33	28	33	28	24	26	22	20	20	17	15	15	15	15	15	15	15	13		
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	14	14	14	14	14	14	11		
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	12	12	12	12	12	12	10		
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	11	11	11	11	11	11	9		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6537	6537	6537
5°	6553	6475	6527
10°	6530	6450	6495
15°	6486	6404	6460
20°	6425	6350	6397
25°	6352	6276	6335
30°	6264	6213	6254
35°	6196	6122	6153
40°	6077	6020	6032
45°	5952	5903	5903
50°	5826	5773	5744
55°	5691	5615	5583
60°	5479	5390	5355
65°	5218	5115	5050
70°	4864	4756	4656
75°	4360	4228	4124
80°	3528	3485	3374
85°	2096	2414	2509



TEST NUMBER: P844940

CATALOG NUMBER: SQ4P-F-100U-050D-B35-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	1.3
10°-20°	190.4	3.6
20°-30°	285.9	5.5
30°-40°	341.3	6.5
40°-50°	349.7	6.7
50°-60°	311.9	6.0
60°-70°	232.3	4.4
70°-80°	126.1	2.4
80°-90°	30.4	0.6
90°-100°	202.4	3.9
100°-110°	704.3	13.5
110°-120°	682.2	13.0
120°-130°	535.2	10.2
130°-140°	423.6	8.1
140°-150°	326.9	6.2
150°-160°	234.3	4.5
160°-170°	143.3	2.7
170°-180°	48.5	0.9
0°-30°	543.1	10.4
0°-40°	884.4	16.9
0°-60°	1546.1	29.5
0°-90°	1934.9	37.0
90°-120°	1588.9	30.3
90°-150°	2874.6	54.9
90°-180°	3301.0	63.0
0°-180°	5235.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	707	699	706	705	67
15°	679	677	670	676	676	191
25°	624	622	616	620	622	287
35°	550	548	544	544	546	343
45°	456	457	452	451	452	352
55°	354	354	349	346	347	315
65°	239	238	234	231	231	237
75°	122	121	119	117	116	129
85°	20	22	23	24	24	28
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	



TEST NUMBER: P844940

CATALOG NUMBER: SQ4P-F-100U-050D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.5	708.5	708.5	708.5	708.5
2.5°	710.6	709.3	703.1	708.5	707.8
5°	707.6	706.6	699.1	705.5	704.7
7.5°	702.4	700.6	693.1	699.6	698.6
10°	697.0	695.2	688.5	694.2	693.3
12.5°	690.3	689.2	681.8	687.4	687.2
15°	679.0	677.2	670.5	676.3	676.3
17.5°	664.3	663.2	656.6	662.1	661.5
20°	654.4	652.6	646.8	651.5	651.5
22.5°	642.2	641.2	635.5	639.4	640.2
25°	624.0	622.3	616.5	620.3	622.3
27.5°	604.0	602.5	597.8	600.2	601.5
30°	588.0	588.0	583.2	584.3	587.0
32.5°	573.6	573.6	568.1	569.1	570.4
35°	550.1	548.3	543.5	543.5	546.3
37.5°	522.8	521.9	518.8	518.2	519.0
40°	504.6	503.7	499.8	500.8	500.8
42.5°	486.4	485.4	481.6	480.3	481.7
45°	456.2	457.2	452.4	451.4	452.4
47.5°	426.6	426.6	422.6	420.0	421.5
50°	405.9	405.9	402.2	400.2	400.2
52.5°	384.7	385.5	380.8	378.2	379.0
55°	353.8	353.8	349.1	346.2	347.1
57.5°	319.6	319.6	314.9	312.1	313.7
60°	296.9	296.9	292.1	289.3	290.2
62.5°	274.1	274.1	269.4	266.6	266.7
65°	239.0	238.1	234.3	231.3	231.3
67.5°	205.2	202.8	199.9	196.2	196.2
70°	180.3	179.2	176.3	172.6	172.6
72.5°	157.5	155.8	152.9	149.9	149.9
75°	122.3	121.3	118.6	116.6	115.7
77.5°	87.7	86.9	86.7	84.1	84.8
80°	66.4	66.4	65.6	63.5	63.5
82.5°	47.4	48.1	46.5	46.1	45.3
85°	19.8	21.7	22.8	23.7	23.7
87.5°	3.9	6.0	5.3	6.1	6.1
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



TEST NUMBER: P844940

CATALOG NUMBER: SQ4P-F-100U-050D-B35-1D-UNV

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)