

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: P844944

Luminaire Tested: **SQ4P-F-100U-075D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844944
REPORT IS A COMBINATION OF REPORTS P700080 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-075D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

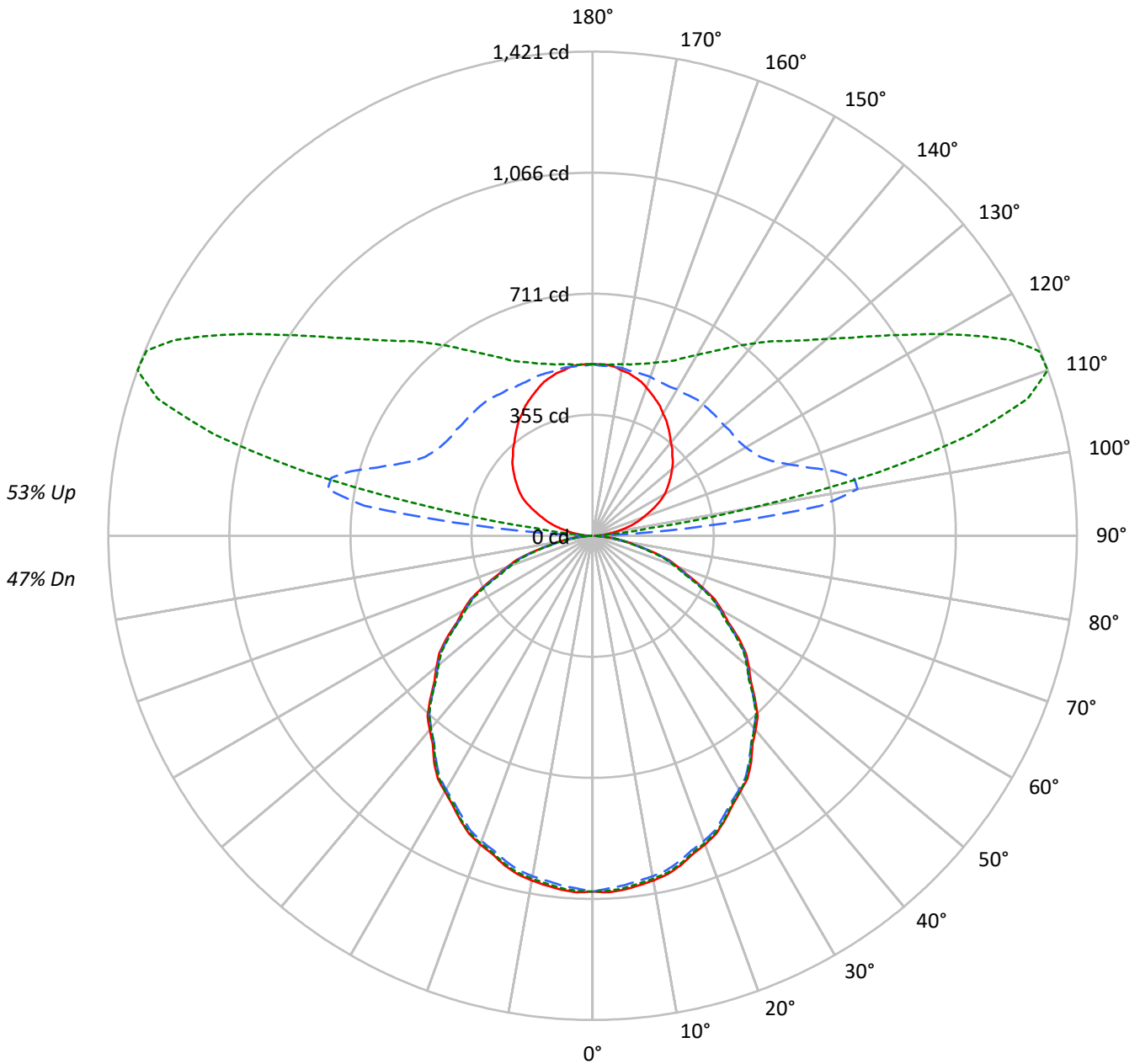
Lumens per Lamp: N/A
Luminaire Lumens: 6120.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.6
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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47				47
1	97	93	89	85	89	85	82	79	71	69	67	59	57	55	47	46	45	39				39
2	88	81	75	70	81	74	69	65	62	59	55	51	49	46	41	39	38	33				33
3	80	71	64	58	74	65	59	54	55	50	46	45	42	39	36	34	32	28				28
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27	24				24
5	67	56	48	42	62	52	44	39	44	38	34	36	32	29	29	26	24	20				20
6	62	50	42	36	57	46	39	34	39	34	29	33	28	25	26	23	21	18				18
7	57	45	37	32	52	42	35	30	35	30	26	30	25	22	24	21	18	16				16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14				14
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	20	17	15	13				13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9634	9634	9634
5°	9659	9542	9619
10°	9625	9507	9574
15°	9559	9440	9520
20°	9469	9361	9429
25°	9363	9250	9336
30°	9233	9159	9217
35°	9133	9023	9069
40°	8959	8873	8890
45°	8772	8700	8700
50°	8588	8509	8469
55°	8389	8276	8231
60°	8075	7946	7894
65°	7691	7538	7444
70°	7165	7011	6863
75°	6424	6228	6078
80°	5202	5133	4973
85°	3091	3557	3694



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.6
10°-20°	280.6	4.6
20°-30°	421.4	6.9
30°-40°	503.1	8.2
40°-50°	515.5	8.4
50°-60°	459.7	7.5
60°-70°	342.4	5.6
70°-80°	185.8	3.0
80°-90°	44.2	0.7
90°-100°	200.5	3.3
100°-110°	697.4	11.4
110°-120°	675.6	11.0
120°-130°	530.0	8.7
130°-140°	419.5	6.9
140°-150°	323.7	5.3
150°-160°	232.1	3.8
160°-170°	141.9	2.3
170°-180°	48.0	0.8
0°-30°	800.5	13.1
0°-40°	1303.6	21.3
0°-60°	2278.8	37.2
0°-90°	2851.2	46.6
90°-120°	1573.5	25.7
90°-150°	2846.7	46.5
90°-180°	3269.0	53.4
0°-180°	6120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1043	1042	1030	1040	1039	99
15°	1001	998	988	997	997	282
25°	920	917	909	914	917	424
35°	811	808	801	801	805	506
45°	672	674	667	665	667	519
55°	522	522	514	510	512	464
65°	352	351	345	341	341	349
75°	180	179	175	172	170	191
85°	29	32	34	35	35	41
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1044.2	1044.2	1044.2	1044.2	1044.2
2.5°	1047.5	1045.3	1036.4	1044.2	1043.2
5°	1042.9	1041.5	1030.3	1040.0	1038.6
7.5°	1035.3	1032.6	1021.5	1031.2	1029.7
10°	1027.4	1024.6	1014.8	1023.1	1021.9
12.5°	1017.4	1015.8	1004.9	1013.3	1012.9
15°	1000.8	998.0	988.3	996.7	996.7
17.5°	979.1	977.5	967.8	975.8	975.1
20°	964.4	961.8	953.4	960.3	960.3
22.5°	946.7	945.0	936.7	942.4	943.6
25°	919.7	917.1	908.6	914.3	917.1
27.5°	890.2	888.0	881.1	884.7	886.6
30°	866.7	866.7	859.7	861.1	865.2
32.5°	845.5	845.5	837.4	838.8	840.8
35°	810.9	808.1	801.1	801.1	805.2
37.5°	770.4	769.1	764.7	763.9	765.1
40°	743.9	742.4	736.7	738.1	738.1
42.5°	716.9	715.5	709.7	707.9	710.0
45°	672.3	673.8	666.8	665.4	666.8
47.5°	628.6	628.6	622.9	619.0	621.2
50°	598.3	598.3	592.8	590.0	590.0
52.5°	567.0	568.1	561.3	557.5	558.7
55°	521.5	521.5	514.5	510.3	511.7
57.5°	471.1	471.1	464.2	459.9	462.3
60°	437.6	437.6	430.6	426.3	427.8
62.5°	404.0	404.0	397.1	392.9	393.1
65°	352.3	351.0	345.3	341.0	341.0
67.5°	302.4	298.9	294.7	289.1	289.1
70°	265.6	264.2	259.9	254.4	254.4
72.5°	232.0	229.6	225.3	220.9	220.9
75°	180.2	178.8	174.7	172.0	170.5
77.5°	129.2	128.1	127.7	123.8	125.0
80°	97.9	97.9	96.6	93.6	93.6
82.5°	69.9	70.9	68.5	67.8	66.8
85°	29.2	32.0	33.6	34.9	34.9
87.5°	5.7	8.8	7.8	9.0	9.0
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



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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)