

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: P844920

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844920
REPORT IS A COMBINATION OF REPORTS P700220 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-075U-075D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

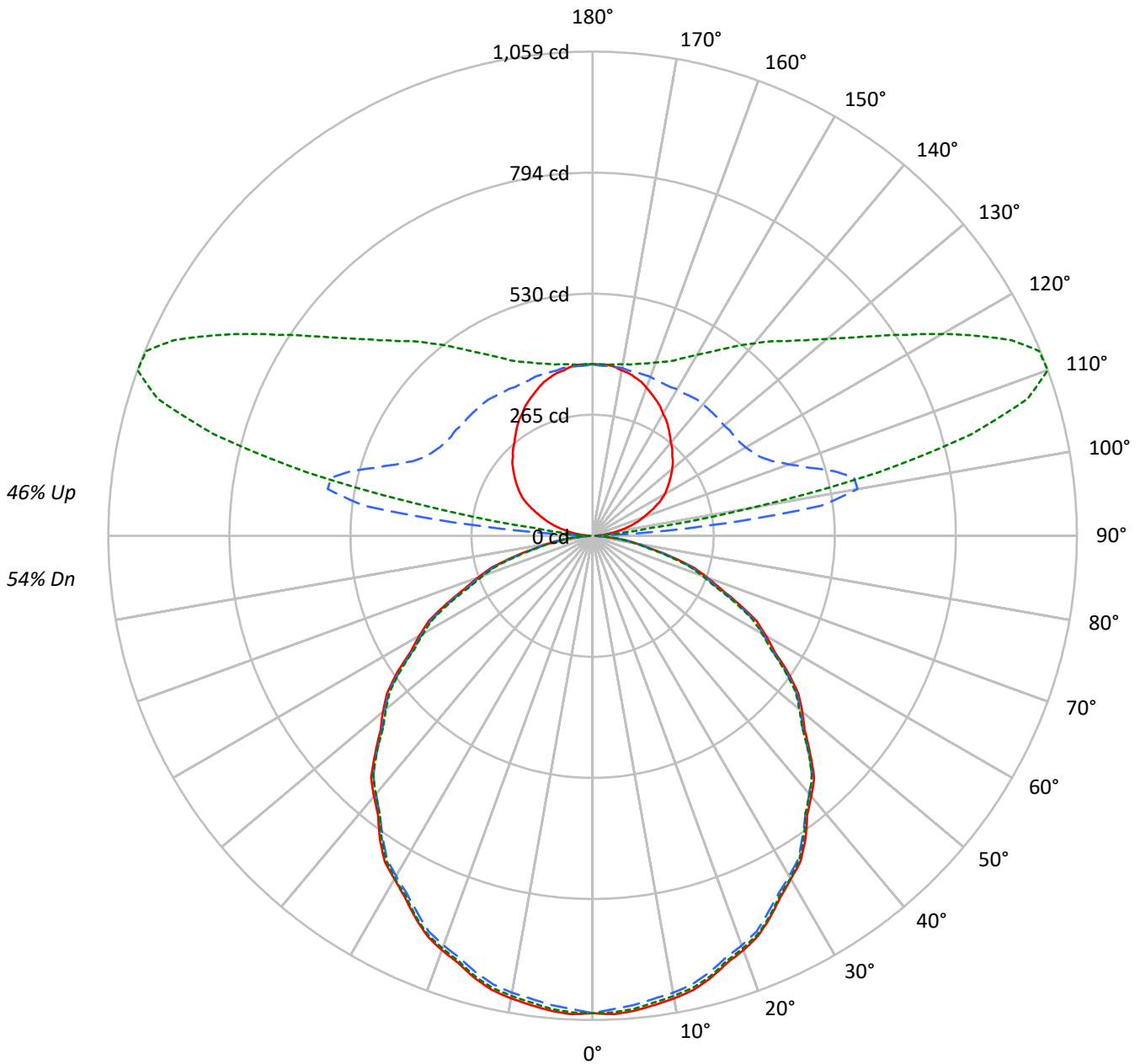
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5287.5 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): 44.6
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									
RC	80									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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54																			
1	99	94	90	87	91	88	84	81	75	72	70	63	62	60	53	52	50	45																			
2	90	82	76	71	83	76	71	66	66	62	58	56	53	50	46	44	42	38																			
3	82	72	65	59	76	67	61	55	58	53	49	49	45	42	41	38	36	32																			
4	75	64	56	50	69	59	52	47	51	46	41	44	39	36	37	33	31	27																			
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27	24																			
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	24	21																			
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	24	21	18																			
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19	16																			
9	50	38	31	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15																			
10	47	35	28	23	44	33	26	22	29	23	20	25	21	17	21	18	15	13																			

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	1.9
10°-20°	280.6	5.3
20°-30°	421.4	8.0
30°-40°	503.1	9.5
40°-50°	515.5	9.7
50°-60°	459.7	8.7
60°-70°	342.4	6.5
70°-80°	185.8	3.5
80°-90°	43.9	0.8
90°-100°	149.4	2.8
100°-110°	519.9	9.8
110°-120°	503.6	9.5
120°-130°	395.1	7.5
130°-140°	312.7	5.9
140°-150°	241.3	4.6
150°-160°	173.0	3.3
160°-170°	105.8	2.0
170°-180°	35.8	0.7
0°-30°	800.5	15.1
0°-40°	1303.6	24.7
0°-60°	2278.8	43.1
0°-90°	2850.9	53.9
90°-120°	1172.9	22.2
90°-150°	2122.0	40.1
90°-180°	2437.0	46.1
0°-180°	5287.5	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°	6	8	8	6	3	4
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



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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°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)