

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P520196

Luminaire Tested: **SQ4-F-100U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520196
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

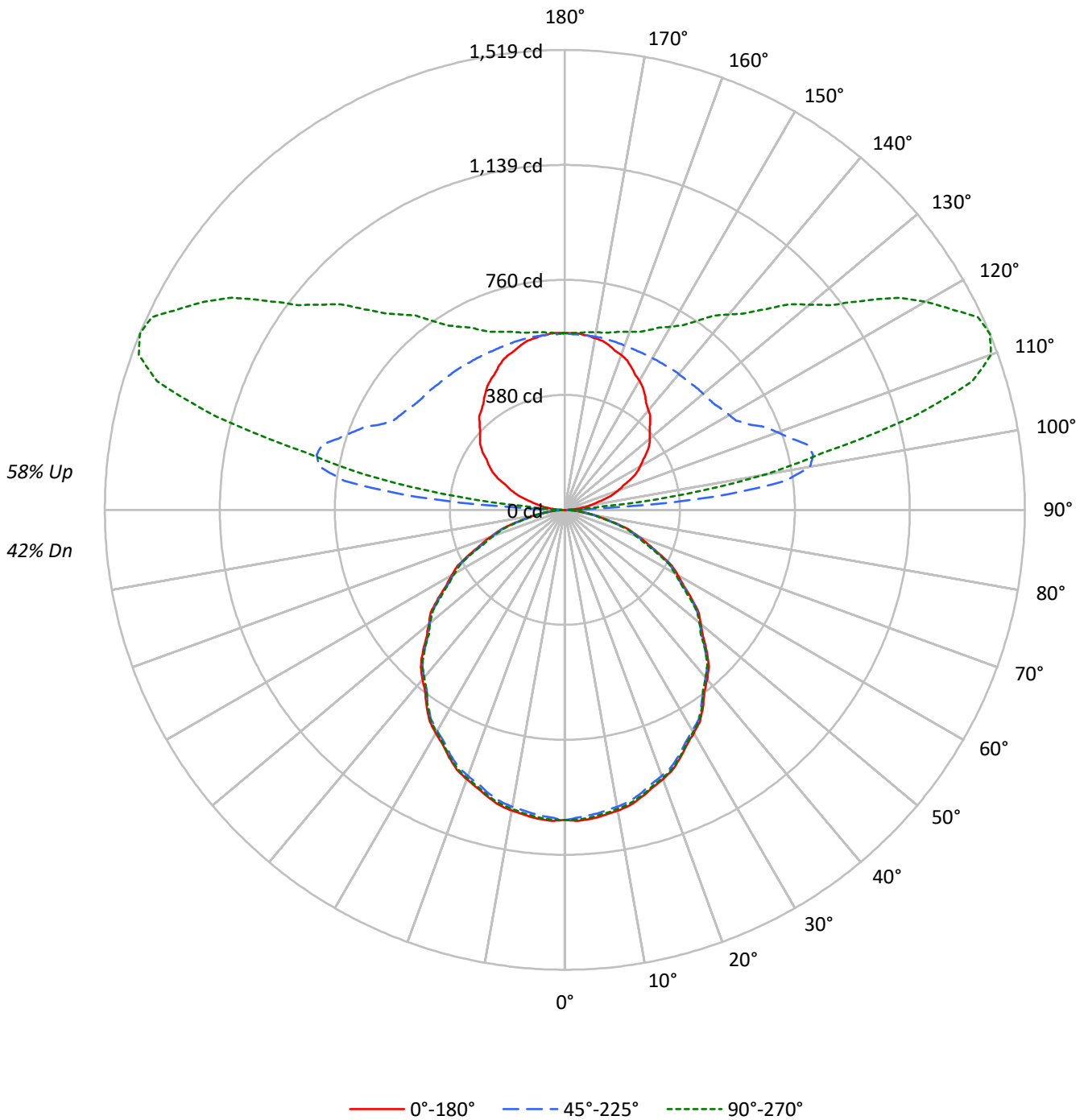
Lumens per Lamp: N/A
Luminaire Lumens: 6589.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
Input Voltage (V): 120
Input Current (Ain): 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: 24 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	
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	0
RCR																		
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9452	9452	9452
5°	9488	9368	9437
10°	9451	9329	9399
15°	9378	9262	9342
20°	9293	9184	9257
25°	9192	9096	9162
30°	9075	8976	9025
35°	8955	8862	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8347	8347
55°	8216	8112	8038
60°	7953	7815	7746
65°	7523	7381	7281
70°	7068	6892	6717
75°	6356	6124	5992
80°	5085	4984	4936
85°	3049	3440	3546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.5
10°-20°	275.3	4.2
20°-30°	413.6	6.3
30°-40°	493.5	7.5
40°-50°	506.1	7.7
50°-60°	451.0	6.8
60°-70°	336.3	5.1
70°-80°	182.4	2.8
80°-90°	43.1	0.7
90°-100°	273.2	4.1
100°-110°	754.3	11.4
110°-120°	777.9	11.8
120°-130°	625.1	9.5
130°-140°	491.3	7.5
140°-150°	376.8	5.7
150°-160°	270.8	4.1
160°-170°	165.6	2.5
170°-180°	55.8	0.8
0°-30°	785.6	11.9
0°-40°	1279.2	19.4
0°-60°	2236.3	33.9
0°-90°	2798.0	42.5
90°-120°	1805.5	27.4
90°-150°	3298.7	50.1
90°-180°	3791.0	57.5
0°-180°	6589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1024	1023	1012	1020	1019	97
15°	982	980	970	977	978	277
25°	903	902	894	898	900	416
35°	795	793	787	787	790	497
45°	663	660	655	655	657	510
55°	511	510	504	500	500	456
65°	345	345	338	334	334	343
75°	178	175	172	169	168	187
85°	29	31	32	33	34	40
90°	2	4	7	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	583	584	581	589	587	55
180°	583	583	583	583	583	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.5	1024.5	1024.5	1024.5	1024.5
2.5°	1028.2	1026.1	1017.1	1024.5	1023.8
5°	1024.5	1022.7	1011.5	1019.9	1019.0
7.5°	1016.1	1014.2	1003.2	1011.5	1011.3
10°	1008.8	1006.0	995.8	1004.0	1003.2
12.5°	999.1	996.4	986.0	994.4	993.5
15°	981.8	979.9	969.7	977.2	978.1
17.5°	962.1	958.7	949.4	956.7	957.7
20°	946.5	943.8	935.4	941.8	942.8
22.5°	930.1	927.4	919.0	925.5	926.4
25°	902.9	901.9	893.5	898.3	900.0
27.5°	873.3	870.8	864.0	867.5	869.4
30°	851.8	849.9	842.5	845.3	847.1
32.5°	829.5	828.4	821.7	823.0	825.5
35°	795.1	793.3	786.8	786.9	790.5
37.5°	757.0	755.0	749.6	748.7	750.1
40°	731.0	728.3	723.6	722.6	722.6
42.5°	704.3	702.2	696.1	694.5	696.6
45°	663.2	660.5	654.8	654.9	656.7
47.5°	618.8	617.7	611.2	608.2	608.9
50°	586.1	587.9	581.5	577.8	581.5
52.5°	557.9	556.8	551.0	547.3	548.8
55°	510.8	509.9	504.3	499.7	499.7
57.5°	463.7	461.3	455.5	452.1	454.7
60°	431.0	430.0	423.5	417.1	419.8
62.5°	398.2	396.7	390.1	385.9	387.9
65°	344.6	344.6	338.1	334.4	333.5
67.5°	297.6	293.3	289.6	285.1	283.9
70°	262.0	258.3	255.5	251.6	249.0
72.5°	227.0	224.9	220.5	216.8	216.2
75°	178.3	174.7	171.8	169.1	168.1
77.5°	126.8	126.2	123.5	122.0	122.6
80°	95.7	95.7	93.8	93.8	92.9
82.5°	67.4	68.2	67.8	66.3	66.1
85°	28.8	30.6	32.5	32.6	33.5
87.5°	5.6	9.5	9.6	9.8	10.0
90°	1.9	3.7	7.4	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.2	147.9	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.3	822.4	828.3	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.5	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.9	291.0	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.6	336.8	626.4	1166.0	1374.1
122.5°	305.5	352.6	616.7	1106.7	1304.0
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.5	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.6	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.1
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.3	524.7	578.0	650.9	678.9
155°	519.9	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.3	556.1	577.8	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.3
165°	563.0	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.4
170°	576.0	579.7	580.7	595.6	595.6
172.5°	579.7	582.0	580.7	592.5	591.8
175°	583.4	584.3	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.6	584.2
180°	583.4	583.4	583.4	583.4	583.4

(END OF REPORT)