

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: P519908

Luminaire Tested: **SQ4-F-050U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519908
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

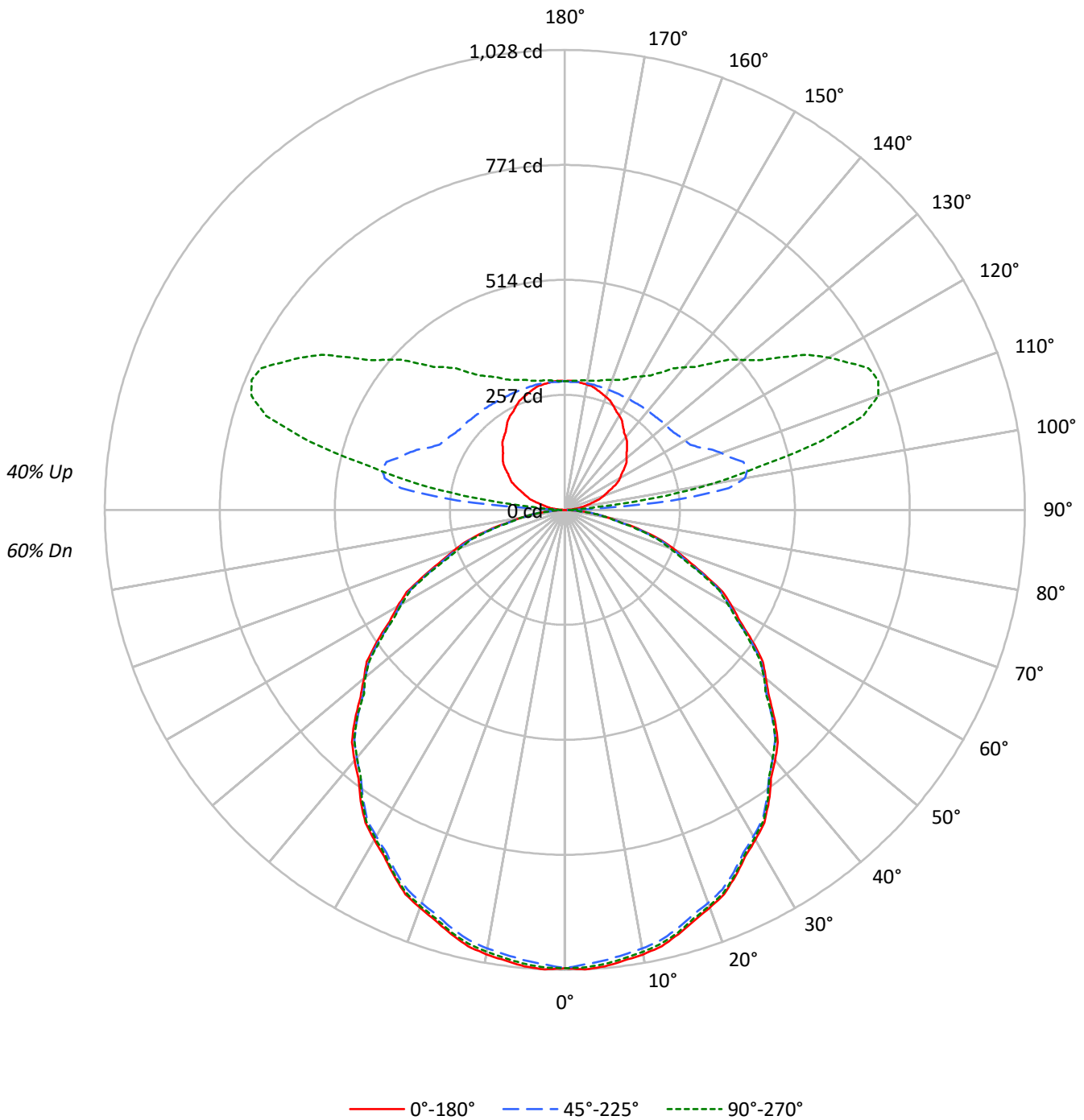
Lumens per Lamp: N/A
Luminaire Lumens: 4678.1 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

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	2.1
10°-20°	275.3	5.9
20°-30°	413.6	8.8
30°-40°	493.5	10.6
40°-50°	506.1	10.8
50°-60°	451.0	9.6
60°-70°	336.3	7.2
70°-80°	182.4	3.9
80°-90°	43.0	0.9
90°-100°	138.2	3.0
100°-110°	375.5	8.0
110°-120°	386.1	8.3
120°-130°	308.7	6.6
130°-140°	242.6	5.2
140°-150°	186.0	4.0
150°-160°	133.7	2.9
160°-170°	81.8	1.7
170°-180°	27.6	0.6
0°-30°	785.6	16.8
0°-40°	1279.2	27.3
0°-60°	2236.3	47.8
0°-90°	2797.9	59.8
90°-120°	899.9	19.2
90°-150°	1637.1	35.0
90°-180°	1880.0	40.2
0°-180°	4678.1	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°	1	4	6	8	8	2
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	331	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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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°	5.4	9.5	9.4	9.8	9.8
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.9	65.7	28.3	23.8
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.2
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.6	103.8	412.9	628.8	591.6
107.5°	82.4	115.2	389.1	689.2	699.5
110°	93.5	123.3	371.3	701.0	745.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.6	691.1	757.9
115°	118.5	143.9	330.6	657.7	749.0
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.3	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.5
127.5°	173.9	196.4	296.0	471.8	549.4
130°	180.6	202.2	294.5	451.6	521.3
132.5°	187.2	208.9	292.9	434.3	496.1
135°	196.3	218.0	290.8	410.5	463.0
137.5°	206.1	225.9	289.6	389.4	433.5
140°	212.1	231.1	288.9	375.9	415.8
142.5°	217.9	235.5	288.1	365.3	398.7
145°	226.9	243.2	287.0	348.7	374.9
147.5°	236.9	250.8	286.1	335.6	356.3
150°	243.6	255.3	286.1	328.1	344.4
152.5°	248.7	259.1	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.1	322.3
157.5°	264.1	271.1	285.2	307.5	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.9	304.8
165°	277.8	281.4	286.1	298.1	299.1
167.5°	282.8	284.6	287.0	295.0	295.8
170°	284.3	286.0	287.0	293.5	293.5
172.5°	285.8	286.8	287.0	292.0	292.0
175°	287.9	288.9	287.0	290.8	289.8
177.5°	288.7	288.7	286.4	289.4	287.9
180°	287.9	287.9	287.9	287.9	287.9

(END OF REPORT)