

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: P519889

Luminaire Tested: **SQ4-F-050U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519889
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

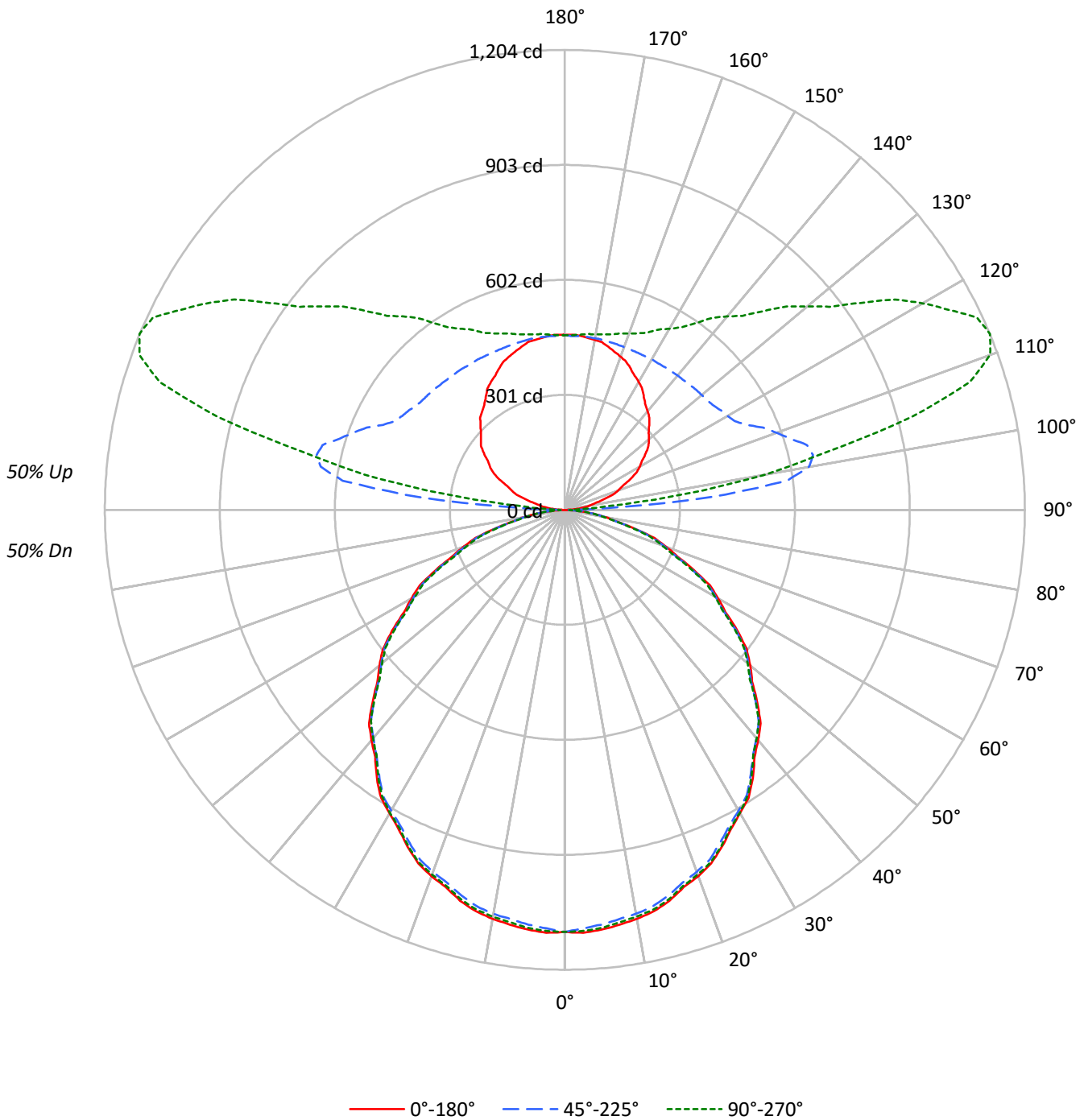
Lumens per Lamp: N/A
Luminaire Lumens: 6005.2 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 43.8
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30				
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25				
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22				
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19				
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17				
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14				
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6786
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6602	6651
25°	6605	6525	6585
30°	6513	6460	6503
35°	6442	6364	6397
40°	6318	6259	6271
45°	6188	6137	6137
50°	6057	6001	5973
55°	5916	5837	5805
60°	5696	5605	5568
65°	5424	5317	5253
70°	5053	4947	4841
75°	4534	4394	4287
80°	3666	3616	3510
85°	2195	2505	2611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.2	1.7
10°-20°	296.9	4.9
20°-30°	445.9	7.4
30°-40°	532.3	8.9
40°-50°	545.4	9.1
50°-60°	486.4	8.1
60°-70°	362.3	6.0
70°-80°	196.6	3.3
80°-90°	47.3	0.8
90°-100°	219.7	3.7
100°-110°	596.8	9.9
110°-120°	613.6	10.2
120°-130°	490.5	8.2
130°-140°	385.5	6.4
140°-150°	295.5	4.9
150°-160°	212.5	3.5
160°-170°	130.0	2.2
170°-180°	43.8	0.7
0°-30°	847.0	14.1
0°-40°	1379.3	23.0
0°-60°	2411.1	40.2
0°-90°	3017.3	50.2
90°-120°	1430.0	23.8
90°-150°	2601.6	43.3
90°-180°	2988.0	49.8
0°-180°	6005.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1103	1102	1090	1100	1099	105
15°	1059	1056	1046	1055	1055	298
25°	973	970	961	967	970	448
35°	858	855	848	848	852	535
45°	711	713	706	704	706	549
55°	552	552	544	540	541	491
65°	373	371	365	361	361	369
75°	191	189	185	182	180	202
85°	31	34	36	37	37	43
90°	2	6	10	13	13	3
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	460	43
180°	458	458	458	458	458	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.9	1104.9	1104.9	1104.9	1104.9
2.5°	1108.4	1106.2	1096.6	1104.9	1103.7
5°	1103.4	1101.9	1090.1	1100.4	1099.0
7.5°	1095.4	1092.6	1080.9	1091.0	1089.5
10°	1087.1	1084.3	1073.8	1082.7	1081.2
12.5°	1076.5	1074.7	1063.2	1072.0	1071.7
15°	1059.0	1056.2	1045.7	1054.6	1054.6
17.5°	1036.0	1034.2	1024.1	1032.7	1031.5
20°	1020.6	1017.7	1008.7	1016.1	1016.1
22.5°	1001.6	999.9	991.0	997.2	998.4
25°	973.2	970.4	961.4	967.4	970.3
27.5°	941.9	939.6	932.1	936.0	938.0
30°	917.0	917.0	909.6	911.2	915.6
32.5°	894.6	894.6	886.0	887.5	889.5
35°	857.9	855.0	847.5	847.6	852.0
37.5°	815.3	813.8	809.1	808.2	809.4
40°	786.9	785.4	779.5	781.0	781.0
42.5°	758.5	757.0	751.1	749.1	751.4
45°	711.4	712.9	705.5	704.0	705.5
47.5°	665.0	665.0	659.1	655.0	657.3
50°	633.0	633.0	627.1	624.2	624.2
52.5°	599.9	601.1	594.0	589.9	591.0
55°	551.7	551.7	544.3	539.9	541.3
57.5°	498.5	498.5	491.1	486.7	489.3
60°	463.0	463.0	455.6	451.1	452.6
62.5°	427.5	427.5	420.1	415.6	415.9
65°	372.7	371.3	365.3	360.9	360.9
67.5°	320.1	316.3	311.8	305.9	305.9
70°	281.0	279.5	275.1	269.2	269.2
72.5°	245.5	243.0	238.4	233.7	233.7
75°	190.8	189.3	184.9	181.9	180.4
77.5°	136.7	135.5	135.2	131.0	132.2
80°	103.5	103.5	102.1	99.1	99.1
82.5°	74.0	75.1	72.5	71.9	70.7
85°	31.1	33.9	35.5	37.0	37.0
87.5°	6.2	10.6	10.4	12.1	12.1
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.2	104.5	44.8	38.0
95°	32.4	120.1	382.6	166.5	111.9
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	106.0	165.0	656.3	999.2	940.3
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.4	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.8	502.0	969.6	1133.3
120°	226.6	264.0	491.4	918.9	1081.5
122.5°	239.5	276.9	484.4	868.1	1025.0
125°	259.0	295.0	475.2	800.8	944.7
127.5°	276.3	312.0	470.2	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.5	690.2	788.4
135°	312.0	346.5	462.0	652.3	735.7
137.5°	327.6	358.9	460.2	618.7	689.0
140°	337.0	367.2	459.0	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.6	533.4	566.2
150°	387.0	405.7	454.6	521.5	547.4
152.5°	395.3	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.0
157.5°	419.7	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.4
162.5°	433.7	441.6	454.3	478.1	484.4
165°	441.4	447.2	454.6	473.9	475.2
167.5°	449.3	452.3	456.1	468.9	469.9
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.0	455.8	456.1	464.1	464.1
175°	457.6	459.0	456.1	462.0	460.5
177.5°	458.8	458.8	455.2	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)