

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: P519985

Luminaire Tested: **SQ4-F-075U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519985
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

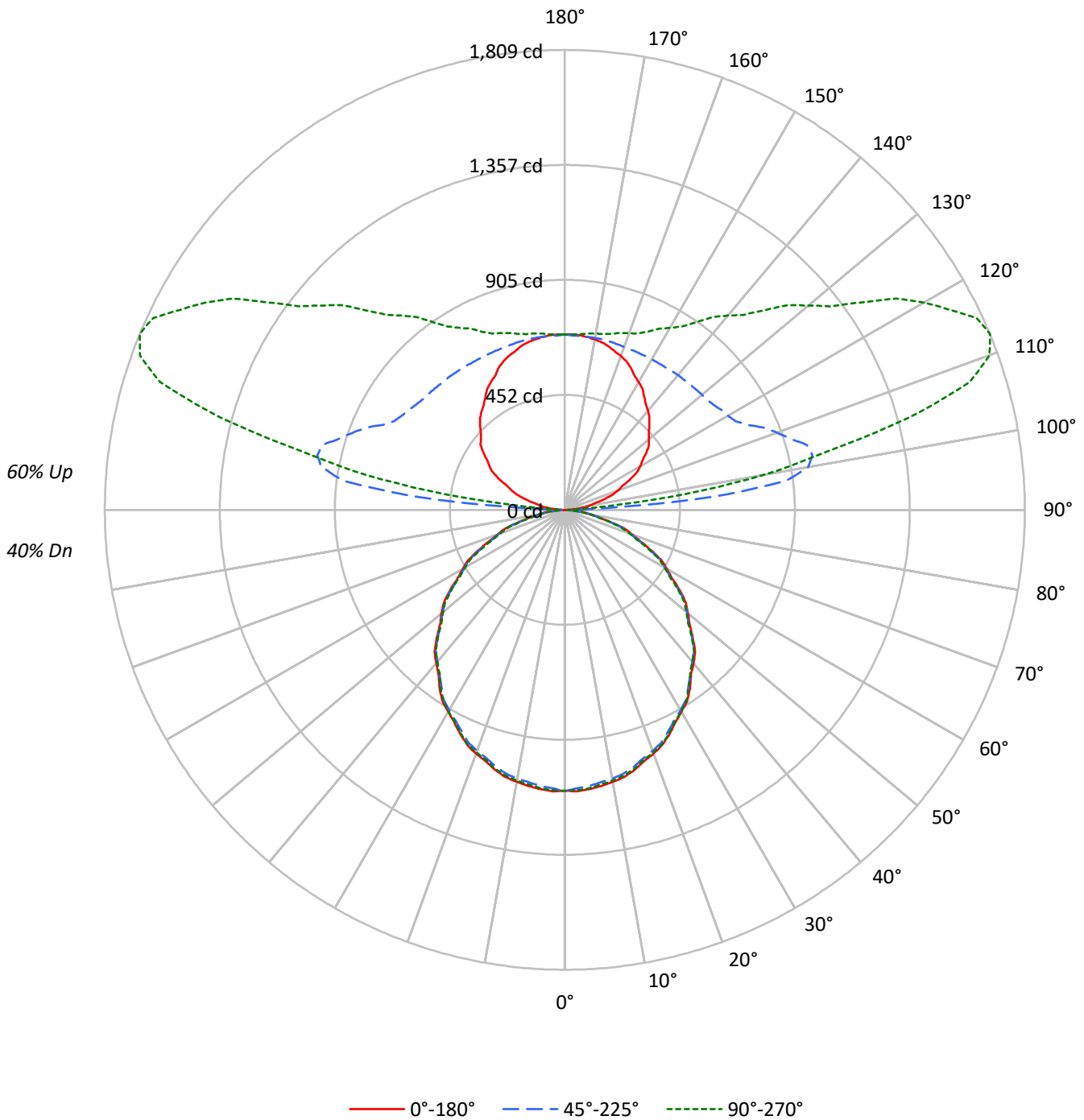
Lumens per Lamp: N/A
Luminaire Lumens: 7507.9 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 53.6
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34				34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28				28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24				24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20				20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18				18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15				15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14				14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12				12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11				11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10				10

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	1.4
10°-20°	296.9	4.0
20°-30°	445.9	5.9
30°-40°	532.3	7.1
40°-50°	545.4	7.3
50°-60°	486.4	6.5
60°-70°	362.3	4.8
70°-80°	196.6	2.6
80°-90°	47.3	0.6
90°-100°	325.1	4.3
100°-110°	894.5	11.9
110°-120°	923.2	12.3
120°-130°	739.7	9.9
130°-140°	581.0	7.7
140°-150°	445.2	5.9
150°-160°	320.1	4.3
160°-170°	195.7	2.6
170°-180°	66.0	0.9
0°-30°	847.0	11.3
0°-40°	1379.3	18.4
0°-60°	2411.1	32.1
0°-90°	3017.3	40.2
90°-120°	2142.8	28.5
90°-150°	3908.8	52.1
90°-180°	4491.0	59.8
0°-180°	7507.9	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	4
95°	48	177	575	246	157	51
105°	160	246	986	1501	1401	169
115°	283	345	790	1574	1786	279
125°	390	445	717	1213	1421	348
135°	471	522	697	981	1110	363
145°	544	581	686	836	901	341
155°	616	636	682	751	773	283
165°	666	674	685	713	717	188
175°	689	691	686	695	694	65
180°	689	689	689	689	689	



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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°	20.2	86.5	149.8	57.5	47.2
95°	48.4	177.4	574.9	245.8	156.9
97.5°	78.9	196.8	877.4	676.0	476.9
100°	101.2	208.7	972.3	981.4	800.8
102.5°	122.4	223.0	997.0	1217.7	1051.9
105°	159.8	245.9	985.6	1501.0	1400.7
107.5°	195.6	274.3	929.6	1639.8	1669.6
110°	221.4	293.1	887.3	1674.3	1777.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	244.9	314.4	845.1	1652.0	1809.2
115°	283.1	344.7	790.5	1574.2	1786.3
117.5°	319.5	376.2	755.9	1464.7	1704.9
120°	341.8	396.2	740.6	1382.9	1630.9
122.5°	361.7	416.2	730.1	1311.0	1546.4
125°	390.2	444.7	717.2	1213.3	1421.2
127.5°	417.1	469.0	708.6	1131.7	1314.1
130°	431.2	484.3	704.0	1083.3	1249.5
132.5°	447.6	500.7	700.4	1040.6	1191.0
135°	470.8	522.4	696.6	981.2	1110.3
137.5°	492.5	540.4	693.4	933.1	1039.5
140°	508.9	553.4	692.2	901.2	997.3
142.5°	523.0	564.0	689.9	872.8	955.0
145°	544.1	581.4	686.3	836.0	900.6
147.5°	566.7	598.8	684.6	803.4	855.1
150°	580.8	609.5	683.4	785.5	825.7
152.5°	593.7	620.1	682.2	770.2	803.4
155°	616.0	636.1	681.9	751.4	772.9
157.5°	632.2	648.5	681.9	736.0	750.9
160°	643.9	656.8	681.9	727.7	739.2
162.5°	653.3	663.8	683.1	720.6	729.8
165°	665.9	674.5	684.9	712.9	717.2
167.5°	674.7	681.3	686.3	706.4	707.5
170°	680.5	684.8	686.3	704.0	704.0
172.5°	685.2	687.2	686.3	700.4	699.3
175°	689.3	690.7	686.3	695.1	693.7
177.5°	690.5	690.5	685.8	692.8	690.5
180°	689.3	689.3	689.3	689.3	689.3

(END OF REPORT)