

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: P519980

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519980
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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

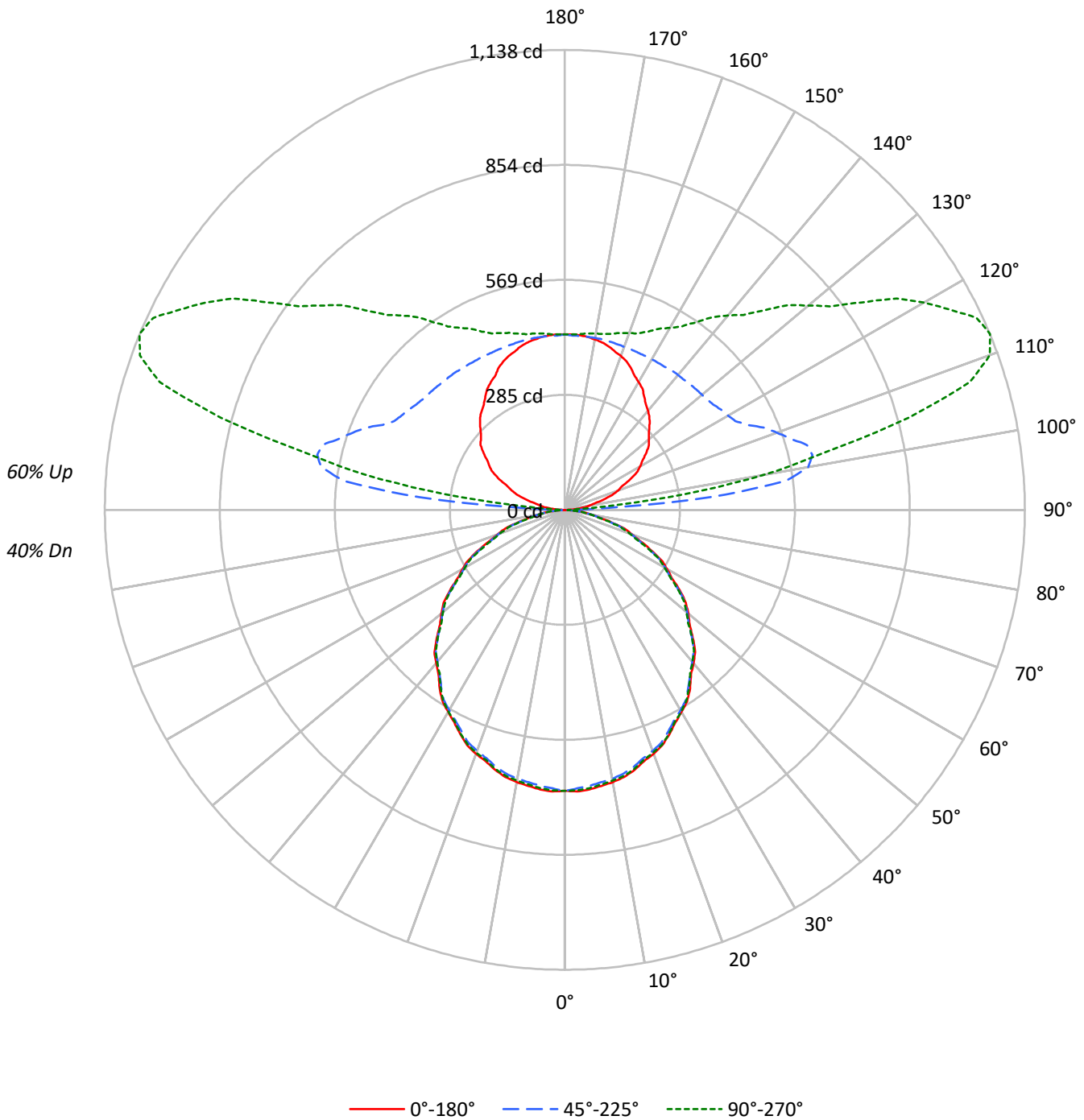
Lumens per Lamp: N/A
Luminaire Lumens: 4724.5 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.7
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	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6352	6404
10°	6409	6330	6374
15°	6365	6285	6338
20°	6305	6232	6279
25°	6234	6158	6216
30°	6147	6098	6139
35°	6081	6007	6038
40°	5963	5908	5920
45°	5842	5792	5792
50°	5718	5664	5637
55°	5585	5511	5480
60°	5375	5288	5255
65°	5122	5017	4958
70°	4769	4672	4570
75°	4281	4149	4050
80°	3464	3411	3310
85°	2064	2371	2467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	1.4
10°-20°	186.8	4.0
20°-30°	280.6	5.9
30°-40°	334.9	7.1
40°-50°	343.2	7.3
50°-60°	306.1	6.5
60°-70°	228.0	4.8
70°-80°	123.7	2.6
80°-90°	29.8	0.6
90°-100°	204.6	4.3
100°-110°	562.9	11.9
110°-120°	581.0	12.3
120°-130°	465.5	9.9
130°-140°	365.6	7.7
140°-150°	280.2	5.9
150°-160°	201.4	4.3
160°-170°	123.2	2.6
170°-180°	41.5	0.9
0°-30°	533.0	11.3
0°-40°	867.9	18.4
0°-60°	1517.2	32.1
0°-90°	1898.7	40.2
90°-120°	1348.4	28.5
90°-150°	2459.6	52.1
90°-180°	2826.0	59.8
0°-180°	4724.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	694	693	686	692	692	66
15°	666	665	658	664	664	188
25°	612	611	605	609	611	282
35°	540	538	533	533	536	337
45°	448	449	444	443	444	346
55°	347	347	343	340	341	309
65°	235	234	230	227	227	232
75°	120	119	116	114	114	127
85°	20	21	22	23	23	27
90°	1	4	6	8	8	3
95°	30	112	362	155	99	32
105°	101	155	620	945	881	106
115°	178	217	498	990	1124	176
125°	246	280	451	763	894	219
135°	296	329	438	617	699	229
145°	342	366	432	526	567	215
155°	388	400	429	473	486	178
165°	419	424	431	449	451	118
175°	434	435	432	437	436	41
180°	434	434	434	434	434	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.3	695.3	695.3	695.3	695.3
2.5°	697.5	696.1	690.0	695.3	694.5
5°	694.3	693.4	685.9	692.4	691.5
7.5°	689.3	687.5	680.2	686.5	685.6
10°	684.1	682.3	675.7	681.3	680.4
12.5°	677.4	676.3	669.0	674.6	674.4
15°	666.4	664.6	658.0	663.6	663.6
17.5°	651.9	650.8	644.5	649.8	649.1
20°	642.2	640.3	634.7	639.5	639.5
22.5°	630.3	629.2	623.6	627.5	628.2
25°	612.4	610.6	604.9	608.7	610.6
27.5°	592.7	591.2	586.5	589.0	590.3
30°	577.0	577.0	572.4	573.4	576.2
32.5°	562.9	562.9	557.5	558.5	559.8
35°	539.9	538.0	533.3	533.4	536.1
37.5°	513.0	512.1	509.1	508.6	509.3
40°	495.1	494.2	490.5	491.5	491.5
42.5°	477.3	476.4	472.6	471.3	472.8
45°	447.7	448.6	443.9	443.0	443.9
47.5°	418.5	418.5	414.7	412.2	413.7
50°	398.4	398.4	394.6	392.7	392.7
52.5°	377.5	378.3	373.8	371.2	371.9
55°	347.2	347.2	342.6	339.7	340.7
57.5°	313.7	313.7	309.0	306.3	307.8
60°	291.3	291.3	286.6	283.9	284.8
62.5°	269.0	269.0	264.4	261.5	261.7
65°	234.6	233.6	229.8	227.1	227.1
67.5°	201.5	199.1	196.2	192.5	192.5
70°	176.8	175.9	173.2	169.4	169.4
72.5°	154.5	152.8	150.1	147.0	147.0
75°	120.1	119.1	116.4	114.5	113.6
77.5°	86.0	85.3	85.1	82.4	83.2
80°	65.2	65.2	64.2	62.3	62.3
82.5°	46.5	47.2	45.7	45.3	44.5
85°	19.5	21.4	22.4	23.3	23.3
87.5°	3.9	6.6	6.5	7.6	7.6
90°	0.9	3.6	6.5	8.3	8.3
92.5°	12.7	54.4	94.3	36.2	29.7
95°	30.4	111.7	361.8	154.7	98.8
97.5°	49.7	123.8	552.1	425.4	300.1
100°	63.7	131.4	611.9	617.6	503.9
102.5°	77.0	140.4	627.4	766.3	661.9
105°	100.6	154.7	620.2	944.6	881.4
107.5°	123.1	172.5	584.9	1031.8	1050.6
110°	139.4	184.5	558.3	1053.6	1118.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.2	197.8	531.8	1039.5	1138.5
115°	178.1	216.9	497.5	990.5	1124.1
117.5°	201.0	236.7	475.7	921.7	1072.8
120°	215.0	249.3	466.1	870.1	1026.2
122.5°	227.6	261.8	459.4	824.9	973.1
125°	245.5	279.7	451.3	763.4	894.3
127.5°	262.4	295.1	445.9	712.2	826.9
130°	271.3	304.7	443.0	681.7	786.3
132.5°	281.7	315.1	440.7	654.9	749.4
135°	296.3	328.7	438.4	617.4	698.7
137.5°	309.9	340.1	436.3	587.2	654.2
140°	320.2	348.2	435.7	567.1	627.6
142.5°	329.1	355.0	434.1	549.2	601.0
145°	342.4	365.8	431.9	526.0	566.6
147.5°	356.6	376.9	430.8	505.6	538.1
150°	365.4	383.5	430.1	494.3	519.6
152.5°	373.5	390.2	429.3	484.7	505.6
155°	387.6	400.2	429.2	472.8	486.4
157.5°	397.8	408.1	429.2	463.1	472.5
160°	405.1	413.3	429.2	458.0	465.1
162.5°	411.1	417.8	429.9	453.5	459.2
165°	419.0	424.4	431.0	448.6	451.3
167.5°	424.5	428.7	431.9	444.5	445.2
170°	428.2	431.0	431.9	443.0	443.0
172.5°	431.2	432.4	431.9	440.7	440.1
175°	433.8	434.7	431.9	437.4	436.5
177.5°	434.5	434.5	431.5	435.9	434.5
180°	433.8	433.8	433.8	433.8	433.8

(END OF REPORT)