

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: P519897

Luminaire Tested: **SQ4-F-050U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519897
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-930-1D-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

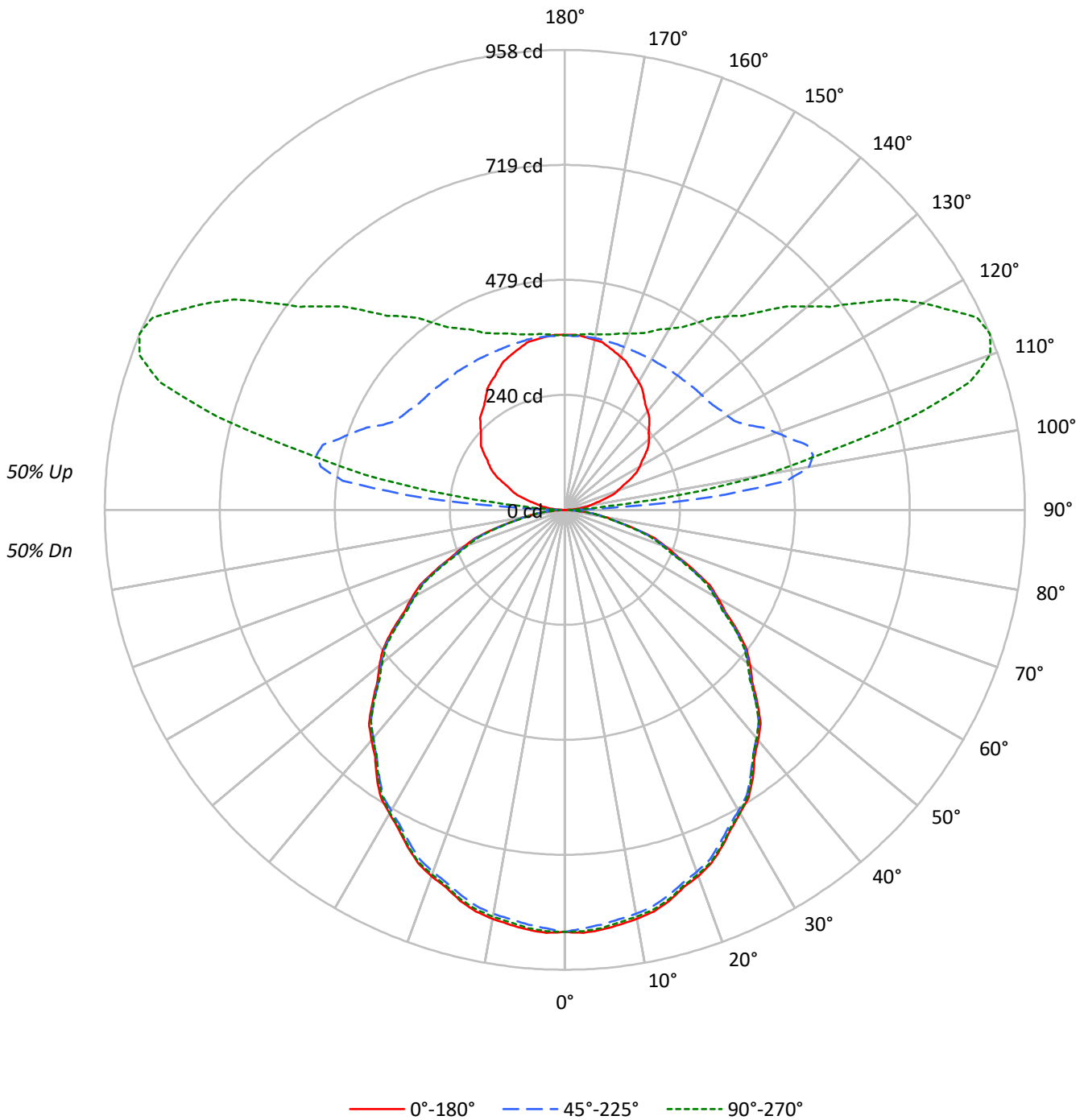
Lumens per Lamp: N/A
Luminaire Lumens: 4778.6 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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	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°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5373
15°	5366	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5183	5141	5175
35°	5125	5065	5090
40°	5027	4980	4989
45°	4924	4884	4884
50°	4821	4775	4753
55°	4708	4645	4620
60°	4532	4459	4431
65°	4317	4231	4178
70°	4021	3937	3852
75°	3610	3496	3413
80°	2919	2880	2795
85°	1750	1990	2075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.7
10°-20°	236.2	4.9
20°-30°	354.8	7.4
30°-40°	423.5	8.9
40°-50°	434.0	9.1
50°-60°	387.1	8.1
60°-70°	288.3	6.0
70°-80°	156.5	3.3
80°-90°	37.7	0.8
90°-100°	174.8	3.7
100°-110°	474.9	9.9
110°-120°	488.2	10.2
120°-130°	390.4	8.2
130°-140°	306.7	6.4
140°-150°	235.2	4.9
150°-160°	169.1	3.5
160°-170°	103.4	2.2
170°-180°	34.8	0.7
0°-30°	674.0	14.1
0°-40°	1097.5	23.0
0°-60°	1918.6	40.2
0°-90°	2401.1	50.2
90°-120°	1137.9	23.8
90°-150°	2070.2	43.3
90°-180°	2378.0	49.8
0°-180°	4778.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	878	877	867	876	874	83
15°	843	840	832	839	839	237
25°	774	772	765	770	772	357
35°	683	680	674	674	678	426
45°	566	567	562	560	562	437
55°	439	439	433	430	431	391
65°	297	295	291	287	287	294
75°	152	151	147	145	144	160
85°	25	27	28	29	29	35
90°	1	5	8	10	10	2
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	307	363	441	474	180
155°	324	336	361	396	407	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.2	879.2	879.2	879.2	879.2
2.5°	882.0	880.2	872.7	879.2	878.3
5°	878.0	876.9	867.4	875.6	874.5
7.5°	871.7	869.4	860.1	868.1	866.9
10°	865.1	862.8	854.5	861.5	860.3
12.5°	856.6	855.2	846.0	853.0	852.8
15°	842.7	840.4	832.1	839.2	839.2
17.5°	824.3	823.0	815.0	821.8	820.8
20°	812.1	809.8	802.7	808.6	808.6
22.5°	797.0	795.6	788.5	793.6	794.5
25°	774.4	772.2	765.1	769.8	772.1
27.5°	749.5	747.6	741.7	744.9	746.4
30°	729.8	729.8	723.9	725.1	728.6
32.5°	711.8	711.8	705.0	706.2	707.8
35°	682.6	680.4	674.5	674.5	677.9
37.5°	648.7	647.6	643.8	643.1	644.1
40°	626.1	625.0	620.2	621.4	621.4
42.5°	603.6	602.4	597.6	596.1	597.9
45°	566.1	567.3	561.5	560.3	561.5
47.5°	529.2	529.2	524.5	521.2	523.0
50°	503.8	503.8	499.0	496.7	496.7
52.5°	477.4	478.3	472.7	469.4	470.3
55°	439.0	439.0	433.2	429.6	430.8
57.5°	396.7	396.7	390.8	387.3	389.4
60°	368.4	368.4	362.5	359.0	360.2
62.5°	340.2	340.2	334.3	330.7	330.9
65°	296.6	295.4	290.7	287.1	287.1
67.5°	254.7	251.7	248.1	243.4	243.4
70°	223.6	222.5	218.9	214.2	214.2
72.5°	195.3	193.3	189.7	186.0	186.0
75°	151.9	150.7	147.1	144.8	143.6
77.5°	108.8	107.9	107.6	104.3	105.2
80°	82.4	82.4	81.3	78.9	78.9
82.5°	58.9	59.8	57.7	57.2	56.3
85°	24.8	27.0	28.2	29.4	29.4
87.5°	4.9	8.4	8.3	9.7	9.7
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.3	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.6	492.0	871.5	884.5
110°	118.2	156.0	469.5	886.5	942.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.1	874.0	958.5
115°	149.8	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.4	210.1	391.0	731.3	860.6
122.5°	190.7	220.4	385.4	690.8	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.3	596.6	694.8
130°	228.3	255.8	372.3	571.0	659.2
132.5°	236.8	264.3	370.4	549.3	627.3
135°	248.3	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.2	492.3	548.2
140°	268.1	292.1	365.3	475.3	525.8
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.8	307.4	363.0	441.0	474.3
147.5°	299.5	317.2	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.4
157.5°	333.9	342.9	360.6	389.0	397.6
160°	339.5	347.6	360.6	384.2	391.0
162.5°	345.2	351.4	361.6	380.4	385.4
165°	351.3	355.8	361.8	377.0	378.2
167.5°	357.6	359.8	363.0	373.1	374.0
170°	359.4	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.2	365.3	363.0	367.6	366.5
177.5°	365.0	365.0	362.3	366.0	364.2
180°	364.2	364.2	364.2	364.2	364.2

(END OF REPORT)