

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521413

Luminaire Tested: **SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521413
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

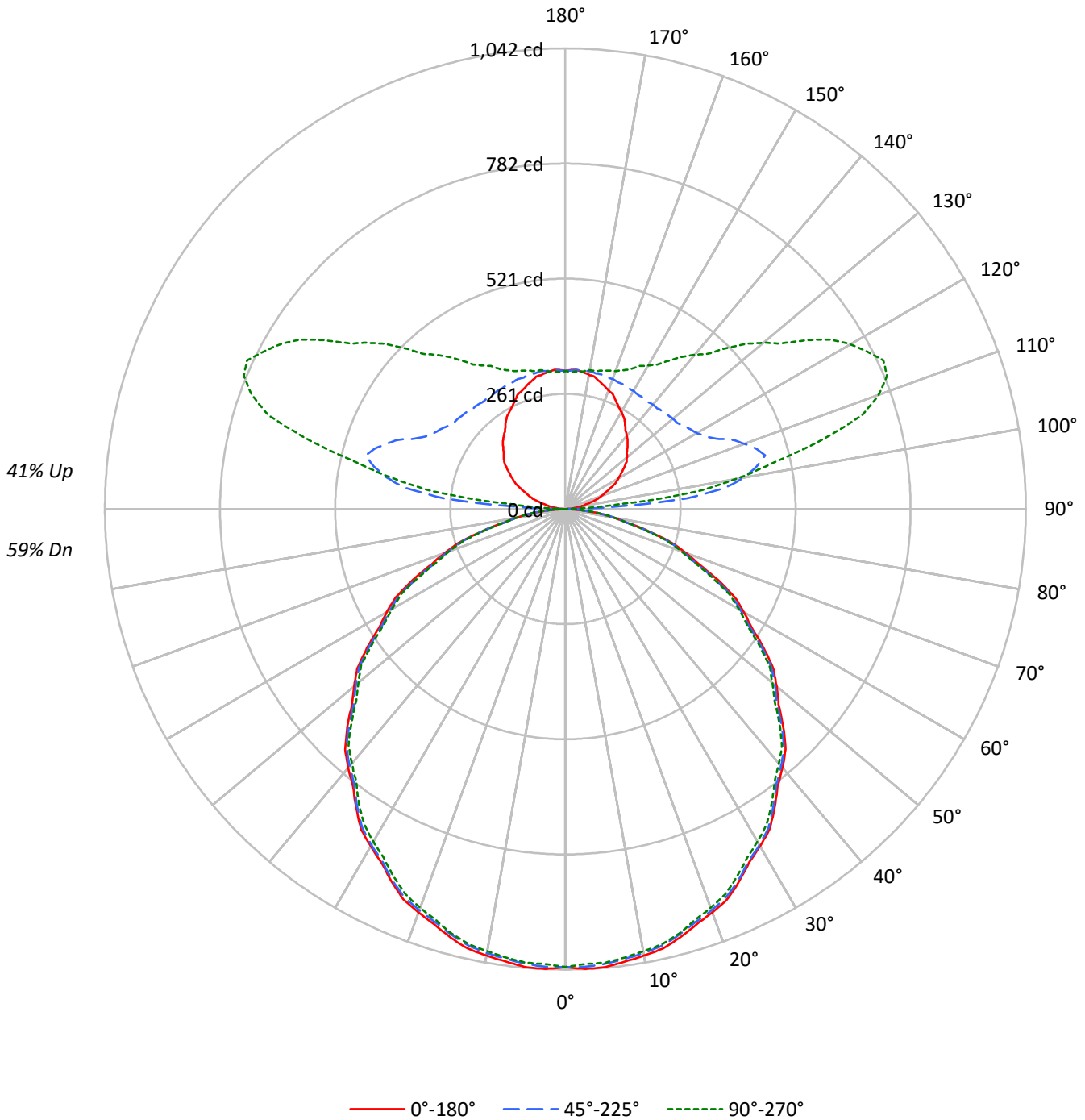
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4977.3 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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	0
RCR																		
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	59
1	100	95	91	88	93	89	86	82	77	75	72	67	65	63	57	56	54	50
2	91	83	77	71	84	78	72	67	68	63	60	58	55	52	50	48	45	41
3	83	73	65	59	77	68	61	56	59	54	50	51	47	44	44	41	38	35
4	75	64	56	50	70	60	53	47	53	47	42	46	41	38	39	36	33	30
5	69	57	49	43	64	54	46	41	47	41	36	41	36	32	35	32	29	26
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	32	28	25	22
7	59	46	38	32	55	44	36	31	38	32	28	34	29	25	29	25	22	20
8	55	42	34	29	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	48	35	28	23	44	33	26	22	30	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9560	9560	9560
5°	9633	9569	9542
10°	9615	9561	9523
15°	9588	9522	9503
20°	9538	9489	9431
25°	9469	9430	9349
30°	9387	9356	9262
35°	9294	9250	9173
40°	9206	9147	9052
45°	9102	9026	8936
50°	8958	8886	8774
55°	8807	8696	8586
60°	8601	8455	8364
65°	8333	8119	8012
70°	7834	7623	7542
75°	6994	6855	6752
80°	5786	5839	5786
85°	4150	4679	4880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	2.0
10°-20°	280.9	5.6
20°-30°	424.8	8.5
30°-40°	511.4	10.3
40°-50°	531.2	10.7
50°-60°	482.0	9.7
60°-70°	367.6	7.4
70°-80°	204.9	4.1
80°-90°	53.7	1.1
90°-100°	161.0	3.2
100°-110°	389.2	7.8
110°-120°	415.1	8.3
120°-130°	336.2	6.8
130°-140°	260.3	5.2
140°-150°	198.6	4.0
150°-160°	143.7	2.9
160°-170°	88.5	1.8
170°-180°	30.0	0.6
0°-30°	803.7	16.1
0°-40°	1315.1	26.4
0°-60°	2328.4	46.8
0°-90°	2954.7	59.4
90°-120°	965.3	19.4
90°-150°	1760.4	35.4
90°-180°	2023.0	40.6
0°-180°	4977.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1036	1036	1036	1036	1036	
5°	1040	1030	1033	1031	1030	99
15°	1004	992	997	995	995	283
25°	930	921	926	918	918	428
35°	825	819	821	812	814	516
45°	698	691	692	683	685	537
55°	548	545	541	534	534	489
65°	382	378	372	366	367	376
75°	196	195	192	190	189	209
85°	39	44	44	46	46	48
90°	0	0	0	0	0	2
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1036.2	1036.2	1036.2	1036.2	1036.2
2.5°	1041.7	1034.0	1036.9	1034.5	1030.7
5°	1040.1	1030.5	1033.2	1031.2	1030.3
7.5°	1032.6	1023.0	1026.7	1023.8	1023.6
10°	1026.3	1016.8	1020.5	1017.5	1016.5
12.5°	1018.5	1008.1	1011.8	1008.9	1008.7
15°	1003.8	992.3	996.9	994.9	994.9
17.5°	985.5	974.2	979.8	976.3	974.7
20°	971.4	960.8	966.5	960.6	960.6
22.5°	956.5	945.9	950.8	944.1	944.1
25°	930.2	920.6	926.3	917.5	918.4
27.5°	901.5	892.9	897.8	889.4	889.8
30°	881.1	872.5	878.2	867.4	869.4
32.5°	859.9	852.1	855.4	846.2	846.6
35°	825.2	819.4	821.3	812.5	814.4
37.5°	789.5	782.8	784.6	775.6	777.5
40°	764.4	757.6	759.5	749.7	751.6
42.5°	737.7	731.7	732.8	723.0	725.7
45°	697.6	690.9	691.8	683.0	684.9
47.5°	654.7	649.3	648.2	640.2	641.9
50°	624.1	620.2	619.1	610.3	611.3
52.5°	593.4	590.4	587.7	579.8	582.3
55°	547.5	544.6	540.6	533.8	533.8
57.5°	499.8	497.0	492.0	485.2	487.1
60°	466.1	463.2	458.2	451.4	453.3
62.5°	432.3	429.4	423.7	417.6	418.8
65°	381.7	377.9	371.9	366.0	367.0
67.5°	327.3	323.7	318.7	313.0	314.2
70°	290.4	287.6	282.6	277.7	279.6
72.5°	252.0	249.1	244.9	242.4	242.0
75°	196.2	195.3	192.3	190.3	189.4
77.5°	143.5	144.8	141.3	140.5	140.3
80°	108.9	111.8	109.9	109.9	108.9
82.5°	78.3	82.7	81.6	81.6	81.4
85°	39.2	44.0	44.2	46.1	46.1
87.5°	11.0	15.6	18.1	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)