

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

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-F-075U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

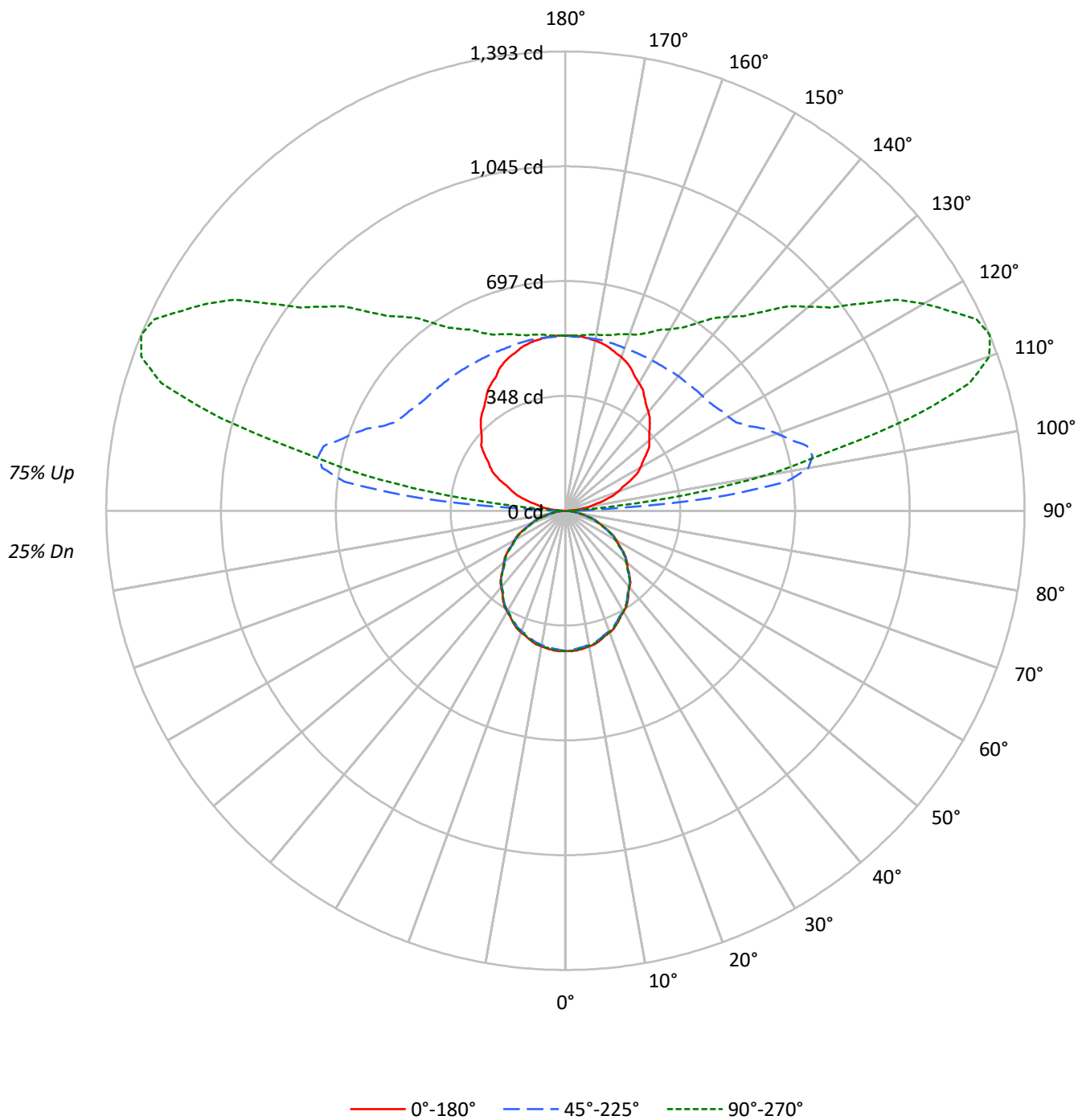
Lumens per Lamp: N/A
Luminaire Lumens: 4620.1 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	24
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	23	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	28	25	20	19	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	25	21	19	16	15	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	45	34	28	23	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2617	2617	2617
5°	2623	2591	2612
10°	2614	2582	2600
15°	2596	2564	2585
20°	2572	2542	2561
25°	2543	2512	2535
30°	2508	2487	2504
35°	2480	2450	2463
40°	2432	2410	2414
45°	2383	2363	2363
50°	2332	2310	2299
55°	2278	2248	2235
60°	2192	2158	2144
65°	2089	2048	2022
70°	1946	1904	1863
75°	1747	1692	1652
80°	1413	1392	1353
85°	847	967	1002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 2388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.9
10°-20°	114.3	2.5
20°-30°	171.7	3.7
30°-40°	204.9	4.4
40°-50°	210.0	4.5
50°-60°	187.3	4.1
60°-70°	139.5	3.0
70°-80°	75.7	1.6
80°-90°	18.9	0.4
90°-100°	250.3	5.4
100°-110°	688.7	14.9
110°-120°	710.9	15.4
120°-130°	569.6	12.3
130°-140°	447.4	9.7
140°-150°	342.8	7.4
150°-160°	246.5	5.3
160°-170°	150.7	3.3
170°-180°	50.8	1.1
0°-30°	326.1	7.1
0°-40°	531.0	11.5
0°-60°	928.3	20.1
0°-90°	1162.4	25.2
90°-120°	1650.0	35.7
90°-150°	3009.8	65.1
90°-180°	3458.0	74.8
0°-180°	4620.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	425	424	420	424	423	40
15°	408	407	403	406	406	115
25°	375	374	370	372	374	173
35°	330	329	326	326	328	206
45°	274	274	272	271	272	211
55°	212	212	210	208	208	189
65°	144	143	141	139	139	142
75°	74	73	71	70	70	78
85°	12	13	14	14	14	17
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	425.4	425.4	425.4	425.4	425.4
2.5°	426.7	425.9	422.2	425.4	424.9
5°	424.8	424.3	419.7	423.7	423.1
7.5°	421.7	420.6	416.2	420.0	419.5
10°	418.5	417.4	413.4	416.8	416.3
12.5°	414.4	413.8	409.3	412.7	412.6
15°	407.7	406.6	402.6	406.0	406.0
17.5°	398.8	398.2	394.3	397.6	397.1
20°	392.9	391.8	388.4	391.2	391.2
22.5°	385.6	385.0	381.5	383.9	384.4
25°	374.7	373.6	370.1	372.4	373.6
27.5°	362.6	361.7	358.9	360.4	361.1
30°	353.1	353.1	350.2	350.8	352.5
32.5°	344.4	344.4	341.1	341.7	342.5
35°	330.3	329.2	326.3	326.3	328.0
37.5°	313.9	313.3	311.5	311.2	311.6
40°	302.9	302.4	300.1	300.7	300.7
42.5°	292.0	291.5	289.2	288.4	289.3
45°	273.9	274.5	271.6	271.1	271.6
47.5°	256.0	256.0	253.7	252.2	253.1
50°	243.7	243.7	241.4	240.3	240.3
52.5°	231.0	231.4	228.7	227.1	227.6
55°	212.4	212.4	209.6	207.9	208.4
57.5°	191.9	191.9	189.1	187.4	188.4
60°	178.2	178.2	175.4	173.7	174.3
62.5°	164.6	164.6	161.7	160.0	160.1
65°	143.5	142.9	140.7	138.9	138.9
67.5°	123.2	121.8	120.0	117.8	117.8
70°	108.2	107.6	105.9	103.6	103.6
72.5°	94.5	93.5	91.8	90.0	90.0
75°	73.5	72.9	71.2	70.0	69.5
77.5°	52.6	52.2	52.0	50.5	50.9
80°	39.9	39.9	39.3	38.2	38.2
82.5°	28.5	28.9	27.9	27.7	27.2
85°	12.0	13.1	13.7	14.2	14.2
87.5°	2.5	4.5	4.8	5.7	5.7
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)