

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-PW1-050U-075D-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

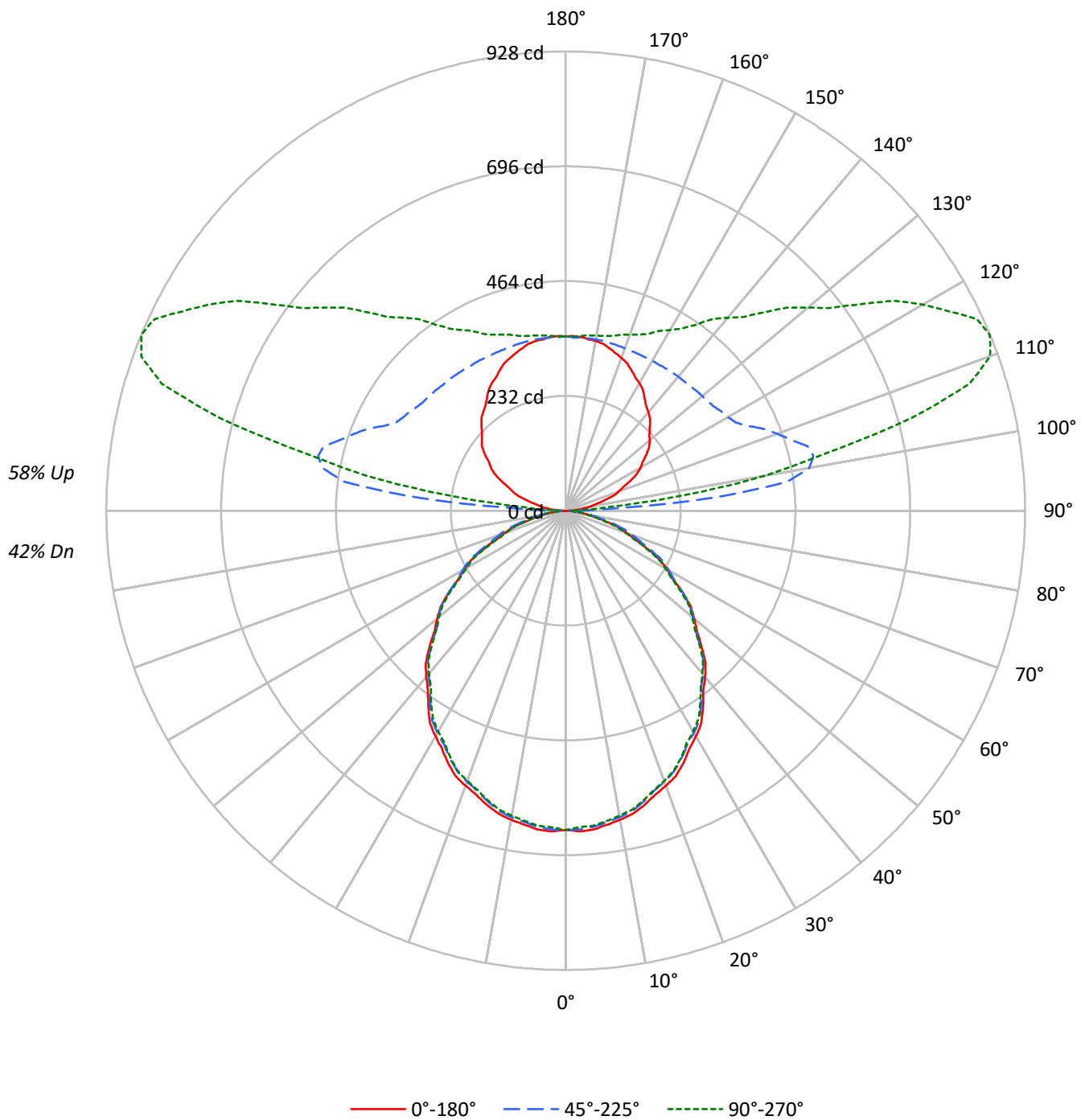
Lumens per Lamp: N/A
Luminaire Lumens: 3942.8 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	58	73	65	58	53	53	49	45	43	40	37	34	31	30
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	28	25
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	20	17
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3967	3967	3967
5°	3992	3961	3943
10°	3960	3929	3907
15°	3918	3875	3861
20°	3872	3812	3805
25°	3817	3748	3737
30°	3737	3680	3656
35°	3630	3579	3558
40°	3518	3463	3449
45°	3380	3336	3321
50°	3240	3213	3191
55°	3089	3089	3040
60°	2901	2956	2852
65°	2655	2787	2588
70°	2340	2564	2279
75°	1999	2296	1944
80°	1551	1930	1569
85°	1002	1482	1327

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3380 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	1.5
10°-20°	171.4	4.3
20°-30°	254.3	6.5
30°-40°	297.6	7.5
40°-50°	296.2	7.5
50°-60°	255.8	6.5
60°-70°	184.1	4.7
70°-80°	96.6	2.4
80°-90°	25.3	0.6
90°-100°	169.1	4.3
100°-110°	459.5	11.7
110°-120°	472.4	12.0
120°-130°	377.7	9.6
130°-140°	296.8	7.5
140°-150°	227.6	5.8
150°-160°	163.7	4.2
160°-170°	100.1	2.5
170°-180°	33.7	0.9
0°-30°	486.5	12.3
0°-40°	784.1	19.9
0°-60°	1336.1	33.9
0°-90°	1642.1	41.6
90°-120°	1101.1	27.9
90°-150°	2003.2	50.8
90°-180°	2301.0	58.4
0°-180°	3942.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	647	639	642	640	639	61
15°	615	608	608	607	606	173
25°	562	553	552	549	551	259
35°	484	477	477	472	474	302
45°	389	385	384	382	382	300
55°	288	288	288	284	284	257
65°	182	188	192	184	178	181
75°	84	92	97	90	82	90
85°	14	19	21	20	19	19
90°	1	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	644.9	644.9	644.9	644.9	644.9
2.5°	648.5	643.2	644.9	643.5	640.3
5°	646.6	639.4	641.5	639.8	638.6
7.5°	640.0	633.3	634.9	633.1	632.4
10°	634.1	627.4	629.0	626.7	625.6
12.5°	627.3	620.2	621.7	619.4	618.8
15°	615.3	607.6	608.5	607.4	606.3
17.5°	601.5	593.6	593.8	591.9	591.7
20°	591.5	583.2	582.4	580.1	581.3
22.5°	580.6	571.8	571.0	567.9	569.4
25°	562.5	553.1	552.3	548.9	550.6
27.5°	541.6	532.3	532.3	527.5	529.3
30°	526.1	517.3	518.2	512.6	514.8
32.5°	509.8	501.8	502.3	496.6	498.9
35°	483.5	476.9	476.7	472.2	473.9
37.5°	456.7	450.8	449.9	447.3	447.7
40°	438.1	433.1	431.3	429.6	429.6
42.5°	418.5	414.0	412.2	410.9	410.5
45°	388.6	385.3	383.5	382.4	381.8
47.5°	359.1	356.0	354.4	353.6	353.1
50°	338.6	336.4	335.8	334.1	333.5
52.5°	318.2	316.9	316.3	314.1	313.5
55°	288.1	287.5	288.1	284.1	283.5
57.5°	256.7	257.6	259.4	254.1	252.7
60°	235.8	238.0	240.3	234.0	231.8
62.5°	214.4	218.0	221.3	214.0	210.9
65°	182.4	187.9	191.5	184.0	177.8
67.5°	151.5	158.4	162.6	154.5	147.6
70°	130.1	137.9	142.6	134.5	126.7
72.5°	111.5	120.1	124.0	116.3	108.5
75°	84.1	91.9	96.6	90.2	81.8
77.5°	59.7	67.0	70.9	65.3	58.4
80°	43.8	51.5	54.5	49.9	44.3
82.5°	31.0	37.5	39.5	36.7	33.0
85°	14.2	18.6	21.0	19.9	18.8
87.5°	3.9	7.6	10.2	10.7	11.1
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)