

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-4

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-4
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

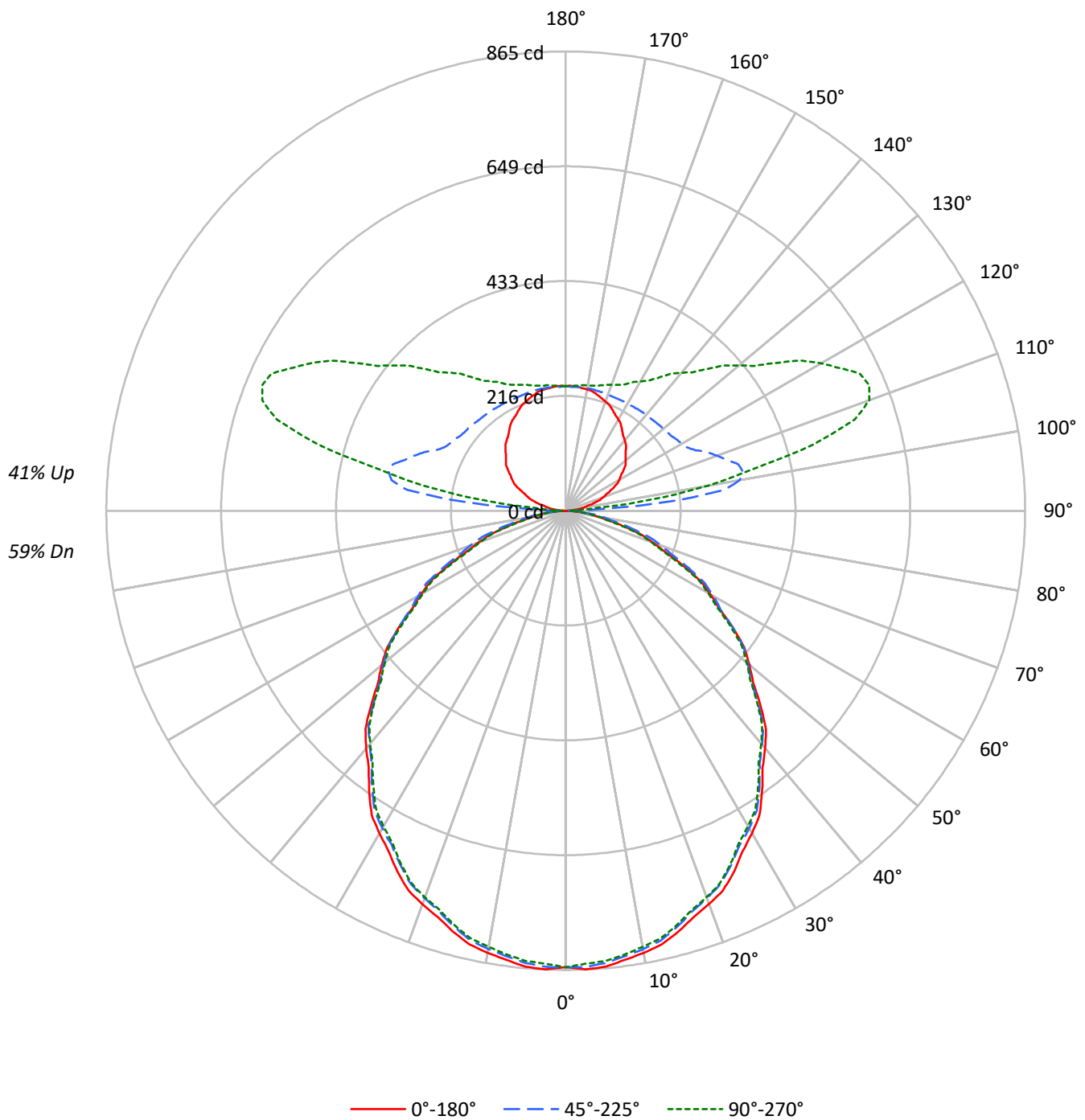
Lumens per Lamp: N/A
Luminaire Lumens: 3722.5 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-4

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7934	7934	7934
5°	7984	7921	7886
10°	7921	7856	7814
15°	7837	7750	7721
20°	7743	7624	7609
25°	7635	7497	7473
30°	7473	7361	7313
35°	7261	7159	7116
40°	7035	6925	6898
45°	6761	6673	6643
50°	6481	6426	6383
55°	6178	6178	6080
60°	5801	5914	5704
65°	5309	5573	5176
70°	4680	5131	4556
75°	3996	4591	3889
80°	3098	3863	3140
85°	2001	2964	2646

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6761 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	2.2
10°-20°	228.6	6.1
20°-30°	339.1	9.1
30°-40°	396.8	10.7
40°-50°	395.0	10.6
50°-60°	341.1	9.2
60°-70°	245.5	6.6
70°-80°	128.8	3.5
80°-90°	32.8	0.9
90°-100°	112.8	3.0
100°-110°	306.3	8.2
110°-120°	315.0	8.5
120°-130°	251.8	6.8
130°-140°	197.9	5.3
140°-150°	151.7	4.1
150°-160°	109.1	2.9
160°-170°	66.7	1.8
170°-180°	22.5	0.6
0°-30°	648.7	17.4
0°-40°	1045.4	28.1
0°-60°	1781.5	47.9
0°-90°	2188.6	58.8
90°-120°	734.1	19.7
90°-150°	1335.5	35.9
90°-180°	1534.0	41.2
0°-180°	3722.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	862	852	855	853	852	82
15°	820	810	811	810	808	231
25°	750	737	736	732	734	345
35°	645	636	636	630	632	403
45°	518	514	511	510	509	400
55°	384	383	384	379	378	343
65°	243	251	255	245	237	241
75°	112	122	129	120	109	120
85°	19	25	28	26	25	25
90°	1	3	5	7	7	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	859.9	859.9	859.9	859.9	859.9
2.5°	864.7	857.6	859.9	857.9	853.8
5°	862.1	852.5	855.3	853.0	851.5
7.5°	853.3	844.5	846.5	844.1	843.2
10°	845.5	836.6	838.6	835.6	834.1
12.5°	836.4	826.9	828.9	825.9	825.0
15°	820.5	810.1	811.4	809.8	808.3
17.5°	802.0	791.5	791.7	789.2	788.9
20°	788.6	777.5	776.5	773.5	775.0
22.5°	774.1	762.4	761.4	757.2	759.3
25°	750.0	737.4	736.4	731.9	734.1
27.5°	722.1	709.7	709.7	703.4	705.8
30°	701.5	689.7	690.9	683.4	686.4
32.5°	679.7	669.0	669.7	662.2	665.2
35°	644.7	635.8	635.6	629.6	631.8
37.5°	608.9	601.1	599.9	596.4	597.0
40°	584.1	577.4	575.0	572.7	572.7
42.5°	558.0	552.0	549.6	547.9	547.3
45°	518.2	513.7	511.4	509.8	509.1
47.5°	478.8	474.6	472.6	471.5	470.8
50°	451.5	448.6	447.7	445.4	444.7
52.5°	424.2	422.5	421.7	418.8	418.0
55°	384.1	383.4	384.1	378.8	378.0
57.5°	342.3	343.5	345.9	338.8	337.0
60°	314.4	317.4	320.5	312.1	309.1
62.5°	285.9	290.7	295.0	285.4	281.2
65°	243.2	250.6	255.3	245.3	237.1
67.5°	202.0	211.2	216.8	206.0	196.8
70°	173.5	183.9	190.2	179.3	168.9
72.5°	148.6	160.2	165.3	155.1	144.7
75°	112.1	122.5	128.8	120.2	109.1
77.5°	79.5	89.3	94.5	87.1	77.9
80°	58.3	68.7	72.7	66.5	59.1
82.5°	41.4	50.0	52.7	49.0	43.9
85°	18.9	24.9	28.0	26.5	25.0
87.5°	5.0	9.6	12.6	12.9	13.5
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)