

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-FB-0U-075D-940-1D-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 (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

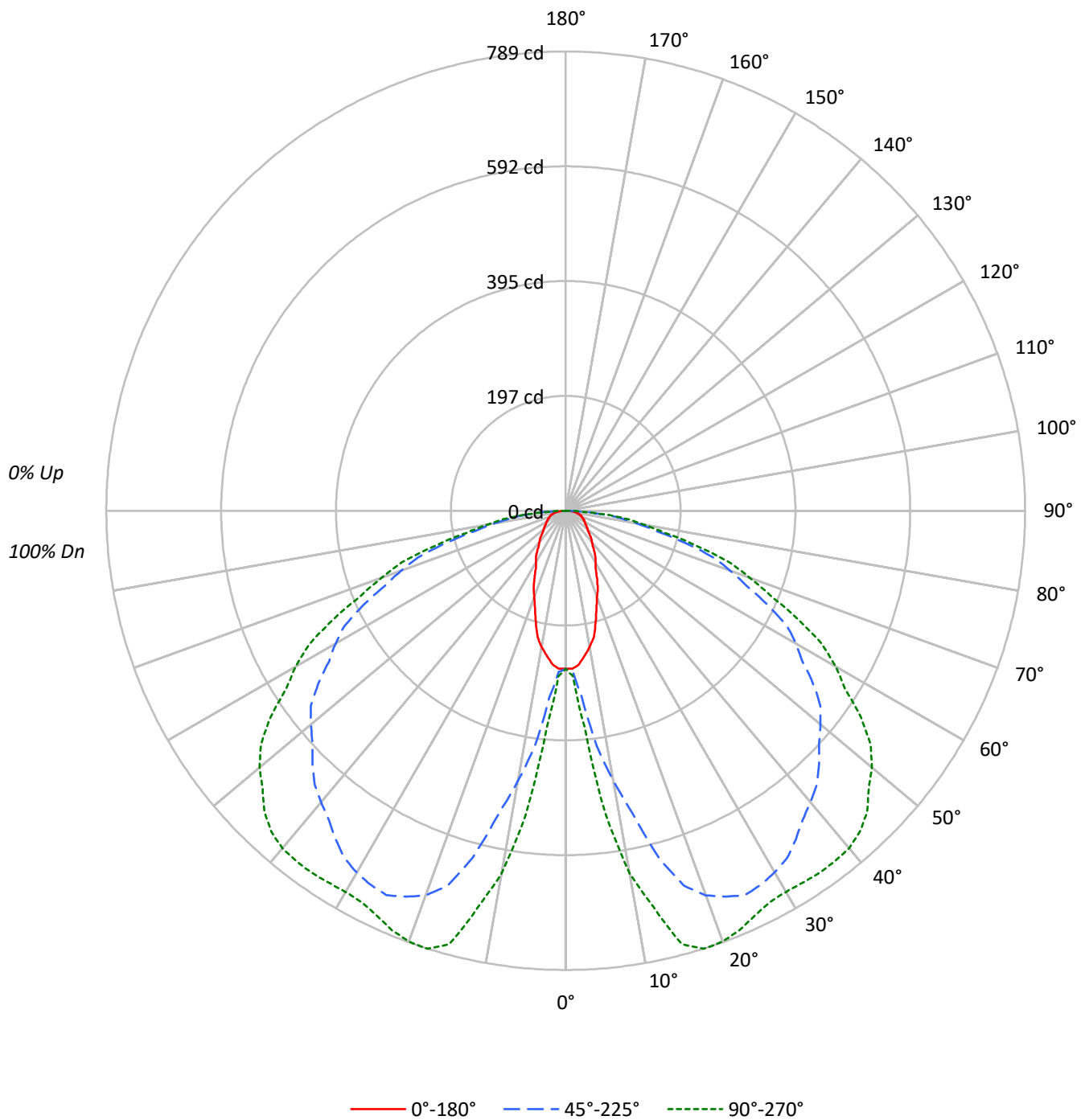
Lumens per Lamp: N/A
Luminaire Lumens: 2101.6 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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-FB-0U-075D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-940-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2506	2506	2506
5°	2451	2980	3469
10°	2225	4409	5923
15°	1893	5892	7364
20°	1543	6906	7733
25°	1289	7418	7813
30°	1089	7647	8056
35°	964	7759	8557
40°	842	7872	9117
45°	763	8026	9547
50°	702	8197	9851
55°	674	8350	9958
60°	692	8426	9878
65°	725	8359	9588
70°	777	8102	9069
75°	870	7516	8309
80°	972	6495	7237
85°	921	5409	6193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 10000 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.6	1.7
10°-20°	155.1	7.4
20°-30°	271.9	12.9
30°-40°	350.1	16.7
40°-50°	390.8	18.6
50°-60°	374.8	17.8
60°-70°	298.3	14.2
70°-80°	175.7	8.4
80°-90°	49.3	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	462.6	22.0
0°-40°	812.7	38.7
0°-60°	1578.3	75.1
0°-90°	2101.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2101.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	272	272	272	272	272	
5°	265	284	322	363	375	24
15°	198	364	617	746	771	55
25°	127	413	729	766	768	58
35°	86	387	689	731	760	53
45°	58	304	615	699	732	45
55°	42	203	519	600	619	38
65°	33	133	383	432	439	33
75°	24	84	211	230	233	25
85°	9	23	51	57	58	10
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	271.6	271.6	271.6	271.6	271.6	271.6	271.6	271.6	271.6	271.6
2.5°	271.6	271.6	273.0	275.1	275.7	278.5	282.7	284.8	286.2	284.8
5°	264.6	268.1	279.4	296.0	312.6	330.9	354.5	365.9	372.8	374.6
7.5°	250.8	260.4	292.7	336.0	384.2	432.0	473.4	507.0	526.5	527.4
10°	237.5	254.1	303.9	370.2	436.6	504.7	561.5	596.4	624.3	632.2
12.5°	222.8	247.8	315.7	404.5	495.3	571.8	634.8	673.2	695.6	698.5
15°	198.2	234.9	332.7	458.4	571.1	662.7	723.0	753.6	767.5	771.0
17.5°	175.3	223.4	347.5	500.7	634.1	716.7	762.5	781.7	788.7	789.0
20°	157.2	212.2	354.5	530.0	666.2	740.5	773.6	785.9	789.4	787.6
22.5°	143.9	200.3	358.7	549.6	685.8	749.5	774.3	780.3	781.7	779.9
25°	126.6	180.7	358.9	575.4	705.5	751.8	764.9	766.7	768.4	767.5
27.5°	111.2	158.9	353.6	592.5	708.3	741.2	747.3	751.6	757.0	758.3
30°	102.2	144.9	346.7	598.1	705.5	730.0	736.1	743.9	753.6	756.2
32.5°	95.2	131.7	336.2	598.8	698.5	716.7	724.9	739.8	753.6	757.6
35°	85.6	111.8	318.7	593.8	682.8	695.0	712.5	737.0	755.3	759.7
37.5°	76.1	97.4	295.0	583.5	662.2	675.0	703.8	733.3	753.7	759.1
40°	69.9	89.1	276.8	573.7	646.2	661.0	696.8	729.1	750.9	757.0
42.5°	65.0	82.1	257.2	561.1	628.0	648.4	688.4	722.8	743.2	748.0
45°	58.5	71.6	226.2	537.9	599.9	630.4	674.1	707.3	726.5	731.7
47.5°	52.4	64.3	193.7	511.3	571.2	608.6	653.3	684.7	702.4	705.9
50°	48.9	59.4	172.0	492.5	551.0	591.1	636.5	668.0	682.8	686.3
52.5°	46.1	55.2	151.8	470.8	530.0	573.0	616.3	644.9	658.4	659.8
55°	41.9	49.8	124.9	437.5	496.8	541.4	583.3	606.0	615.6	619.1
57.5°	39.6	45.8	103.7	401.3	459.5	504.2	542.2	559.9	567.6	568.8
60°	37.5	43.7	92.6	375.5	435.7	477.6	510.8	525.7	532.6	535.3
62.5°	35.5	42.3	84.2	348.9	407.8	448.3	477.3	490.0	495.6	496.1
65°	33.2	40.2	74.2	308.2	364.1	401.7	424.4	434.8	437.5	439.2
67.5°	30.9	38.1	67.1	267.2	319.1	350.1	366.9	376.0	376.5	380.2
70°	28.8	36.7	62.9	239.3	285.5	315.2	329.2	336.2	335.3	336.2
72.5°	27.4	34.6	60.1	210.6	253.4	276.8	289.4	294.3	294.8	295.0
75°	24.4	30.6	55.9	166.8	200.8	220.9	230.5	229.6	232.3	233.1
77.5°	21.1	26.4	45.9	122.9	150.5	163.8	171.5	173.9	173.1	173.2
80°	18.3	23.6	37.5	94.3	117.0	127.5	134.5	136.2	135.3	136.2
82.5°	14.8	19.4	29.2	69.9	87.7	96.0	100.9	101.3	101.8	103.4
85°	8.7	11.4	17.5	38.4	48.9	53.3	56.8	57.6	58.5	58.5
87.5°	3.5	4.9	9.1	16.1	20.3	21.7	21.7	20.3	21.7	19.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)