

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-840-1D-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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

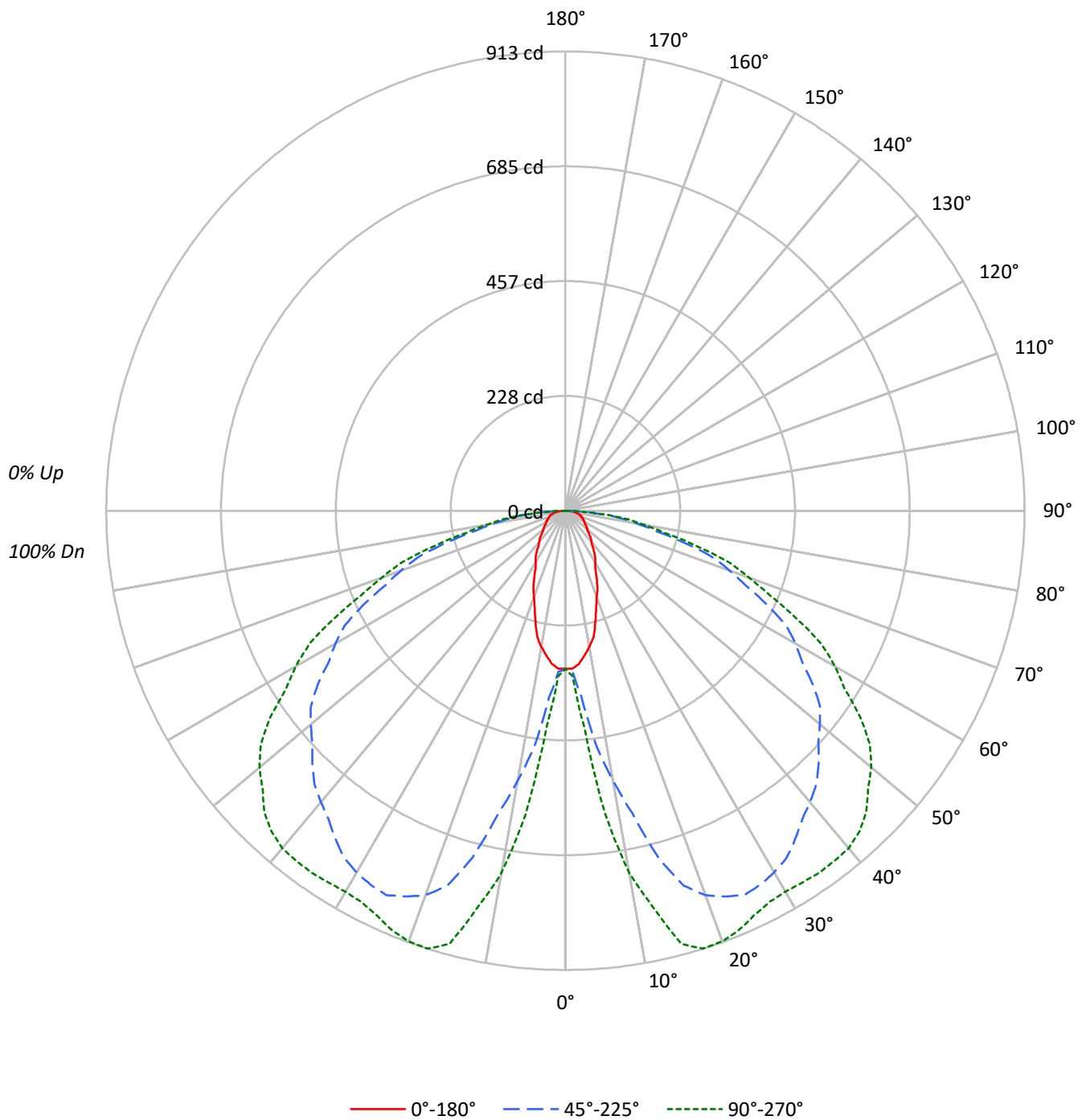
Lumens per Lamp: N/A
Luminaire Lumens: 2431.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-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°	2898	2898	2898
5°	2834	3447	4013
10°	2574	5100	6851
15°	2190	6816	8519
20°	1785	7988	8945
25°	1491	8581	9038
30°	1259	8845	9319
35°	1115	8976	9898
40°	973	9105	10547
45°	883	9285	11044
50°	812	9481	11395
55°	780	9658	11519
60°	801	9747	11426
65°	838	9669	11092
70°	898	9373	10491
75°	1009	8694	9614
80°	1126	7513	8374
85°	1069	6256	7167

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11567 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	1.7
10°-20°	179.5	7.4
20°-30°	314.5	12.9
30°-40°	404.9	16.7
40°-50°	452.1	18.6
50°-60°	433.5	17.8
60°-70°	345.0	14.2
70°-80°	203.3	8.4
80°-90°	57.0	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°	535.1	22.0
0°-40°	940.1	38.7
0°-60°	1825.7	75.1
0°-90°	2431.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2431.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	314	314	314	314	314	
5°	306	328	372	420	433	28
15°	229	421	714	863	892	64
25°	146	478	843	886	888	68
35°	99	448	797	845	879	62
45°	68	352	712	809	846	52
55°	48	235	600	694	716	44
65°	38	154	443	500	508	38
75°	28	97	244	266	270	29
85°	10	26	59	66	68	11
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	314.1	314.1	314.1	314.1	314.1	314.1	314.1	314.1	314.1	314.1
2.5°	314.1	314.1	315.7	318.2	319.0	322.2	327.1	329.5	331.1	329.5
5°	306.0	310.1	323.2	342.4	361.6	382.8	410.1	423.2	431.3	433.3
7.5°	290.1	301.2	338.6	388.7	444.4	499.8	547.7	586.4	609.1	610.1
10°	274.7	293.9	351.5	428.3	505.0	583.8	649.5	689.9	722.2	731.3
12.5°	257.8	286.7	365.2	467.9	572.9	661.4	734.3	778.8	804.6	808.0
15°	229.3	271.7	384.8	530.3	660.6	766.6	836.3	871.7	887.8	891.9
17.5°	202.8	258.4	402.0	579.2	733.5	829.1	882.0	904.2	912.3	912.7
20°	181.8	245.4	410.1	613.1	770.7	856.5	894.9	909.1	913.1	911.1
22.5°	166.5	231.7	414.9	635.7	793.3	867.0	895.7	902.6	904.2	902.2
25°	146.5	209.1	415.1	665.6	816.1	869.7	884.8	886.8	888.9	887.8
27.5°	128.7	183.8	409.1	685.4	819.4	857.3	864.4	869.5	875.7	877.1
30°	118.2	167.7	401.0	691.9	816.1	844.4	851.5	860.6	871.7	874.7
32.5°	110.1	152.3	388.9	692.7	808.0	829.1	838.6	855.7	871.7	876.3
35°	99.0	129.3	368.7	686.8	789.9	804.0	824.2	852.5	873.7	878.8
37.5°	88.1	112.7	341.2	674.9	766.0	780.8	814.1	848.2	871.9	878.1
40°	80.8	103.0	320.2	663.6	747.4	764.6	806.0	843.4	868.7	875.7
42.5°	75.1	94.9	297.6	649.1	726.4	750.1	796.3	836.1	859.8	865.2
45°	67.7	82.8	261.6	622.2	693.9	729.3	779.8	818.1	840.4	846.4
47.5°	60.6	74.3	224.0	591.5	660.8	704.0	755.7	792.1	812.5	816.5
50°	56.6	68.7	199.0	569.7	637.3	683.8	736.3	772.7	789.9	793.9
52.5°	53.3	63.8	175.5	544.6	613.1	662.8	712.9	746.0	761.6	763.2
55°	48.5	57.6	144.4	506.0	574.7	626.2	674.7	701.0	712.1	716.1
57.5°	45.9	52.9	120.0	464.2	531.5	583.2	627.2	647.7	656.5	658.0
60°	43.4	50.5	107.1	434.3	504.0	552.5	590.9	608.1	616.1	619.2
62.5°	41.0	48.9	97.4	403.6	471.7	518.6	552.1	566.8	573.3	573.9
65°	38.4	46.5	85.9	356.6	421.2	464.6	490.9	503.0	506.0	508.1
67.5°	35.8	44.0	77.6	309.1	369.1	405.0	424.4	434.9	435.5	439.8
70°	33.3	42.4	72.7	276.8	330.3	364.6	380.8	388.9	387.9	388.9
72.5°	31.7	40.0	69.5	243.6	293.1	320.2	334.7	340.4	341.0	341.2
75°	28.3	35.4	64.6	192.9	232.3	255.5	266.7	265.6	268.7	269.7
77.5°	24.4	30.5	53.1	142.2	174.1	189.5	198.4	201.2	200.2	200.4
80°	21.2	27.3	43.4	109.1	135.3	147.5	155.5	157.6	156.6	157.6
82.5°	17.2	22.4	33.7	80.8	101.4	111.1	116.8	117.2	117.8	119.6
85°	10.1	13.1	20.2	44.4	56.6	61.6	65.7	66.7	67.7	67.7
87.5°	4.0	5.7	10.5	18.6	23.4	25.0	25.0	23.4	25.0	22.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)