

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-BB-075U-125D-927-1D-UNV-STD-W-8

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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-125D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

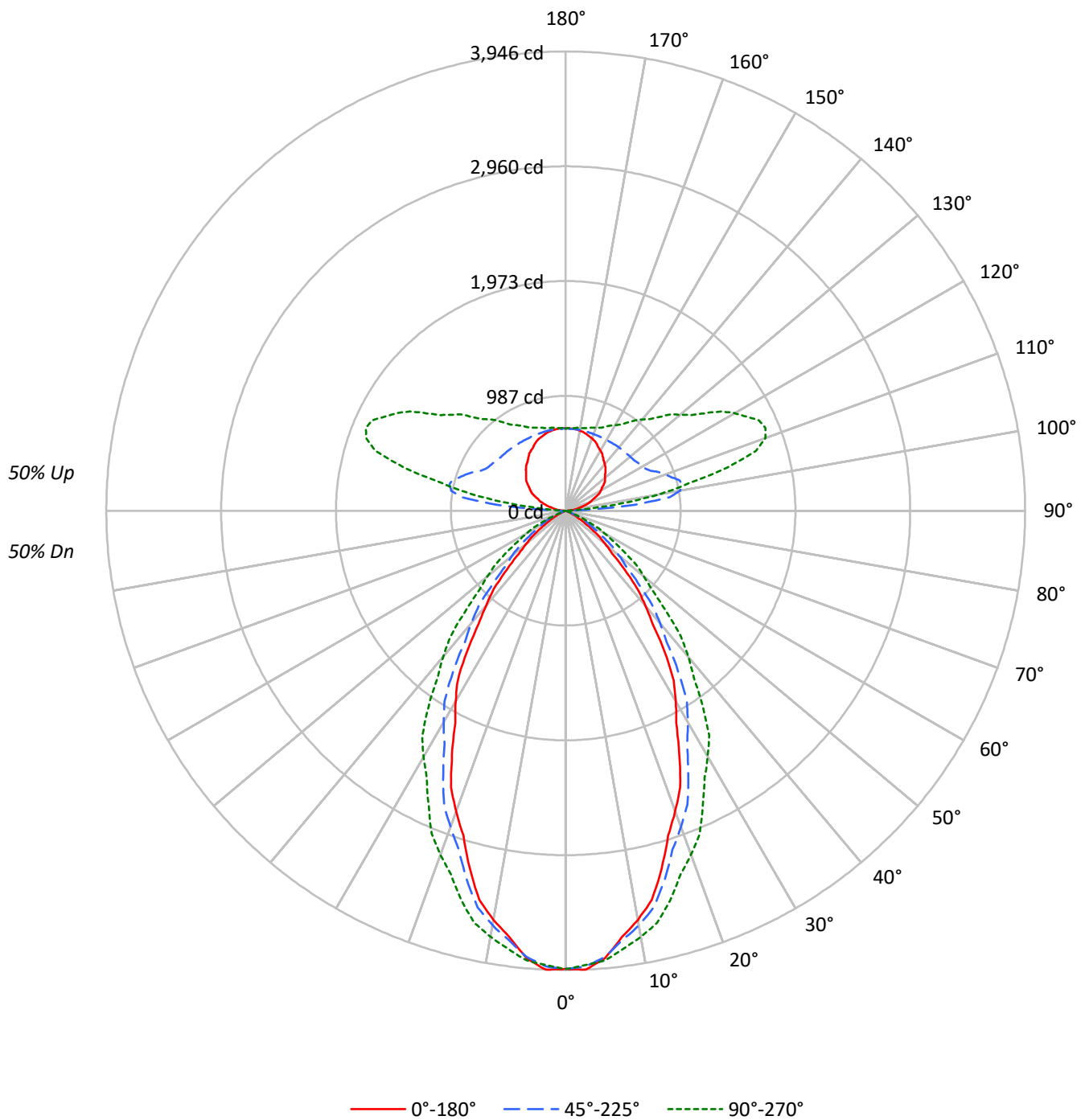
Lumens per Lamp: N/A
Luminaire Lumens: 9309.1 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 127.7
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31
7	64	53	46	41	59	50	43	39	44	39	35	38	35	32	33	30	28
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18163	18163	18163
5°	17871	17827	17959
10°	16721	16944	17418
15°	15201	15684	16557
20°	13494	14195	15439
25°	11751	12682	14185
30°	10065	11171	12998
35°	8346	9483	11564
40°	6412	7582	9854
45°	4635	5741	7929
50°	3158	4279	6288
55°	2053	3095	4887
60°	1177	2179	3533
65°	312	1331	1788
70°	154	411	514
75°	68	34	0
80°	50	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7929 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.3	3.9
10°-20°	918.9	9.9
20°-30°	1150.4	12.4
30°-40°	1062.6	11.4
40°-50°	714.0	7.7
50°-60°	368.8	4.0
60°-70°	115.5	1.2
70°-80°	7.3	0.1
80°-90°	1.9	0.0
90°-100°	333.8	3.6
100°-110°	918.3	9.9
110°-120°	947.9	10.2
120°-130°	759.5	8.2
130°-140°	596.5	6.4
140°-150°	457.1	4.9
150°-160°	328.7	3.5
160°-170°	201.0	2.2
170°-180°	67.7	0.7
0°-30°	2428.6	26.1
0°-40°	3491.2	37.5
0°-60°	4574.0	49.1
0°-90°	4698.7	50.5
90°-120°	2200.0	23.6
90°-150°	4013.1	43.1
90°-180°	4610.0	49.5
0°-180°	9309.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3937	3937	3937	3937	3937	
5°	3859	3820	3850	3863	3878	358
15°	3183	3172	3284	3394	3467	887
25°	2309	2327	2492	2662	2787	1058
35°	1482	1519	1684	1882	2053	918
45°	710	753	880	1051	1215	558
55°	255	298	385	494	608	238
65°	29	55	122	147	164	48
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	10	14	14	3
95°	50	182	590	252	161	52
105°	164	252	1012	1541	1438	173
115°	291	354	812	1616	1834	287
125°	400	456	736	1246	1459	357
135°	483	536	715	1007	1140	373
145°	559	597	705	858	924	350
155°	632	653	700	771	794	291
165°	684	692	703	732	736	193
175°	708	709	705	714	712	67
180°	708	708	708	708	708	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3937.3	3937.3	3937.3	3937.3	3937.3
2.5°	3946.5	3909.2	3919.0	3918.8	3908.4
5°	3859.2	3820.1	3849.7	3863.4	3878.3
7.5°	3696.2	3665.6	3722.5	3765.1	3796.0
10°	3569.7	3543.6	3617.3	3675.4	3718.3
12.5°	3423.4	3403.3	3492.4	3572.1	3626.8
15°	3183.0	3171.8	3284.0	3394.2	3466.8
17.5°	2925.5	2925.1	3053.1	3190.0	3277.5
20°	2748.7	2754.3	2891.6	3042.5	3144.9
22.5°	2571.9	2585.0	2731.6	2888.9	3006.2
25°	2308.7	2327.3	2491.5	2662.0	2786.8
27.5°	2055.7	2082.9	2255.7	2432.9	2584.9
30°	1889.6	1921.3	2097.2	2283.7	2440.1
32.5°	1726.6	1764.2	1935.7	2132.9	2292.3
35°	1482.0	1519.2	1683.9	1882.1	2053.4
37.5°	1229.4	1265.9	1426.7	1621.8	1806.9
40°	1064.8	1105.8	1259.1	1448.2	1636.3
42.5°	915.5	956.4	1100.6	1286.4	1464.1
45°	710.5	753.3	880.0	1051.4	1215.3
47.5°	540.6	587.2	698.3	853.3	1002.7
50°	440.0	486.6	596.2	732.8	876.2
52.5°	359.3	404.3	503.3	632.0	763.5
55°	255.3	298.1	384.8	494.0	607.6
57.5°	176.4	213.3	291.1	382.2	471.3
60°	127.6	163.0	236.2	310.2	382.9
62.5°	85.0	117.4	189.0	245.7	294.5
65°	28.6	54.6	121.9	147.1	163.8
67.5°	14.5	17.5	64.0	67.6	73.1
70°	11.4	11.4	30.5	32.5	38.1
72.5°	8.4	8.4	12.2	15.6	16.8
75°	3.8	3.8	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.9	10.5	13.6	13.6
92.5°	20.8	88.8	153.9	59.1	48.5
95°	49.7	182.2	590.3	252.4	161.1
97.5°	81.0	202.0	900.7	694.0	489.7
100°	103.9	214.3	998.3	1007.7	822.1
102.5°	125.6	228.9	1023.6	1250.1	1079.9
105°	164.1	252.5	1011.9	1541.1	1438.0
107.5°	200.9	281.5	954.3	1683.5	1714.2
110°	227.4	301.0	911.0	1719.0	1825.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	251.5	322.7	867.6	1696.1	1857.5
115°	290.6	353.9	811.6	1616.1	1834.0
117.5°	328.0	386.3	776.1	1503.8	1750.3
120°	350.8	406.8	760.4	1419.7	1674.4
122.5°	371.3	427.3	749.6	1345.9	1587.7
125°	400.5	456.5	736.3	1245.6	1459.1
127.5°	428.2	481.5	727.6	1161.9	1349.2
130°	442.7	497.2	722.8	1112.1	1282.9
132.5°	459.6	514.0	719.1	1068.4	1222.7
135°	483.3	536.4	715.2	1007.4	1139.9
137.5°	505.6	554.8	711.9	958.0	1067.3
140°	522.5	568.1	710.7	925.3	1023.9
142.5°	537.0	579.1	708.3	896.0	980.5
145°	558.6	596.9	704.7	858.3	924.5
147.5°	581.8	614.8	702.9	824.9	877.9
150°	596.3	625.7	701.7	806.5	847.7
152.5°	609.5	636.6	700.5	790.7	824.9
155°	632.4	653.0	700.2	771.4	793.5
157.5°	649.0	665.8	700.2	755.6	770.9
160°	661.0	674.3	700.2	747.1	758.9
162.5°	670.7	681.6	701.4	739.8	749.3
165°	683.6	692.4	703.2	731.9	736.3
167.5°	692.6	699.4	704.7	725.2	726.4
170°	698.7	703.1	704.7	722.8	722.8
172.5°	703.5	705.6	704.7	719.1	717.9
175°	707.7	709.2	704.7	713.7	712.2
177.5°	708.9	708.9	704.1	711.3	708.9
180°	707.7	707.7	707.7	707.7	707.7

(END OF REPORT)