

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-125D-835-1D-UNV-STD-W-12

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-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

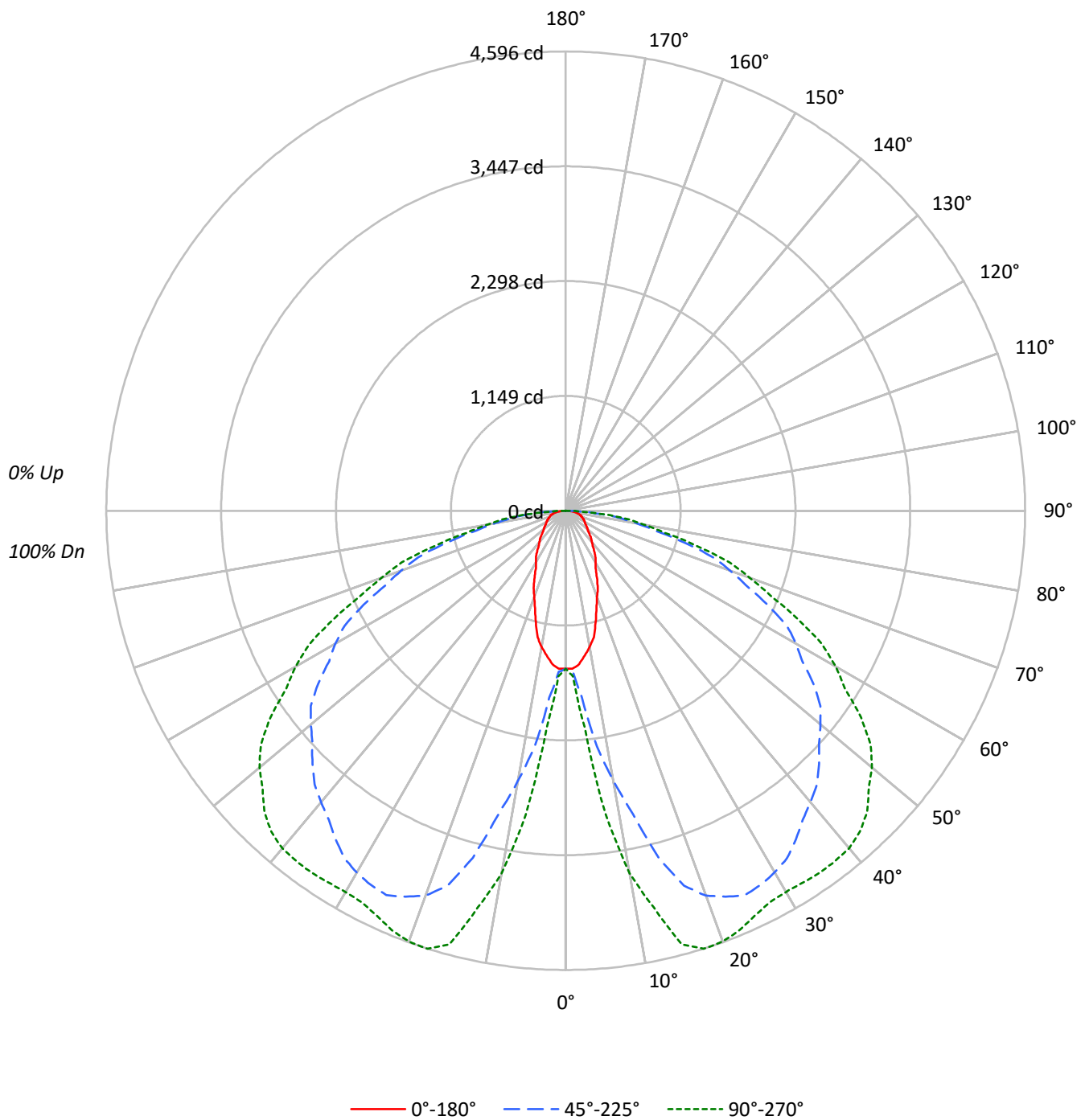
Lumens per Lamp: N/A
Luminaire Lumens: 12243.2 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 140.8
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
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°	4865	4865	4865
5°	4758	5787	6737
10°	4321	8562	11501
15°	3676	11443	14301
20°	2997	13410	15017
25°	2503	14405	15173
30°	2114	14849	15644
35°	1872	15069	16615
40°	1634	15286	17706
45°	1482	15586	18540
50°	1363	15917	19130
55°	1309	16215	19338
60°	1345	16364	19180
65°	1407	16232	18620
70°	1510	15735	17611
75°	1692	14598	16139
80°	1891	12613	14055
85°	1796	10501	12026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 19418 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.5	1.7
10°-20°	903.8	7.4
20°-30°	1583.8	12.9
30°-40°	2039.4	16.7
40°-50°	2276.9	18.6
50°-60°	2183.5	17.8
60°-70°	1737.7	14.2
70°-80°	1023.7	8.4
80°-90°	287.0	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°	2695.1	22.0
0°-40°	4734.5	38.7
0°-60°	9194.8	75.1
0°-90°	12243.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12243.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1541	1652	1874	2115	2182	142
15°	1155	2121	3594	4346	4492	320
25°	738	2406	4245	4464	4471	340
35°	498	2257	4014	4258	4426	311
45°	341	1772	3584	4072	4263	264
55°	244	1183	3024	3497	3607	223
65°	193	773	2231	2518	2559	192
75°	142	487	1228	1339	1358	149
85°	51	132	298	334	341	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1582.0	1582.0	1582.0	1582.0	1582.0	1582.0	1582.0	1582.0	1582.0	1582.0
2.5°	1582.0	1582.0	1590.2	1602.4	1606.4	1622.7	1647.1	1659.3	1667.5	1659.3
5°	1541.3	1561.7	1627.8	1724.5	1821.1	1927.9	2065.3	2131.4	2172.1	2182.3
7.5°	1461.0	1516.9	1705.1	1957.4	2238.2	2517.0	2758.1	2953.5	3067.4	3072.5
10°	1383.6	1480.3	1770.2	2156.8	2543.4	2940.2	3270.9	3474.4	3637.1	3682.9
12.5°	1298.2	1443.7	1839.4	2356.3	2885.3	3330.9	3698.2	3922.0	4052.2	4069.5
15°	1154.7	1368.4	1938.1	2670.6	3326.8	3861.0	4212.0	4390.0	4471.4	4491.7
17.5°	1021.4	1301.2	2024.6	2916.8	3694.1	4175.3	4441.9	4553.8	4594.5	4596.5
20°	915.6	1236.1	2065.3	3087.7	3881.3	4313.7	4507.0	4578.2	4598.6	4588.4
22.5°	838.3	1166.9	2089.7	3201.7	3995.2	4366.6	4511.1	4545.7	4553.8	4543.6
25°	737.6	1053.0	2090.7	3352.3	4110.2	4379.8	4456.1	4466.3	4476.5	4471.4
27.5°	648.1	925.8	2060.2	3452.0	4126.5	4317.8	4353.4	4378.8	4410.3	4417.5
30°	595.2	844.4	2019.5	3484.5	4110.2	4252.6	4288.3	4334.0	4390.0	4405.3
32.5°	554.5	767.1	1958.5	3488.6	4069.5	4175.3	4223.1	4309.6	4390.0	4413.4
35°	498.5	651.1	1856.7	3459.1	3978.0	4049.2	4150.9	4293.3	4400.2	4425.6
37.5°	443.6	567.7	1718.4	3399.1	3857.9	3932.2	4100.0	4272.0	4391.0	4422.5
40°	407.0	518.9	1612.5	3342.1	3764.3	3850.8	4059.3	4247.6	4374.7	4410.3
42.5°	378.5	478.2	1498.6	3268.8	3658.5	3777.5	4010.5	4210.9	4330.0	4357.4
45°	340.8	417.1	1317.5	3133.5	3494.7	3672.7	3927.1	4120.4	4232.3	4262.8
47.5°	305.2	374.4	1128.3	2978.9	3327.8	3545.6	3806.0	3989.1	4091.9	4112.2
50°	284.9	345.9	1002.1	2869.0	3209.8	3443.8	3708.3	3891.5	3978.0	3998.3
52.5°	268.6	321.5	884.1	2742.9	3087.7	3338.0	3590.3	3757.2	3835.5	3843.7
55°	244.2	290.0	727.4	2548.5	2894.4	3153.9	3398.0	3530.3	3586.3	3606.6
57.5°	230.9	266.6	604.3	2337.9	2676.7	2937.2	3159.0	3261.7	3306.5	3313.6
60°	218.7	254.3	539.2	2187.4	2538.4	2782.5	2975.8	3062.3	3103.0	3118.3
62.5°	206.5	246.2	490.4	2032.7	2375.6	2611.6	2780.5	2854.8	2887.3	2890.4
65°	193.3	234.0	432.4	1795.7	2121.2	2340.0	2472.2	2533.3	2548.5	2558.7
67.5°	180.1	221.8	390.7	1556.6	1858.8	2039.8	2137.5	2190.4	2193.5	2214.8
70°	167.9	213.6	366.3	1393.8	1663.4	1836.4	1917.8	1958.5	1953.4	1958.5
72.5°	159.7	201.4	350.0	1227.0	1476.2	1612.5	1685.8	1714.3	1717.3	1718.4
75°	142.4	178.0	325.6	971.6	1170.0	1287.0	1342.9	1337.9	1353.1	1358.2
77.5°	123.1	153.6	267.6	716.2	877.0	954.3	999.1	1013.3	1008.2	1009.2
80°	106.8	137.3	218.7	549.4	681.6	742.7	783.4	793.6	788.5	793.6
82.5°	86.5	112.9	169.9	407.0	510.7	559.6	588.0	590.1	593.1	602.3
85°	50.9	66.1	101.7	223.8	284.9	310.3	330.6	335.7	340.8	340.8
87.5°	20.3	28.5	52.9	93.6	118.0	126.2	126.2	118.0	126.2	113.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)