

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-940-1D-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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

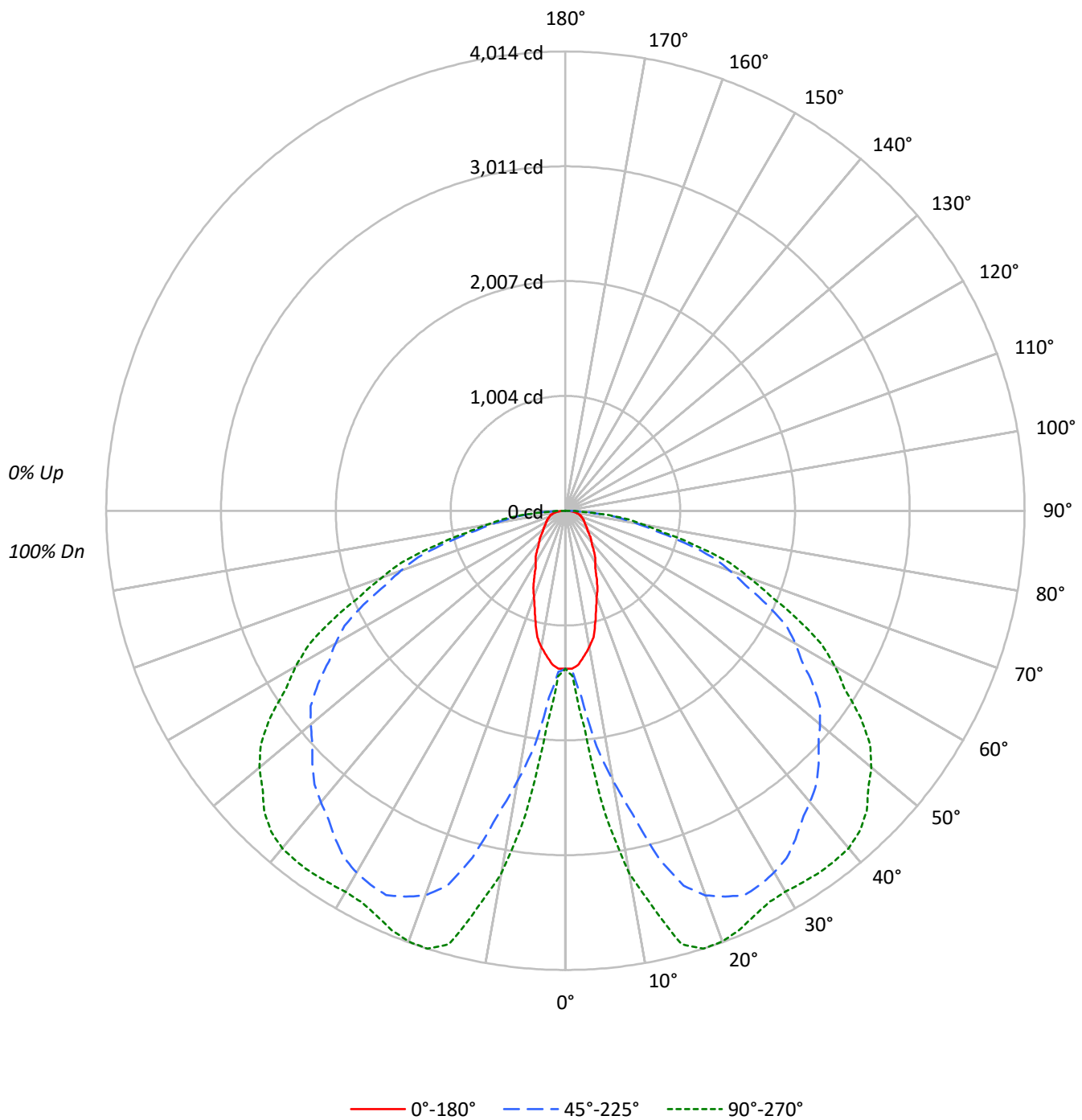
Lumens per Lamp: N/A
Luminaire Lumens: 10690.5 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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°	4248	4248	4248
5°	4155	5053	5883
10°	3773	7476	10042
15°	3210	9991	12488
20°	2617	11709	13112
25°	2186	12578	13249
30°	1846	12966	13660
35°	1634	13158	14508
40°	1426	13347	15460
45°	1294	13610	16189
50°	1190	13899	16704
55°	1143	14159	16885
60°	1175	14289	16747
65°	1228	14173	16258
70°	1318	13740	15377
75°	1478	12746	14093
80°	1652	11013	12272
85°	1567	9167	10501

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 16955 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.2	1.7
10°-20°	789.2	7.4
20°-30°	1382.9	12.9
30°-40°	1780.7	16.7
40°-50°	1988.2	18.6
50°-60°	1906.6	17.8
60°-70°	1517.3	14.2
70°-80°	893.9	8.4
80°-90°	250.6	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°	2353.3	22.0
0°-40°	4134.0	38.7
0°-60°	8028.7	75.1
0°-90°	10690.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10690.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1346	1442	1637	1847	1906	124
15°	1008	1852	3138	3794	3922	280
25°	644	2101	3707	3898	3904	297
35°	435	1971	3505	3718	3864	272
45°	298	1547	3129	3556	3722	230
55°	213	1033	2641	3054	3149	194
65°	169	675	1948	2199	2234	167
75°	124	425	1073	1169	1186	130
85°	44	115	260	292	298	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4
2.5°	1381.4	1381.4	1388.5	1399.2	1402.7	1416.9	1438.2	1448.9	1456.0	1448.9
5°	1345.9	1363.6	1421.4	1505.8	1590.2	1683.4	1803.4	1861.1	1896.6	1905.5
7.5°	1275.7	1324.5	1488.9	1709.2	1954.4	2197.8	2408.3	2578.9	2678.4	2682.8
10°	1208.2	1292.6	1545.7	1883.3	2220.9	2567.3	2856.1	3033.7	3175.9	3215.8
12.5°	1133.5	1260.6	1606.1	2057.4	2519.4	2908.5	3229.2	3424.6	3538.3	3553.4
15°	1008.3	1194.8	1692.3	2331.9	2904.9	3371.3	3677.8	3833.3	3904.3	3922.1
17.5°	891.9	1136.2	1767.8	2546.9	3225.6	3645.8	3878.6	3976.3	4011.8	4013.6
20°	799.5	1079.4	1803.4	2696.2	3389.1	3766.6	3935.4	3997.6	4015.4	4006.5
22.5°	732.0	1018.9	1824.7	2795.7	3488.6	3812.8	3939.0	3969.2	3976.3	3967.4
25°	644.1	919.4	1825.6	2927.1	3589.0	3824.4	3891.0	3899.9	3908.8	3904.3
27.5°	565.9	808.4	1798.9	3014.2	3603.2	3770.2	3801.3	3823.5	3851.0	3857.2
30°	519.7	737.3	1763.4	3042.6	3589.0	3713.3	3744.4	3784.4	3833.3	3846.6
32.5°	484.2	669.8	1710.1	3046.2	3553.4	3645.8	3687.6	3763.1	3833.3	3853.7
35°	435.3	568.5	1621.2	3020.4	3473.5	3535.7	3624.5	3748.9	3842.1	3864.3
37.5°	387.3	495.7	1500.4	2968.0	3368.6	3433.5	3580.1	3730.2	3834.1	3861.7
40°	355.3	453.1	1408.0	2918.2	3286.9	3362.4	3544.5	3708.9	3819.9	3851.0
42.5°	330.5	417.5	1308.5	2854.3	3194.5	3298.5	3501.9	3676.9	3780.8	3804.8
45°	297.6	364.2	1150.4	2736.1	3051.5	3207.0	3429.1	3597.8	3695.6	3722.2
47.5°	266.5	326.9	985.2	2601.1	2905.8	3095.9	3323.3	3483.2	3573.0	3590.7
50°	248.7	302.0	875.0	2505.2	2802.8	3007.1	3238.1	3398.0	3473.5	3491.2
52.5°	234.5	280.7	772.0	2395.0	2696.2	2914.7	3135.0	3280.7	3349.1	3356.2
55°	213.2	253.2	635.2	2225.3	2527.4	2753.9	2967.1	3082.6	3131.5	3149.2
57.5°	201.7	232.7	527.7	2041.4	2337.3	2564.7	2758.3	2848.1	2887.2	2893.4
60°	191.0	222.1	470.8	1910.0	2216.4	2429.7	2598.4	2673.9	2709.5	2722.8
62.5°	180.3	215.0	428.2	1774.9	2074.3	2280.4	2427.9	2492.7	2521.2	2523.8
65°	168.8	204.3	377.6	1567.9	1852.2	2043.2	2158.7	2212.0	2225.3	2234.2
67.5°	157.2	193.7	341.1	1359.2	1623.0	1781.2	1866.4	1912.6	1915.3	1933.9
70°	146.6	186.6	319.8	1217.0	1452.5	1603.5	1674.5	1710.1	1705.6	1710.1
72.5°	139.5	175.9	305.6	1071.4	1289.0	1408.0	1472.0	1496.9	1499.5	1500.4
75°	124.4	155.5	284.3	848.4	1021.6	1123.8	1172.6	1168.2	1181.5	1186.0
77.5°	107.5	134.1	233.6	625.4	765.8	833.3	872.4	884.8	880.4	881.2
80°	93.3	119.9	191.0	479.7	595.2	648.5	684.0	692.9	688.5	692.9
82.5°	75.5	98.6	148.4	355.3	446.0	488.6	513.5	515.2	517.9	525.9
85°	44.4	57.7	88.8	195.4	248.7	270.9	288.7	293.2	297.6	297.6
87.5°	17.8	24.9	46.2	81.7	103.0	110.2	110.2	103.0	110.2	99.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)