

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-935-1D-UNV-STD-W-6

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-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

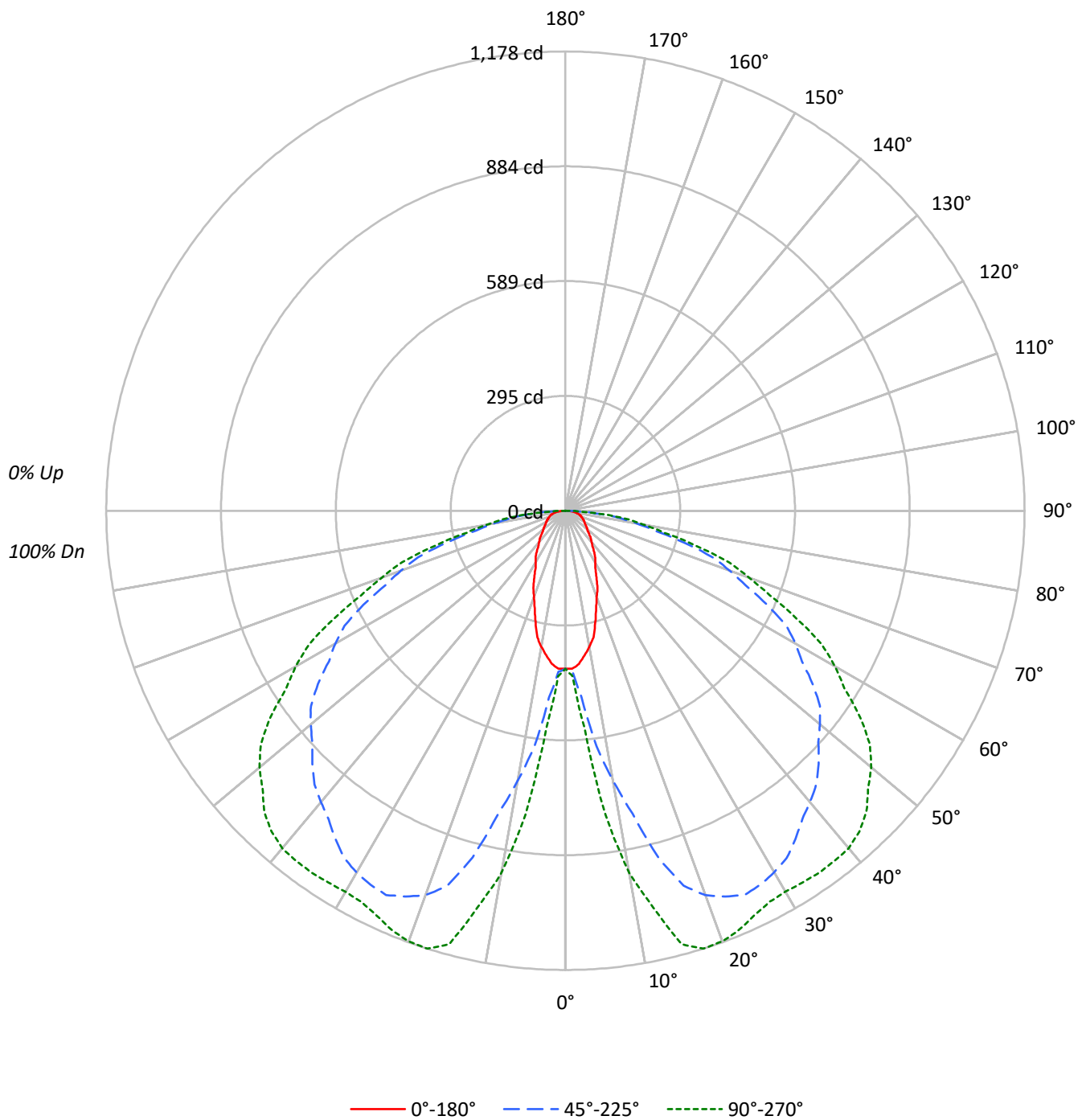
Lumens per Lamp: N/A
Luminaire Lumens: 3136.9 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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:

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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°	2493	2493	2493
5°	2438	2966	3452
10°	2214	4388	5893
15°	1884	5863	7328
20°	1536	6872	7695
25°	1283	7382	7775
30°	1083	7609	8016
35°	959	7722	8514
40°	837	7833	9073
45°	759	7987	9501
50°	699	8157	9802
55°	671	8309	9910
60°	689	8385	9828
65°	720	8318	9542
70°	773	8063	9024
75°	867	7480	8270
80°	971	6463	7201
85°	917	5381	6161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 9950 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	1.7
10°-20°	231.6	7.4
20°-30°	405.8	12.9
30°-40°	522.5	16.7
40°-50°	583.4	18.6
50°-60°	559.4	17.8
60°-70°	445.2	14.2
70°-80°	262.3	8.4
80°-90°	73.5	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°	690.5	22.0
0°-40°	1213.0	38.7
0°-60°	2355.9	75.1
0°-90°	3136.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3136.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	423	480	542	559	36
15°	296	544	921	1113	1151	82
25°	189	616	1088	1144	1146	87
35°	128	578	1028	1091	1134	80
45°	87	454	918	1043	1092	68
55°	63	303	775	896	924	57
65°	50	198	572	645	656	49
75°	36	125	315	343	348	38
85°	13	34	76	86	87	15
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	405.3	405.3	405.3	405.3	405.3	405.3	405.3	405.3	405.3	405.3
2.5°	405.3	405.3	407.4	410.6	411.6	415.8	422.0	425.1	427.2	425.1
5°	394.9	400.1	417.1	441.8	466.6	494.0	529.2	546.1	556.5	559.1
7.5°	374.3	388.7	436.9	501.5	573.5	644.9	706.7	756.7	785.9	787.2
10°	354.5	379.3	453.6	552.6	651.7	753.3	838.0	890.2	931.9	943.6
12.5°	332.6	369.9	471.3	603.7	739.3	853.4	947.5	1004.9	1038.2	1042.7
15°	295.9	350.6	496.6	684.3	852.4	989.2	1079.2	1124.8	1145.6	1150.8
17.5°	261.7	333.4	518.7	747.3	946.5	1069.8	1138.1	1166.7	1177.2	1177.7
20°	234.6	316.7	529.2	791.1	994.4	1105.2	1154.8	1173.0	1178.2	1175.6
22.5°	214.8	299.0	535.4	820.3	1023.6	1118.8	1155.8	1164.7	1166.7	1164.1
25°	189.0	269.8	535.7	858.9	1053.1	1122.2	1141.7	1144.3	1146.9	1145.6
27.5°	166.0	237.2	527.9	884.4	1057.3	1106.3	1115.4	1121.9	1130.0	1131.8
30°	152.5	216.4	517.4	892.8	1053.1	1089.6	1098.7	1110.4	1124.8	1128.7
32.5°	142.1	196.5	501.8	893.8	1042.7	1069.8	1082.0	1104.2	1124.8	1130.8
35°	127.7	166.8	475.7	886.3	1019.2	1037.5	1063.5	1100.0	1127.4	1133.9
37.5°	113.7	145.5	440.3	870.9	988.5	1007.5	1050.5	1094.5	1125.0	1133.1
40°	104.3	132.9	413.2	856.3	964.5	986.6	1040.1	1088.3	1120.9	1130.0
42.5°	97.0	122.5	384.0	837.5	937.4	967.9	1027.6	1078.9	1109.4	1116.4
45°	87.3	106.9	337.6	802.9	895.4	941.0	1006.2	1055.7	1084.4	1092.2
47.5°	78.2	95.9	289.1	763.2	852.6	908.4	975.2	1022.1	1048.4	1053.6
50°	73.0	88.6	256.8	735.1	822.4	882.4	950.1	997.1	1019.2	1024.4
52.5°	68.8	82.4	226.5	702.8	791.1	855.2	919.9	962.6	982.7	984.8
55°	62.6	74.3	186.4	653.0	741.6	808.1	870.6	904.5	918.9	924.1
57.5°	59.2	68.3	154.8	599.0	685.8	752.5	809.4	835.7	847.2	849.0
60°	56.0	65.2	138.2	560.4	650.4	712.9	762.5	784.6	795.0	798.9
62.5°	52.9	63.1	125.6	520.8	608.7	669.1	712.4	731.4	739.8	740.6
65°	49.5	60.0	110.8	460.1	543.5	599.5	633.4	649.1	653.0	655.6
67.5°	46.1	56.8	100.1	398.8	476.2	522.6	547.7	561.2	562.0	567.5
70°	43.0	54.7	93.8	357.1	426.2	470.5	491.4	501.8	500.5	501.8
72.5°	40.9	51.6	89.7	314.4	378.2	413.2	431.9	439.2	440.0	440.3
75°	36.5	45.6	83.4	248.9	299.8	329.7	344.1	342.8	346.7	348.0
77.5°	31.5	39.4	68.6	183.5	224.7	244.5	256.0	259.6	258.3	258.6
80°	27.4	35.2	56.0	140.8	174.6	190.3	200.7	203.3	202.0	203.3
82.5°	22.2	28.9	43.5	104.3	130.9	143.4	150.7	151.2	152.0	154.3
85°	13.0	16.9	26.1	57.3	73.0	79.5	84.7	86.0	87.3	87.3
87.5°	5.2	7.3	13.6	24.0	30.2	32.3	32.3	30.2	32.3	29.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)