

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-100D-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-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

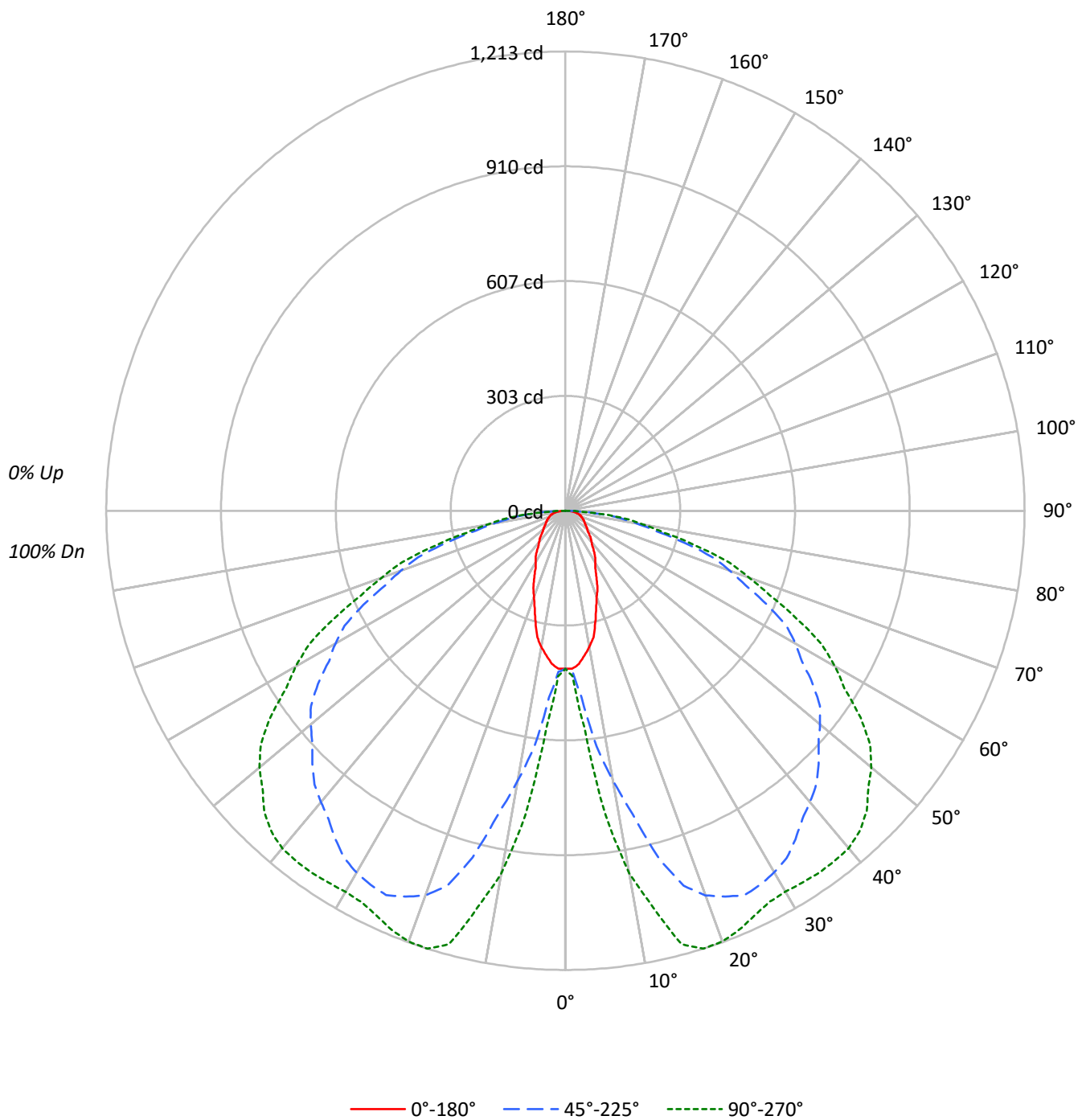
Lumens per Lamp: N/A
Luminaire Lumens: 3230.4 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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		0
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°	3851	3851	3851
5°	3767	4581	5333
10°	3420	6778	9103
15°	2910	9057	11321
20°	2372	10615	11887
25°	1981	11402	12010
30°	1673	11754	12383
35°	1481	11928	13152
40°	1294	12099	14016
45°	1173	12338	14676
50°	1079	12599	15143
55°	1036	12835	15307
60°	1065	12954	15183
65°	1113	12849	14738
70°	1195	12455	13938
75°	1340	11555	12776
80°	1498	9986	11126
85°	1419	8315	9517

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15371 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	1.7
10°-20°	238.5	7.4
20°-30°	417.9	12.9
30°-40°	538.1	16.7
40°-50°	600.8	18.6
50°-60°	576.1	17.8
60°-70°	458.5	14.2
70°-80°	270.1	8.4
80°-90°	75.7	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°	711.1	22.0
0°-40°	1249.2	38.7
0°-60°	2426.1	75.1
0°-90°	3230.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3230.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	407	436	495	558	576	37
15°	305	560	948	1147	1185	85
25°	195	635	1120	1178	1180	90
35°	132	596	1059	1123	1168	82
45°	90	467	946	1074	1125	70
55°	64	312	798	923	952	59
65°	51	204	589	664	675	51
75°	38	129	324	353	358	39
85°	13	35	79	88	90	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°	417.4	417.4	417.4	417.4	417.4	417.4	417.4	417.4	417.4	417.4
2.5°	417.4	417.4	419.6	422.8	423.9	428.2	434.6	437.8	440.0	437.8
5°	406.7	412.1	429.5	455.0	480.5	508.7	544.9	562.4	573.1	575.8
7.5°	385.5	400.2	449.9	516.5	590.6	664.1	727.7	779.3	809.3	810.7
10°	365.1	390.6	467.1	569.1	671.1	775.8	863.0	916.7	959.7	971.7
12.5°	342.5	380.9	485.3	621.7	761.3	878.9	975.8	1034.8	1069.2	1073.8
15°	304.7	361.0	511.4	704.6	877.8	1018.7	1111.3	1158.3	1179.8	1185.2
17.5°	269.5	343.3	534.2	769.6	974.7	1101.7	1172.0	1201.5	1212.3	1212.8
20°	241.6	326.2	544.9	814.7	1024.1	1138.2	1189.2	1208.0	1213.3	1210.7
22.5°	221.2	307.9	551.4	844.8	1054.2	1152.1	1190.3	1199.4	1201.5	1198.8
25°	194.6	277.8	551.6	884.5	1084.5	1155.6	1175.8	1178.4	1181.1	1179.8
27.5°	171.0	244.3	543.6	910.8	1088.8	1139.2	1148.6	1155.4	1163.7	1165.6
30°	157.0	222.8	532.8	919.4	1084.5	1122.1	1131.5	1143.5	1158.3	1162.3
32.5°	146.3	202.4	516.7	920.5	1073.8	1101.7	1114.3	1137.1	1158.3	1164.5
35°	131.5	171.8	489.9	912.7	1049.6	1068.4	1095.2	1132.8	1161.0	1167.7
37.5°	117.0	149.8	453.4	896.9	1017.9	1037.5	1081.8	1127.2	1158.6	1166.9
40°	107.4	136.9	425.5	881.8	993.2	1016.0	1071.1	1120.7	1154.3	1163.7
42.5°	99.9	126.2	395.4	862.5	965.3	996.7	1058.2	1111.1	1142.5	1149.7
45°	89.9	110.1	347.6	826.8	922.1	969.1	1036.2	1087.2	1116.7	1124.8
47.5°	80.5	98.8	297.7	786.0	878.1	935.5	1004.2	1052.5	1079.7	1085.0
50°	75.2	91.3	264.4	757.0	846.9	908.7	978.5	1026.8	1049.6	1055.0
52.5°	70.9	84.8	233.3	723.7	814.7	880.7	947.3	991.3	1012.0	1014.2
55°	64.4	76.5	191.9	672.4	763.7	832.2	896.6	931.5	946.2	951.6
57.5°	60.9	70.3	159.5	616.9	706.3	775.0	833.5	860.6	872.4	874.3
60°	57.7	67.1	142.3	577.1	669.8	734.2	785.2	808.0	818.7	822.8
62.5°	54.5	65.0	129.4	536.3	626.8	689.1	733.6	753.2	761.8	762.6
65°	51.0	61.7	114.1	473.8	559.7	617.4	652.3	668.4	672.4	675.1
67.5°	47.5	58.5	103.1	410.7	490.4	538.2	564.0	577.9	578.8	584.4
70°	44.3	56.4	96.6	367.8	438.9	484.5	506.0	516.7	515.4	516.7
72.5°	42.1	53.2	92.3	323.7	389.5	425.5	444.8	452.3	453.1	453.4
75°	37.6	47.0	85.9	256.4	308.7	339.6	354.3	353.0	357.0	358.4
77.5°	32.5	40.5	70.6	189.0	231.4	251.8	263.6	267.4	266.0	266.3
80°	28.2	36.2	57.7	145.0	179.9	196.0	206.7	209.4	208.0	209.4
82.5°	22.8	29.8	44.8	107.4	134.8	147.6	155.2	155.7	156.5	158.9
85°	13.4	17.4	26.8	59.1	75.2	81.9	87.2	88.6	89.9	89.9
87.5°	5.4	7.5	14.0	24.7	31.1	33.3	33.3	31.1	33.3	30.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)