

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-PR1-075U-100D-927-1D-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

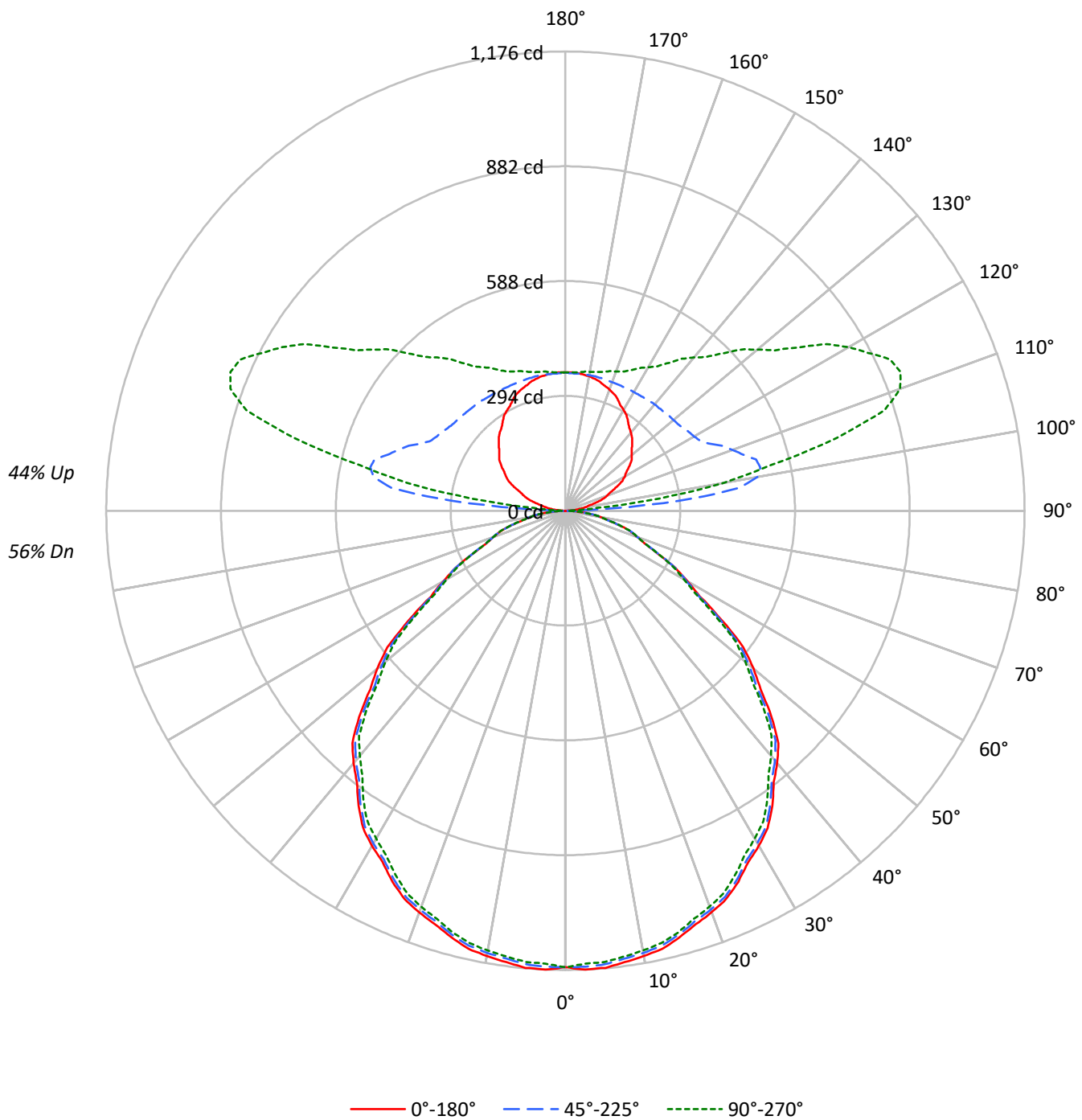
Lumens per Lamp: N/A
Luminaire Lumens: 5228.1 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	88	92	89	85	82	76	74	72	65	64	62	55	54	53
2	91	84	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45
3	83	74	66	61	77	69	62	57	60	55	51	51	48	45	43	41	38
4	76	65	58	52	71	61	54	49	53	48	44	46	42	38	39	36	33
5	70	58	50	44	65	55	48	42	48	42	38	41	37	33	35	32	29
6	65	53	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26
7	60	47	40	34	55	45	37	32	39	33	29	34	30	26	29	26	23
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10785	10785	10785
5°	10881	10797	10741
10°	10847	10771	10715
15°	10799	10732	10674
20°	10745	10675	10597
25°	10669	10597	10474
30°	10554	10479	10329
35°	10398	10308	10160
40°	10161	10052	9870
45°	9747	9576	9379
50°	9017	8800	8626
55°	7871	7692	7530
60°	6632	6576	6445
65°	5737	5759	5715
70°	5268	5295	5295
75°	5062	5062	5098
80°	4761	4814	4761
85°	3832	4266	4266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9747 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	2.1
10°-20°	316.2	6.0
20°-30°	477.0	9.1
30°-40°	568.3	10.9
40°-50°	560.3	10.7
50°-60°	428.2	8.2
60°-70°	265.0	5.1
70°-80°	150.5	2.9
80°-90°	46.7	0.9
90°-100°	166.9	3.2
100°-110°	459.2	8.8
110°-120°	473.9	9.1
120°-130°	379.7	7.3
130°-140°	298.2	5.7
140°-150°	228.6	4.4
150°-160°	164.3	3.1
160°-170°	100.5	1.9
170°-180°	33.9	0.6
0°-30°	903.8	17.3
0°-40°	1472.1	28.2
0°-60°	2460.7	47.1
0°-90°	2922.9	55.9
90°-120°	1100.0	21.0
90°-150°	2006.5	38.4
90°-180°	2305.0	44.1
0°-180°	5228.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1175	1162	1166	1162	1160	111
15°	1131	1119	1124	1120	1118	319
25°	1048	1035	1041	1030	1029	482
35°	923	912	915	903	902	576
45°	747	737	734	721	719	572
55°	489	481	478	470	468	438
65°	263	261	264	262	262	266
75°	142	142	142	143	143	150
85°	36	38	40	40	40	42
90°	1	3	5	7	7	3
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.9	1168.9	1168.9	1168.9	1168.9
2.5°	1176.1	1165.9	1168.9	1166.3	1160.8
5°	1174.9	1162.1	1165.8	1161.8	1159.8
7.5°	1165.8	1153.2	1157.0	1152.9	1151.7
10°	1157.8	1146.0	1149.7	1145.7	1143.7
12.5°	1148.9	1136.3	1140.9	1136.0	1134.0
15°	1130.6	1118.8	1123.6	1119.5	1117.5
17.5°	1110.5	1097.9	1102.6	1097.9	1095.4
20°	1094.4	1082.5	1087.3	1080.2	1079.3
22.5°	1076.6	1064.8	1069.6	1060.1	1059.9
25°	1048.0	1035.2	1041.0	1029.9	1028.9
27.5°	1014.0	1002.2	1007.0	995.7	994.5
30°	990.7	978.8	983.6	971.5	969.5
32.5°	964.1	953.1	957.0	944.9	943.7
35°	923.2	912.4	915.2	903.0	902.1
37.5°	876.7	866.8	868.4	855.1	854.1
40°	843.7	833.8	834.6	820.5	819.5
42.5°	807.4	797.6	796.8	782.6	781.7
45°	747.0	737.2	733.9	720.8	718.8
47.5°	678.2	668.3	662.3	651.5	650.2
50°	628.2	618.4	613.1	604.0	601.0
52.5°	574.3	564.4	560.0	551.6	548.7
55°	489.3	481.4	478.2	470.1	468.1
57.5°	408.5	403.2	402.3	394.4	393.6
60°	359.4	356.5	356.4	349.3	349.3
62.5°	317.5	315.4	316.9	312.3	311.5
65°	262.8	260.8	263.8	261.8	261.8
67.5°	219.5	219.5	221.3	220.5	220.5
70°	195.3	195.3	196.3	196.3	196.3
72.5°	173.6	172.8	175.4	175.4	174.6
75°	142.0	142.0	142.0	143.0	143.0
77.5°	110.5	110.7	111.5	111.3	110.5
80°	89.6	90.6	90.6	89.6	89.6
82.5°	68.7	69.6	69.7	69.4	68.7
85°	36.2	38.2	40.3	40.3	40.3
87.5°	10.6	14.2	17.2	17.4	16.7
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)