

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-PW1-075U-125D-927-1D-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-075U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

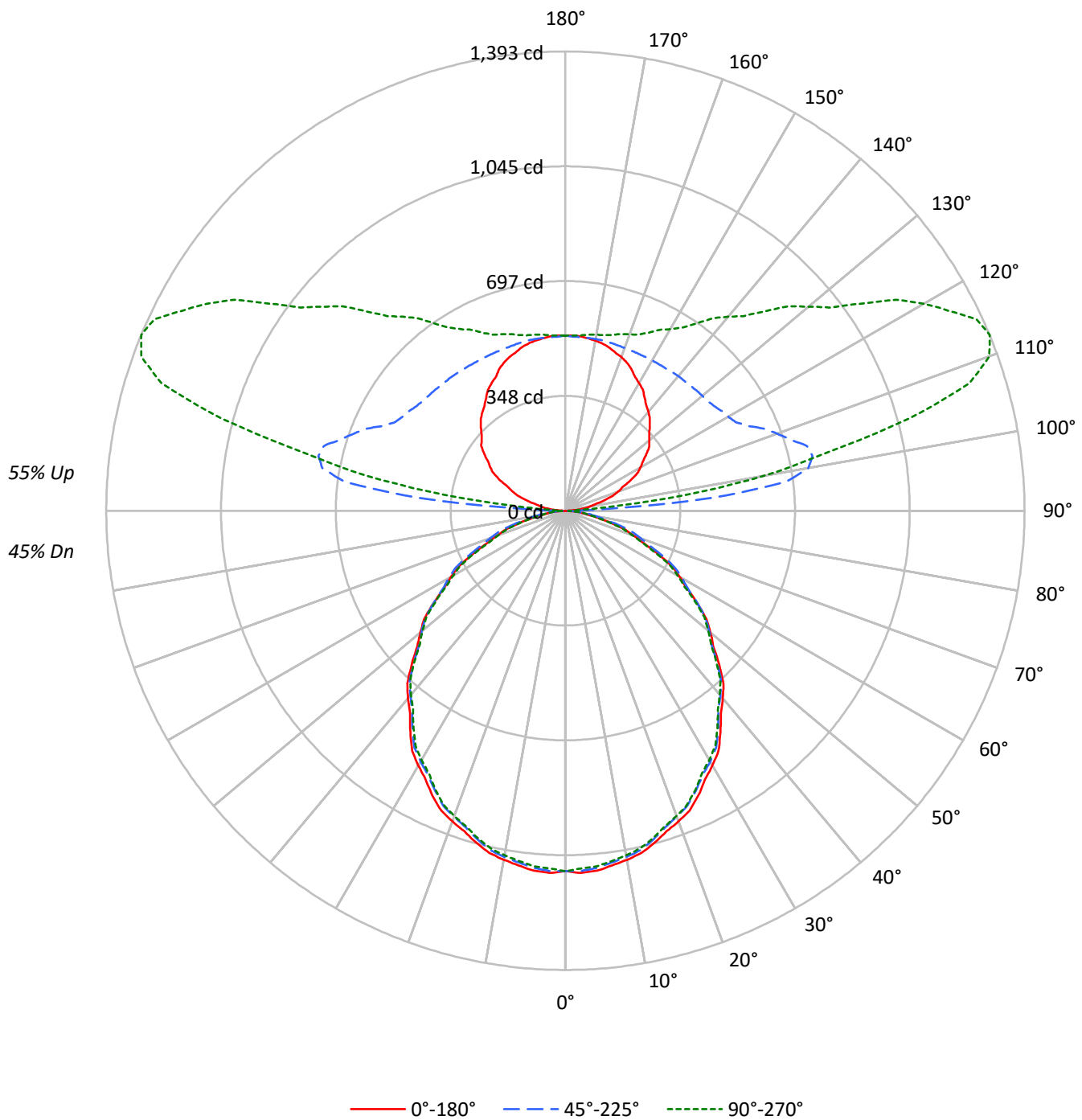
Lumens per Lamp: N/A
Luminaire Lumens: 6241.2 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 97.3
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	97	92	89	85	88	85	82	79	71	68	66	57	56	54	45	44	43
2	88	81	75	70	80	74	69	65	62	58	55	51	48	46	40	38	37
3	80	71	64	58	73	65	59	54	55	50	46	45	41	39	35	33	31
4	74	63	55	49	67	58	51	46	49	43	39	40	36	33	32	29	27
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6726	6726	6726
5°	6769	6716	6686
10°	6715	6661	6625
15°	6644	6570	6546
20°	6565	6464	6451
25°	6473	6355	6336
30°	6336	6240	6200
35°	6156	6069	6033
40°	5964	5871	5848
45°	5732	5657	5631
50°	5494	5449	5411
55°	5238	5238	5155
60°	4918	5013	4836
65°	4502	4726	4389
70°	3967	4348	3863
75°	3389	3893	3296
80°	2628	3276	2660
85°	1701	2512	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5732 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.6
10°-20°	290.7	4.7
20°-30°	431.2	6.9
30°-40°	504.6	8.1
40°-50°	502.3	8.0
50°-60°	433.8	7.0
60°-70°	312.2	5.0
70°-80°	163.7	2.6
80°-90°	41.9	0.7
90°-100°	250.3	4.0
100°-110°	688.7	11.0
110°-120°	710.9	11.4
120°-130°	569.6	9.1
130°-140°	447.4	7.2
140°-150°	342.8	5.5
150°-160°	246.5	3.9
160°-170°	150.7	2.4
170°-180°	50.8	0.8
0°-30°	824.9	13.2
0°-40°	1329.5	21.3
0°-60°	2265.5	36.3
0°-90°	2783.5	44.6
90°-120°	1650.0	26.4
90°-150°	3009.8	48.2
90°-180°	3458.0	55.4
0°-180°	6241.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1096	1084	1088	1085	1083	104
15°	1043	1030	1032	1030	1028	294
25°	954	938	936	931	934	439
35°	820	809	808	801	804	513
45°	659	653	650	648	647	508
55°	488	488	488	482	481	436
65°	309	319	325	312	302	306
75°	143	156	164	153	139	153
85°	24	32	36	34	32	32
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.5	1093.5	1093.5	1093.5	1093.5
2.5°	1099.6	1090.6	1093.5	1091.0	1085.8
5°	1096.4	1084.1	1087.7	1084.8	1082.9
7.5°	1085.2	1073.9	1076.5	1073.4	1072.3
10°	1075.2	1063.9	1066.5	1062.6	1060.7
12.5°	1063.6	1051.6	1054.2	1050.3	1049.2
15°	1043.4	1030.2	1031.8	1029.9	1028.0
17.5°	1019.9	1006.5	1006.8	1003.7	1003.3
20°	1002.9	988.8	987.5	983.7	985.6
22.5°	984.4	969.5	968.2	962.9	965.5
25°	953.8	937.8	936.4	930.7	933.6
27.5°	918.3	902.5	902.5	894.5	897.5
30°	892.1	877.1	878.6	869.1	872.9
32.5°	864.4	850.8	851.7	842.1	845.9
35°	819.9	808.6	808.3	800.7	803.5
37.5°	774.4	764.4	762.8	758.4	759.2
40°	742.8	734.3	731.2	728.3	728.3
42.5°	709.7	701.9	698.9	696.7	696.0
45°	659.0	653.3	650.3	648.4	647.4
47.5°	608.9	603.6	601.0	599.6	598.7
50°	574.2	570.4	569.4	566.5	565.5
52.5°	539.5	537.3	536.2	532.6	531.6
55°	488.5	487.5	488.5	481.7	480.7
57.5°	435.3	436.8	439.9	430.8	428.5
60°	399.8	403.6	407.5	396.8	393.1
62.5°	363.6	369.6	375.2	362.9	357.6
65°	309.3	318.7	324.7	311.9	301.6
67.5°	256.8	268.5	275.7	262.0	250.3
70°	220.6	233.8	241.8	228.0	214.8
72.5°	189.0	203.7	210.2	197.2	184.0
75°	142.6	155.8	163.8	152.9	138.7
77.5°	101.2	113.6	120.2	110.7	99.0
80°	74.2	87.4	92.5	84.6	75.1
82.5°	52.6	63.5	67.1	62.3	55.9
85°	24.1	31.6	35.6	33.7	31.8
87.5°	6.4	12.3	16.2	16.7	17.4
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)