

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-PW1-150U-125D-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

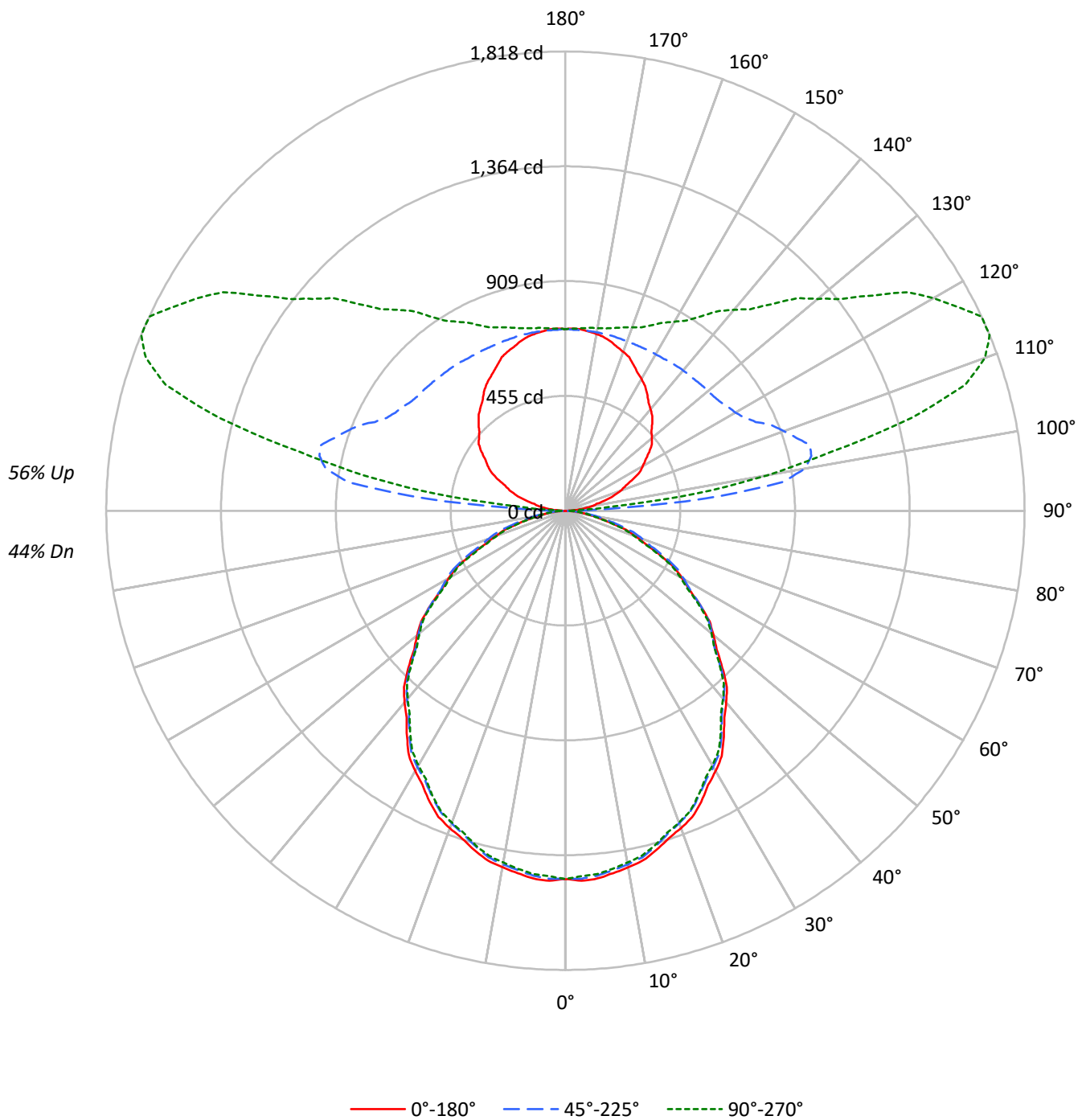
Lumens per Lamp: N/A
Luminaire Lumens: 8349.4 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	70	68	66	57	56	54	45	44	43
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31
4	73	63	55	49	67	58	51	46	48	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	29	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°	13452	13452	13452
5°	13538	13432	13372
10°	13431	13322	13250
15°	13288	13141	13092
20°	13129	12928	12902
25°	12946	12711	12671
30°	12672	12481	12399
35°	12313	12138	12066
40°	11928	11743	11696
45°	11464	11314	11263
50°	10989	10897	10822
55°	10476	10476	10311
60°	9837	10027	9671
65°	9001	9451	8778
70°	7936	8697	7729
75°	6777	7785	6595
80°	5255	6551	5324
85°	3398	5028	4488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11464 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.3	1.6
10°-20°	387.6	4.6
20°-30°	575.0	6.9
30°-40°	672.8	8.1
40°-50°	669.8	8.0
50°-60°	578.4	6.9
60°-70°	416.3	5.0
70°-80°	218.3	2.6
80°-90°	55.6	0.7
90°-100°	334.3	4.0
100°-110°	904.0	10.8
110°-120°	950.4	11.4
120°-130°	772.0	9.2
130°-140°	605.6	7.3
140°-150°	464.8	5.6
150°-160°	334.3	4.0
160°-170°	204.2	2.4
170°-180°	68.8	0.8
0°-30°	1099.9	13.2
0°-40°	1772.6	21.2
0°-60°	3020.7	36.2
0°-90°	3711.0	44.4
90°-120°	2188.8	26.2
90°-150°	4031.1	48.3
90°-180°	4638.0	55.5
0°-180°	8349.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1462	1446	1450	1446	1444	138
15°	1391	1374	1376	1373	1371	392
25°	1272	1250	1249	1241	1245	585
35°	1093	1078	1078	1068	1071	683
45°	879	871	867	864	863	678
55°	651	650	651	642	641	581
65°	412	425	433	416	402	409
75°	190	208	218	204	185	204
85°	32	42	48	45	42	42
90°	2	5	10	11	10	5
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.0	1458.0	1458.0	1458.0	1458.0
2.5°	1466.2	1454.1	1458.0	1454.7	1447.7
5°	1461.8	1445.5	1450.3	1446.4	1443.8
7.5°	1446.9	1431.9	1435.4	1431.2	1429.7
10°	1433.6	1418.5	1422.0	1416.8	1414.3
12.5°	1418.2	1402.1	1405.6	1400.4	1398.9
15°	1391.2	1373.6	1375.8	1373.1	1370.6
17.5°	1359.8	1342.0	1342.4	1338.2	1337.7
20°	1337.2	1318.4	1316.7	1311.6	1314.1
22.5°	1312.6	1292.7	1291.0	1283.9	1287.4
25°	1271.7	1250.4	1248.6	1241.0	1244.7
27.5°	1224.4	1203.3	1203.4	1192.7	1196.7
30°	1189.5	1169.4	1171.5	1158.8	1163.8
32.5°	1152.5	1134.4	1135.6	1122.8	1127.8
35°	1093.2	1078.1	1077.7	1067.6	1071.3
37.5°	1032.5	1019.2	1017.1	1011.2	1012.2
40°	990.4	979.1	975.0	971.1	971.1
42.5°	946.2	935.9	931.8	929.0	928.0
45°	878.6	871.1	867.1	864.5	863.2
47.5°	811.8	804.8	801.3	799.5	798.2
50°	765.6	760.6	759.2	755.3	754.0
52.5°	719.4	716.3	715.0	710.1	708.8
55°	651.3	650.0	651.3	642.3	641.0
57.5°	580.4	582.4	586.5	574.4	571.4
60°	533.1	538.1	543.4	529.1	524.1
62.5°	484.8	492.8	500.2	483.9	476.8
65°	412.3	424.9	432.9	415.9	402.1
67.5°	342.5	358.0	367.6	349.3	333.7
70°	294.2	311.7	322.4	304.0	286.5
72.5°	252.0	271.6	280.3	262.9	245.4
75°	190.1	207.7	218.4	203.8	185.0
77.5°	134.9	151.5	160.3	147.6	132.1
80°	98.9	116.5	123.3	112.8	100.2
82.5°	70.1	84.7	89.4	83.0	74.5
85°	32.1	42.2	47.5	44.9	42.4
87.5°	8.5	16.2	21.5	21.7	22.6
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)