

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-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-PW1-075U-125D-927-1D-UNV-STD-W-4
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

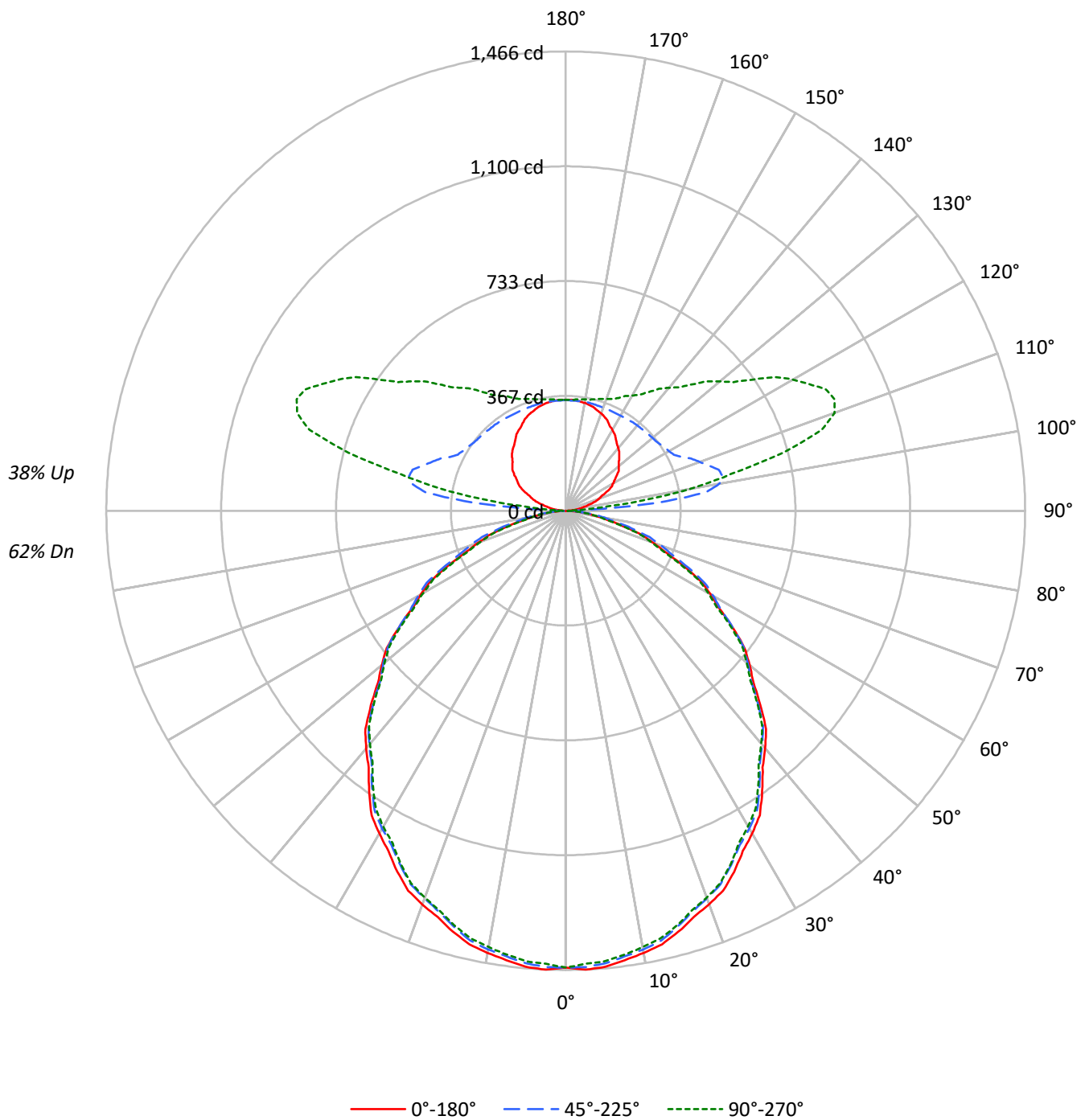
Lumens per Lamp: N/A
Luminaire Lumens: 6015.6 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 62.1
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57
2	92	84	78	73	86	79	74	69	69	65	62	61	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	46	43	41
4	77	66	58	51	71	62	55	49	55	49	44	48	43	40	42	38	35
5	70	59	50	44	66	55	48	42	49	43	38	43	38	35	37	34	31
6	65	53	44	38	61	50	42	37	44	38	34	39	34	30	34	30	27
7	60	48	39	34	56	45	38	32	40	34	30	35	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	32	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	24	21	18

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	2.3
10°-20°	387.6	6.4
20°-30°	575.0	9.6
30°-40°	672.8	11.2
40°-50°	669.8	11.1
50°-60°	578.4	9.6
60°-70°	416.3	6.9
70°-80°	218.3	3.6
80°-90°	55.0	0.9
90°-100°	166.9	2.8
100°-110°	459.2	7.6
110°-120°	473.9	7.9
120°-130°	379.7	6.3
130°-140°	298.2	5.0
140°-150°	228.6	3.8
150°-160°	164.3	2.7
160°-170°	100.5	1.7
170°-180°	33.9	0.6
0°-30°	1099.9	18.3
0°-40°	1772.6	29.5
0°-60°	3020.7	50.2
0°-90°	3710.4	61.7
90°-120°	1100.0	18.3
90°-150°	2006.5	33.4
90°-180°	2305.0	38.3
0°-180°	6015.6	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°	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	

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-075U-125D-927-1D-UNV-STD-W-4

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°	8.4	15.8	20.6	20.9	21.9
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)