

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-PR1-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

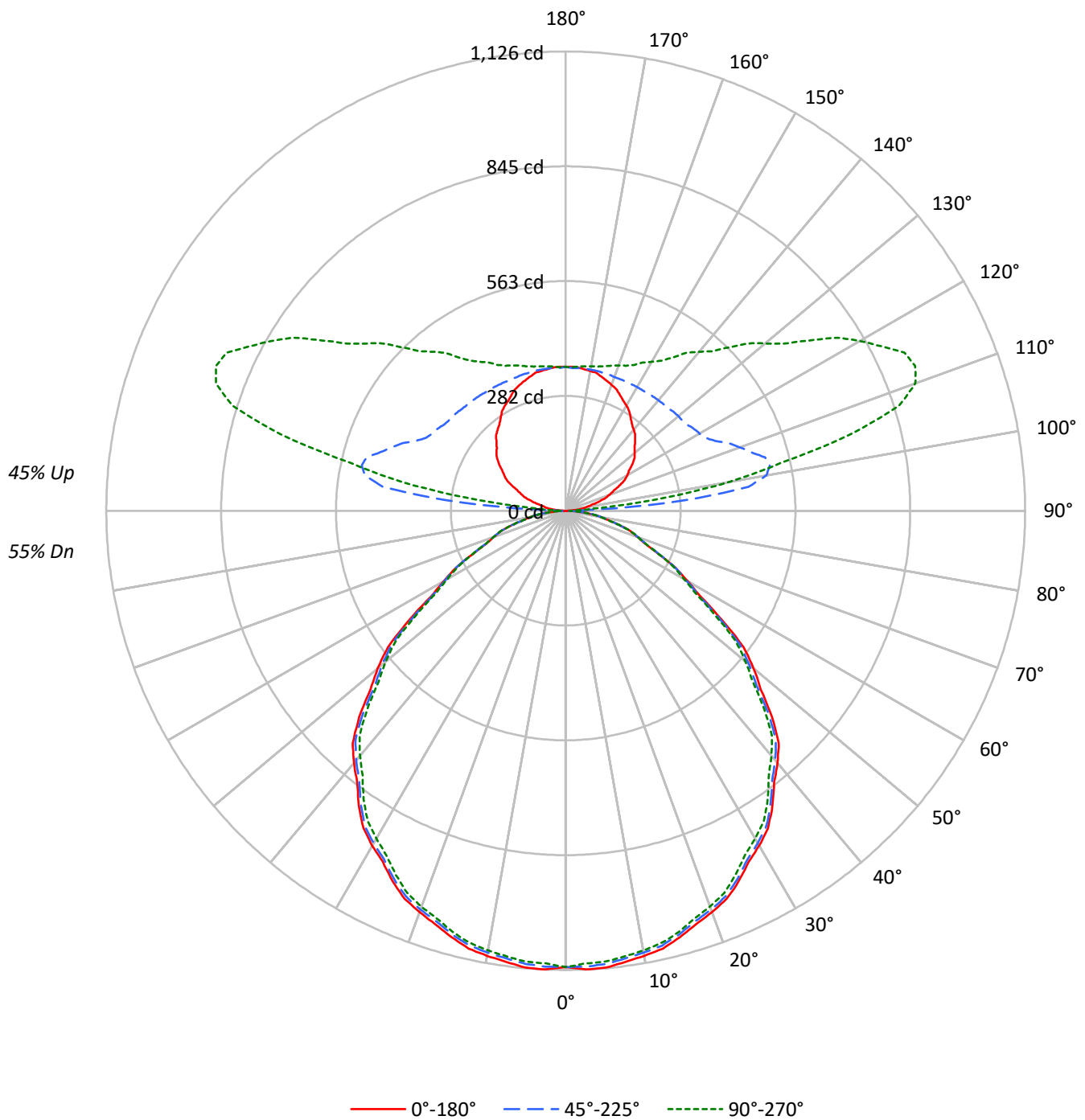
Lumens per Lamp: N/A
Luminaire Lumens: 5098.7 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.8
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	50	30	10
RCR																	
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	88	92	88	85	82	76	74	71	65	63	61	54	53	52
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44
3	83	73	66	60	77	69	62	57	59	54	50	51	47	44	43	40	38
4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	38	35	33
5	70	58	50	44	65	55	47	42	47	42	37	41	36	33	35	31	29
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	28	25
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20
9	52	39	32	27	48	37	30	26	33	27	23	28	24	21	24	21	18
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6881	6881	6881
5°	6943	6889	6853
10°	6921	6873	6837
15°	6891	6847	6811
20°	6856	6812	6762
25°	6808	6762	6684
30°	6734	6686	6590
35°	6635	6577	6483
40°	6484	6414	6297
45°	6219	6110	5985
50°	5754	5615	5505
55°	5022	4908	4805
60°	4232	4196	4114
65°	3660	3675	3646
70°	3361	3379	3379
75°	3230	3230	3251
80°	3039	3071	3039
85°	2449	2717	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6219 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	2.1
10°-20°	302.7	5.9
20°-30°	456.5	9.0
30°-40°	544.0	10.7
40°-50°	536.3	10.5
50°-60°	409.9	8.0
60°-70°	253.6	5.0
70°-80°	144.1	2.8
80°-90°	45.2	0.9
90°-100°	169.1	3.3
100°-110°	459.5	9.0
110°-120°	472.4	9.3
120°-130°	377.7	7.4
130°-140°	296.8	5.8
140°-150°	227.6	4.5
150°-160°	163.7	3.2
160°-170°	100.1	2.0
170°-180°	33.7	0.7
0°-30°	865.0	17.0
0°-40°	1409.0	27.6
0°-60°	2355.1	46.2
0°-90°	2798.0	54.9
90°-120°	1101.1	21.6
90°-150°	2003.2	39.3
90°-180°	2301.0	45.1
0°-180°	5098.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1124	1112	1116	1112	1110	107
15°	1082	1071	1075	1072	1070	305
25°	1003	991	996	986	985	462
35°	884	873	876	864	863	551
45°	715	706	702	690	688	548
55°	468	461	458	450	448	420
65°	252	250	252	250	250	255
75°	136	136	136	137	137	143
85°	35	37	38	38	38	40
90°	1	4	8	10	10	3
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.7	1118.7	1118.7	1118.7	1118.7
2.5°	1125.6	1115.8	1118.7	1116.3	1111.0
5°	1124.5	1112.2	1115.8	1111.9	1110.0
7.5°	1115.8	1103.8	1107.3	1103.5	1102.3
10°	1108.1	1096.8	1100.4	1096.5	1094.6
12.5°	1099.6	1087.6	1091.9	1087.3	1085.4
15°	1082.1	1070.8	1075.3	1071.5	1069.6
17.5°	1062.8	1050.8	1055.3	1050.8	1048.4
20°	1047.4	1036.1	1040.7	1033.9	1033.0
22.5°	1030.4	1019.1	1023.7	1014.6	1014.5
25°	1003.1	990.8	996.3	985.7	984.8
27.5°	970.5	959.2	963.8	952.9	951.8
30°	948.2	936.9	941.4	929.8	927.9
32.5°	922.7	912.2	916.0	904.4	903.3
35°	883.6	873.2	875.9	864.3	863.4
37.5°	839.1	829.7	831.2	818.4	817.5
40°	807.5	798.1	798.8	785.3	784.3
42.5°	772.8	763.4	762.6	749.1	748.1
45°	715.0	705.6	702.4	689.9	688.0
47.5°	649.1	639.6	633.8	623.6	622.3
50°	601.3	591.8	586.8	578.1	575.3
52.5°	549.6	540.2	535.9	528.0	525.1
55°	468.3	460.8	457.7	449.9	448.1
57.5°	391.0	385.9	385.0	377.5	376.8
60°	344.0	341.2	341.1	334.4	334.4
62.5°	303.9	301.8	303.3	298.9	298.1
65°	251.5	249.6	252.5	250.5	250.5
67.5°	210.1	210.1	211.8	211.0	211.0
70°	186.9	186.9	187.9	187.9	187.9
72.5°	166.1	165.4	167.9	167.8	167.1
75°	135.9	135.9	135.9	136.8	136.8
77.5°	105.8	106.0	106.8	106.6	105.8
80°	85.8	86.7	86.7	85.8	85.8
82.5°	65.7	66.7	66.7	66.5	65.7
85°	34.7	36.6	38.5	38.5	38.5
87.5°	10.2	13.9	17.0	17.4	16.7
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)