

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: P521357

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521357
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5235.4 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

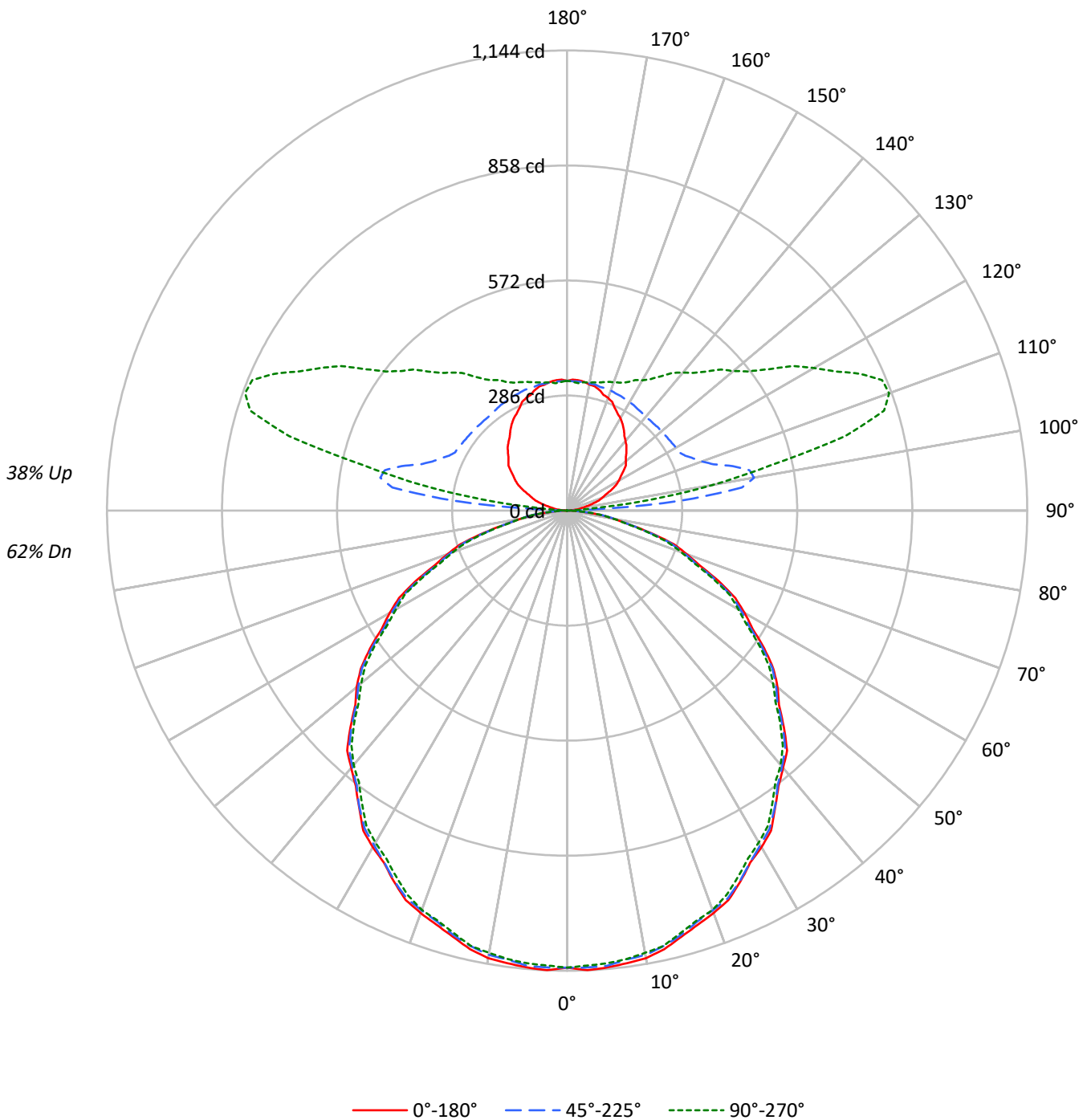
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90		78	78	78		67	67	67	62
1	100	96	92	88	94	90	86	83	79	76	74		68	66	65		59	58	56	52
2	91	83	77	72	85	78	73	68	69	64	61		60	57	54		52	49	47	43
3	83	73	66	60	77	69	62	57	60	55	51		53	49	45		46	42	40	36
4	76	65	56	50	71	61	53	48	54	48	43		47	42	39		41	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37		42	37	33		36	33	30	27
6	64	52	43	37	60	49	41	36	43	37	32		38	33	29		33	29	26	23
7	59	47	38	33	55	44	37	31	39	33	28		34	29	26		30	26	23	21
8	55	42	34	29	51	40	33	28	36	30	25		31	27	23		28	24	21	18
9	51	39	31	26	48	37	30	25	33	27	23		29	24	21		25	21	19	16
10	48	35	28	23	45	34	27	22	30	24	20		27	22	19		24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10482	10482	10482
5°	10561	10522	10465
10°	10586	10508	10460
15°	10476	10437	10387
20°	10454	10383	10373
25°	10365	10344	10228
30°	10296	10229	10153
35°	10150	10139	10011
40°	10057	10007	9945
45°	9937	9882	9774
50°	9802	9727	9594
55°	9621	9503	9370
60°	9394	9241	9069
65°	9082	8877	8719
70°	8514	8317	8122
75°	7671	7450	7340
80°	6270	6323	6211
85°	4488	5145	5145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9937 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	2.1
10°-20°	307.9	5.9
20°-30°	465.8	8.9
30°-40°	560.3	10.7
40°-50°	581.7	11.1
50°-60°	527.0	10.1
60°-70°	400.9	7.7
70°-80°	222.8	4.3
80°-90°	57.4	1.1
90°-100°	147.0	2.8
100°-110°	418.3	8.0
110°-120°	400.8	7.7
120°-130°	317.2	6.1
130°-140°	254.6	4.9
140°-150°	199.3	3.8
150°-160°	145.8	2.8
160°-170°	90.3	1.7
170°-180°	30.7	0.6
0°-30°	881.4	16.8
0°-40°	1441.6	27.5
0°-60°	2550.3	48.7
0°-90°	3231.4	61.7
90°-120°	966.1	18.5
90°-150°	1737.2	33.2
90°-180°	2004.0	38.3
0°-180°	5235.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1140	1130	1136	1131	1130	108
15°	1097	1088	1093	1092	1088	310
25°	1018	1009	1016	1006	1005	469
35°	901	897	900	890	889	565
45°	762	756	757	749	749	588
55°	598	597	591	586	582	534
65°	416	410	407	400	399	410
75°	215	212	209	207	206	228
85°	42	46	49	49	49	52
90°	0	0	0	0	0	2
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.1	1136.1	1136.1	1136.1	1136.1
2.5°	1143.6	1133.9	1137.0	1134.4	1132.0
5°	1140.3	1130.1	1136.1	1130.9	1129.9
7.5°	1134.9	1122.9	1125.8	1124.7	1124.7
10°	1129.9	1114.7	1121.6	1116.5	1116.5
12.5°	1116.7	1103.9	1109.2	1106.6	1108.2
15°	1096.8	1087.7	1092.7	1091.5	1087.5
17.5°	1079.6	1068.7	1072.4	1070.5	1068.9
20°	1064.7	1054.6	1057.5	1052.4	1056.5
22.5°	1048.2	1038.1	1043.4	1034.9	1034.9
25°	1018.2	1009.1	1016.1	1005.7	1004.7
27.5°	986.3	980.4	985.1	977.3	974.5
30°	966.4	957.3	960.2	955.0	953.0
32.5°	943.3	934.1	937.0	927.8	929.0
35°	901.2	897.2	900.2	889.8	888.8
37.5°	863.2	855.1	859.9	851.4	850.5
40°	835.0	826.9	830.9	825.7	825.7
42.5°	809.4	800.5	802.7	795.9	793.4
45°	761.6	756.5	757.4	749.1	749.1
47.5°	714.4	710.7	709.2	700.8	702.4
50°	682.9	676.8	677.7	668.4	668.4
52.5°	646.5	646.9	643.0	636.9	632.0
55°	598.1	597.1	590.8	585.6	582.5
57.5°	546.3	541.7	537.2	530.2	529.6
60°	509.1	506.0	500.8	494.5	491.5
62.5°	471.0	468.0	462.7	457.3	456.7
65°	416.0	409.9	406.6	400.4	399.4
67.5°	356.2	351.3	347.3	342.3	341.7
70°	315.6	311.5	308.3	304.1	301.1
72.5°	278.3	271.9	268.6	265.3	263.0
75°	215.2	212.2	209.0	206.9	205.9
77.5°	154.4	154.6	154.6	151.9	150.9
80°	118.0	119.0	119.0	117.9	116.9
82.5°	85.7	87.5	88.4	87.3	87.1
85°	42.4	45.5	48.6	48.6	48.6
87.5°	11.6	15.6	19.0	19.8	19.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)