

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: P521461

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521461
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-075U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

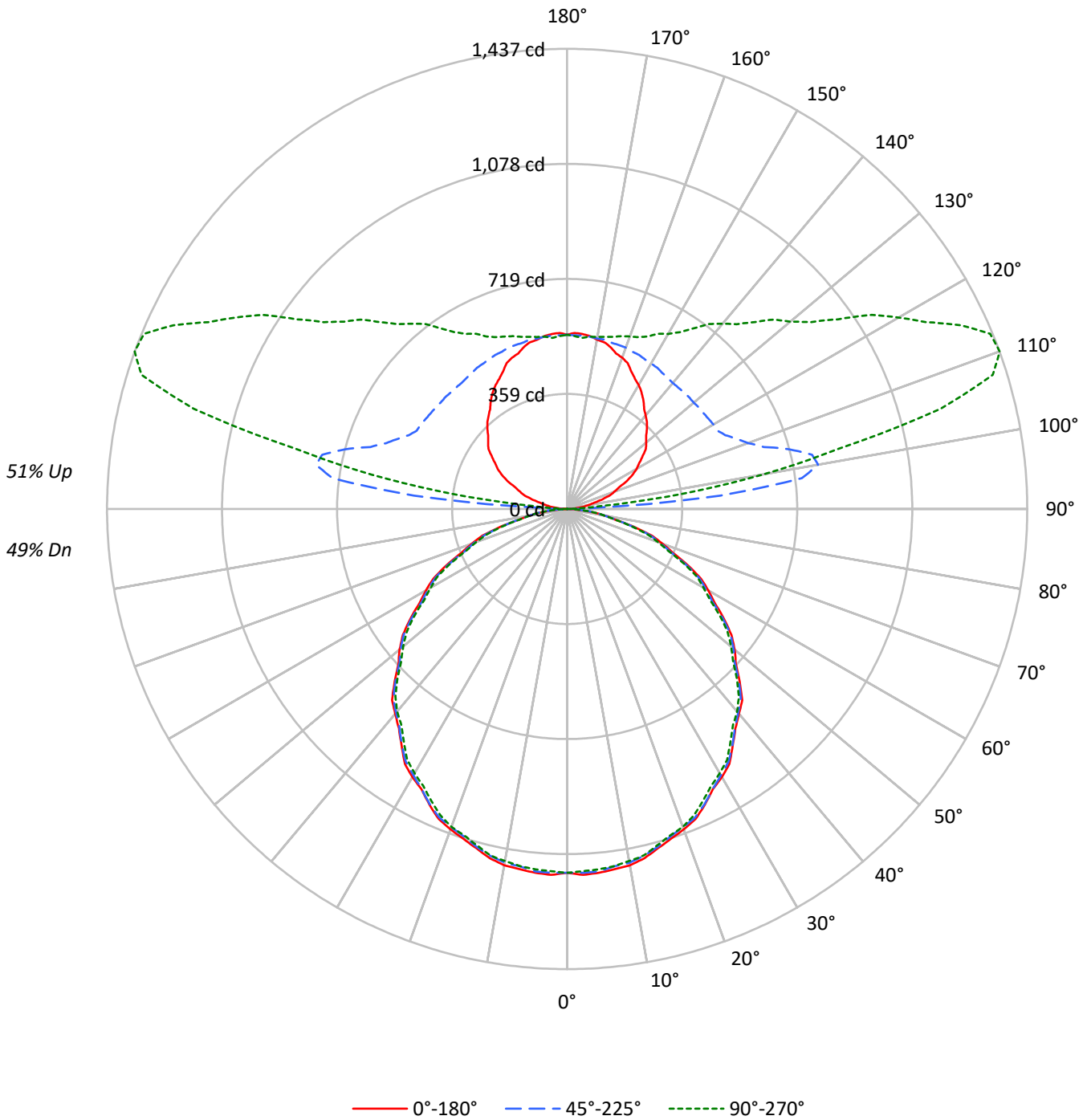
Lumens per Lamp: N/A
Luminaire Lumens: 6612.2 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 55.6
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			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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12

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	1.6
10°-20°	307.9	4.7
20°-30°	465.8	7.0
30°-40°	560.3	8.5
40°-50°	581.7	8.8
50°-60°	527.0	8.0
60°-70°	400.9	6.1
70°-80°	222.8	3.4
80°-90°	57.4	0.9
90°-100°	248.0	3.8
100°-110°	705.7	10.7
110°-120°	676.1	10.2
120°-130°	535.1	8.1
130°-140°	429.5	6.5
140°-150°	336.2	5.1
150°-160°	246.0	3.7
160°-170°	152.4	2.3
170°-180°	51.7	0.8
0°-30°	881.4	13.3
0°-40°	1441.6	21.8
0°-60°	2550.3	38.6
0°-90°	3231.4	48.9
90°-120°	1629.8	24.6
90°-150°	2930.6	44.3
90°-180°	3381.0	51.1
0°-180°	6612.2	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	3
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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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°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)