

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: P521616

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521616
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-125U-075D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8772.4 lumens
Efficiency: N/A
Efficacy: 119.5 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-Indirect

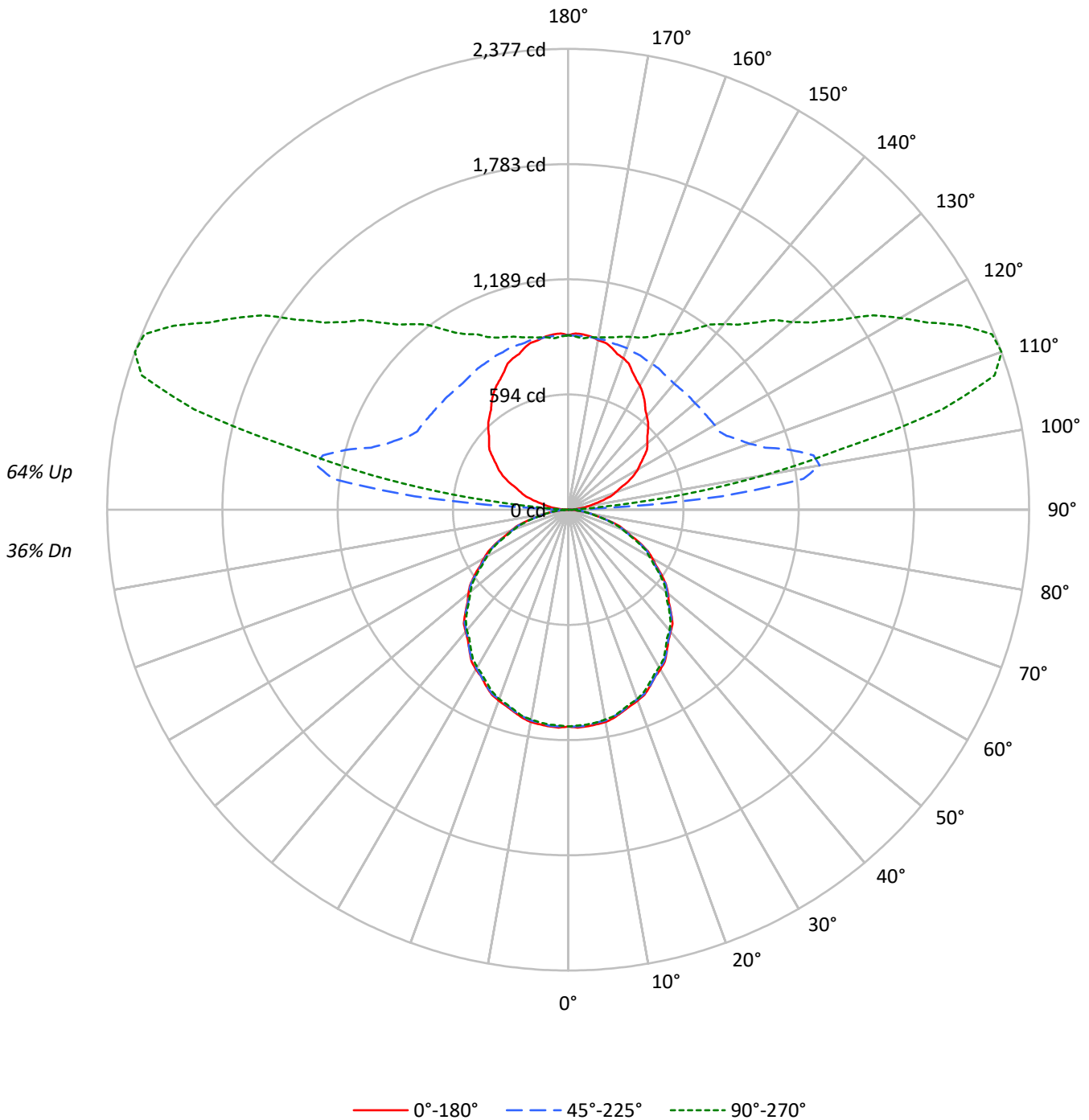
Input Watts (W): 73.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	90	86	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30
2	86	79	73	68	78	71	66	62	58	54	51	45	43	41	34	32	31	25
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	30	28	26	21
4	72	61	53	47	64	55	49	43	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	39	32	27	47	36	29	25	30	24	21	24	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	18	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	19	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10316	10316	10316
5°	10393	10355	10299
10°	10418	10341	10293
15°	10310	10271	10222
20°	10288	10218	10208
25°	10200	10180	10066
30°	10133	10068	9992
35°	9989	9978	9852
40°	9898	9848	9787
45°	9779	9726	9619
50°	9647	9574	9442
55°	9468	9352	9222
60°	9245	9095	8925
65°	8938	8737	8582
70°	8379	8187	7993
75°	7550	7333	7222
80°	6169	6222	6115
85°	4425	5071	5071

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9779 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	1.2
10°-20°	303.0	3.5
20°-30°	458.4	5.2
30°-40°	551.4	6.3
40°-50°	572.5	6.5
50°-60°	518.6	5.9
60°-70°	394.5	4.5
70°-80°	219.2	2.5
80°-90°	56.5	0.6
90°-100°	410.2	4.7
100°-110°	1167.3	13.3
110°-120°	1118.4	12.7
120°-130°	885.2	10.1
130°-140°	710.5	8.1
140°-150°	556.2	6.3
150°-160°	407.0	4.6
160°-170°	252.1	2.9
170°-180°	85.5	1.0
0°-30°	867.4	9.9
0°-40°	1418.7	16.2
0°-60°	2509.8	28.6
0°-90°	3180.1	36.3
90°-120°	2695.9	30.7
90°-150°	4847.7	55.3
90°-180°	5592.0	63.7
0°-180°	8772.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1122	1112	1118	1113	1112	107
15°	1079	1070	1075	1074	1070	305
25°	1002	993	1000	990	989	462
35°	887	883	886	876	875	556
45°	750	744	745	737	737	578
55°	589	588	581	576	573	525
65°	409	403	400	394	393	403
75°	212	209	206	204	203	224
85°	42	45	48	48	48	52
90°	0	0	0	0	0	3
95°	44	177	794	275	169	51
105°	181	275	1190	2101	1997	192
115°	337	408	902	1911	2244	332
125°	476	528	861	1429	1708	426
135°	582	630	851	1207	1364	449
145°	686	722	858	1044	1138	429
155°	784	802	878	944	982	362
165°	866	869	888	907	921	244
175°	907	902	899	893	887	86
180°	900	900	900	900	900	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.1	1118.1	1118.1	1118.1	1118.1
2.5°	1125.4	1115.9	1118.9	1116.4	1114.0
5°	1122.2	1112.2	1118.1	1113.0	1112.0
7.5°	1116.9	1105.1	1107.9	1106.9	1106.9
10°	1112.0	1097.0	1103.8	1098.7	1098.7
12.5°	1098.9	1086.4	1091.6	1089.0	1090.6
15°	1079.4	1070.4	1075.3	1074.2	1070.2
17.5°	1062.5	1051.7	1055.4	1053.5	1051.9
20°	1047.8	1037.9	1040.7	1035.7	1039.7
22.5°	1031.5	1021.6	1026.8	1018.5	1018.5
25°	1002.0	993.0	1000.0	989.8	988.8
27.5°	970.6	964.9	969.4	961.8	959.0
30°	951.1	942.1	945.0	939.8	937.9
32.5°	928.3	919.3	922.2	913.0	914.2
35°	886.9	883.0	885.9	875.7	874.7
37.5°	849.5	841.5	846.2	837.8	837.0
40°	821.8	813.8	817.7	812.6	812.6
42.5°	796.5	787.7	790.0	783.2	780.8
45°	749.5	744.5	745.4	737.2	737.2
47.5°	703.0	699.4	697.9	689.6	691.2
50°	672.1	666.1	667.0	657.8	657.8
52.5°	636.2	636.6	632.8	626.8	622.0
55°	588.6	587.6	581.4	576.3	573.3
57.5°	537.7	533.1	528.7	521.8	521.2
60°	501.0	498.0	492.9	486.7	483.7
62.5°	463.5	460.5	455.4	450.1	449.5
65°	409.4	403.4	400.2	394.1	393.1
67.5°	350.5	345.7	341.7	336.8	336.2
70°	310.6	306.6	303.5	299.3	296.3
72.5°	273.9	267.5	264.3	261.0	258.9
75°	211.8	208.8	205.7	203.6	202.6
77.5°	151.9	152.1	152.1	149.5	148.5
80°	116.1	117.1	117.1	116.1	115.1
82.5°	84.3	86.1	87.0	85.9	85.7
85°	41.8	44.7	47.9	47.9	47.9
87.5°	11.4	15.4	18.7	19.5	18.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.7	72.6	168.4	49.0	37.0
95°	44.5	176.7	794.2	274.9	169.4
97.5°	81.8	207.0	1223.1	875.2	599.7
100°	107.8	225.0	1316.2	1333.2	1026.9
102.5°	136.6	244.4	1295.7	1706.5	1439.1
105°	181.4	275.1	1189.5	2101.2	1997.4
107.5°	227.0	311.0	1065.6	2212.4	2304.8
110°	258.4	337.1	994.4	2169.9	2377.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	363.2	946.5	2069.2	2365.0
115°	337.2	407.5	902.0	1910.8	2243.9
117.5°	380.0	445.9	875.6	1737.7	2090.5
120°	414.2	469.4	872.9	1638.8	1976.9
122.5°	441.6	496.8	866.1	1552.0	1866.0
125°	475.8	527.7	860.9	1428.7	1708.1
127.5°	513.1	561.7	858.2	1355.0	1585.3
130°	532.3	580.8	854.1	1303.6	1504.5
132.5°	552.8	600.0	854.1	1263.6	1448.3
135°	581.9	630.5	850.7	1206.8	1364.1
137.5°	609.3	656.5	850.3	1158.7	1294.6
140°	629.9	678.4	848.9	1118.9	1249.4
142.5°	653.1	693.6	853.0	1087.1	1204.3
145°	686.3	721.5	857.5	1044.5	1138.2
147.5°	714.8	748.9	865.0	1001.4	1082.4
150°	739.4	762.8	867.8	987.2	1044.1
152.5°	758.6	783.3	870.5	967.9	1020.8
155°	783.9	802.3	878.0	943.9	982.4
157.5°	815.4	826.4	879.7	933.1	960.5
160°	831.8	840.2	886.6	924.8	948.2
162.5°	841.4	851.1	888.0	917.8	935.9
165°	866.1	869.4	888.3	907.4	920.8
167.5°	882.8	879.8	896.2	904.9	910.2
170°	888.3	886.6	893.4	895.3	902.0
172.5°	900.6	894.9	897.5	892.5	897.9
175°	907.1	902.1	898.6	893.3	886.6
177.5°	909.9	901.8	897.5	892.1	893.4
180°	900.3	900.3	900.3	900.3	900.3

(END OF REPORT)