

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: P521613

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521613
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8242.2 lumens
Efficiency: N/A
Efficacy: 112.6 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

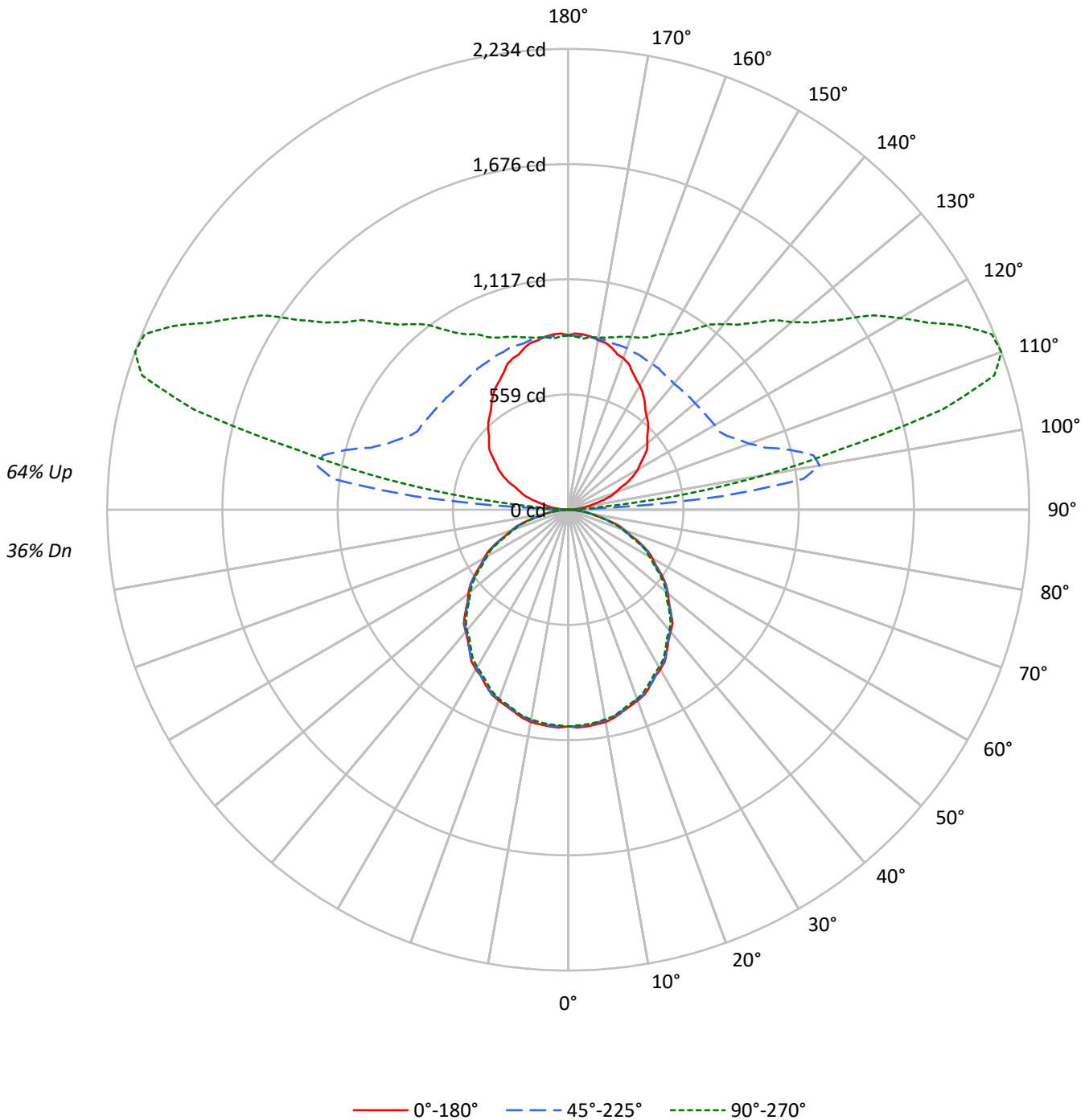
Input Watts (W): 73.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521613

CATALOG NUMBER: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P521613

CATALOG NUMBER: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

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°	9692	9692	9692
5°	9764	9729	9676
10°	9788	9716	9671
15°	9686	9650	9604
20°	9666	9600	9591
25°	9583	9564	9457
30°	9520	9459	9388
35°	9386	9375	9256
40°	9299	9253	9196
45°	9188	9137	9038
50°	9063	8995	8872
55°	8895	8787	8664
60°	8686	8545	8387
65°	8396	8208	8062
70°	7871	7691	7510
75°	7094	6891	6787
80°	5797	5844	5744
85°	4150	4764	4764

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9188 cd/sqm

TEST NUMBER: P521613

CATALOG NUMBER: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	1.2
10°-20°	284.7	3.5
20°-30°	430.7	5.2
30°-40°	518.0	6.3
40°-50°	537.9	6.5
50°-60°	487.3	5.9
60°-70°	370.7	4.5
70°-80°	206.0	2.5
80°-90°	53.1	0.6
90°-100°	385.4	4.7
100°-110°	1096.7	13.3
110°-120°	1050.8	12.7
120°-130°	831.6	10.1
130°-140°	667.5	8.1
140°-150°	522.6	6.3
150°-160°	382.4	4.6
160°-170°	236.8	2.9
170°-180°	80.4	1.0
0°-30°	814.9	9.9
0°-40°	1333.0	16.2
0°-60°	2358.1	28.6
0°-90°	2987.9	36.3
90°-120°	2532.9	30.7
90°-150°	4554.7	55.3
90°-180°	5254.0	63.7
0°-180°	8242.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1054	1045	1050	1046	1045	100
15°	1014	1006	1010	1009	1006	287
25°	941	933	940	930	929	434
35°	833	830	832	823	822	522
45°	704	700	700	693	693	543
55°	553	552	546	542	539	494
65°	385	379	376	370	369	379
75°	199	196	193	191	190	211
85°	39	42	45	45	45	48
90°	0	0	0	0	0	3
95°	42	166	746	258	159	48
105°	170	258	1118	1974	1877	180
115°	317	383	848	1795	2108	312
125°	447	496	809	1342	1605	400
135°	547	592	799	1134	1282	422
145°	645	678	806	981	1069	403
155°	736	754	825	887	923	340
165°	814	817	835	853	865	229
175°	852	848	844	839	833	81
180°	846	846	846	846	846	

TEST NUMBER: P521613

CATALOG NUMBER: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.5	1050.5	1050.5	1050.5	1050.5
2.5°	1057.4	1048.4	1051.3	1048.9	1046.7
5°	1054.3	1045.0	1050.5	1045.7	1044.8
7.5°	1049.4	1038.3	1040.9	1040.0	1040.0
10°	1044.8	1030.7	1037.1	1032.3	1032.3
12.5°	1032.5	1020.7	1025.6	1023.2	1024.7
15°	1014.1	1005.7	1010.3	1009.3	1005.5
17.5°	998.3	988.2	991.6	989.8	988.3
20°	984.5	975.1	977.8	973.1	976.8
22.5°	969.2	959.8	964.8	956.9	956.9
25°	941.4	933.0	939.5	929.9	929.0
27.5°	912.0	906.5	910.8	903.7	901.1
30°	893.6	885.2	887.9	883.0	881.2
32.5°	872.2	863.7	866.4	857.8	859.0
35°	833.3	829.6	832.4	822.8	821.8
37.5°	798.1	790.6	795.0	787.2	786.4
40°	772.1	764.6	768.3	763.5	763.5
42.5°	748.4	740.1	742.2	735.9	733.6
45°	704.2	699.5	700.3	692.7	692.7
47.5°	660.5	657.2	655.7	647.9	649.4
50°	631.4	625.8	626.7	618.1	618.1
52.5°	597.8	598.1	594.5	588.9	584.4
55°	553.0	552.1	546.3	541.5	538.6
57.5°	505.2	500.9	496.7	490.2	489.7
60°	470.7	467.9	463.1	457.3	454.5
62.5°	435.5	432.7	427.9	422.9	422.3
65°	384.6	379.0	376.0	370.2	369.3
67.5°	329.3	324.8	321.1	316.5	315.9
70°	291.8	288.1	285.1	281.2	278.4
72.5°	257.4	251.4	248.4	245.3	243.2
75°	199.0	196.2	193.3	191.3	190.4
77.5°	142.7	142.9	142.9	140.4	139.5
80°	109.1	110.0	110.0	109.0	108.1
82.5°	79.2	80.9	81.7	80.7	80.6
85°	39.2	42.0	45.0	45.0	45.0
87.5°	10.7	14.5	17.6	18.4	17.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	12.9	68.2	158.2	46.1	34.7
95°	41.8	166.0	746.2	258.3	159.2
97.5°	76.9	194.5	1149.2	822.3	563.5
100°	101.3	211.4	1236.6	1252.6	964.9
102.5°	128.3	229.6	1217.3	1603.4	1352.1
105°	170.5	258.5	1117.6	1974.1	1876.7
107.5°	213.2	292.2	1001.2	2078.7	2165.5
110°	242.8	316.7	934.3	2038.7	2233.7

TEST NUMBER: P521613

CATALOG NUMBER: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.1	341.3	889.3	1944.1	2222.1
115°	316.8	382.8	847.5	1795.3	2108.2
117.5°	357.0	419.0	822.7	1632.7	1964.1
120°	389.2	441.0	820.1	1539.7	1857.4
122.5°	414.9	466.8	813.7	1458.2	1753.2
125°	447.1	495.8	808.9	1342.3	1604.9
127.5°	482.1	527.7	806.3	1273.1	1489.4
130°	500.1	545.7	802.4	1224.8	1413.5
132.5°	519.4	563.8	802.4	1187.2	1360.8
135°	546.8	592.4	799.2	1133.9	1281.7
137.5°	572.5	616.8	798.9	1088.7	1216.4
140°	591.8	637.4	797.6	1051.3	1173.9
142.5°	613.7	651.7	801.5	1021.4	1131.5
145°	644.8	677.9	805.7	981.3	1069.4
147.5°	671.5	703.6	812.7	940.9	1017.0
150°	694.7	716.7	815.3	927.5	980.9
152.5°	712.7	736.0	817.9	909.4	959.1
155°	736.5	753.8	825.0	886.9	923.1
157.5°	766.1	776.5	826.6	876.7	902.5
160°	781.5	789.4	833.0	868.9	890.9
162.5°	790.5	799.7	834.3	862.3	879.3
165°	813.7	816.8	834.6	852.6	865.2
167.5°	829.5	826.6	842.0	850.2	855.2
170°	834.6	833.0	839.4	841.2	847.5
172.5°	846.2	840.8	843.3	838.6	843.6
175°	852.3	847.6	844.3	839.3	833.0
177.5°	854.9	847.3	843.3	838.2	839.4
180°	845.9	845.9	845.9	845.9	845.9

(END OF REPORT)