

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520044

Luminaire Tested: **SQ4-F-075U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520044
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

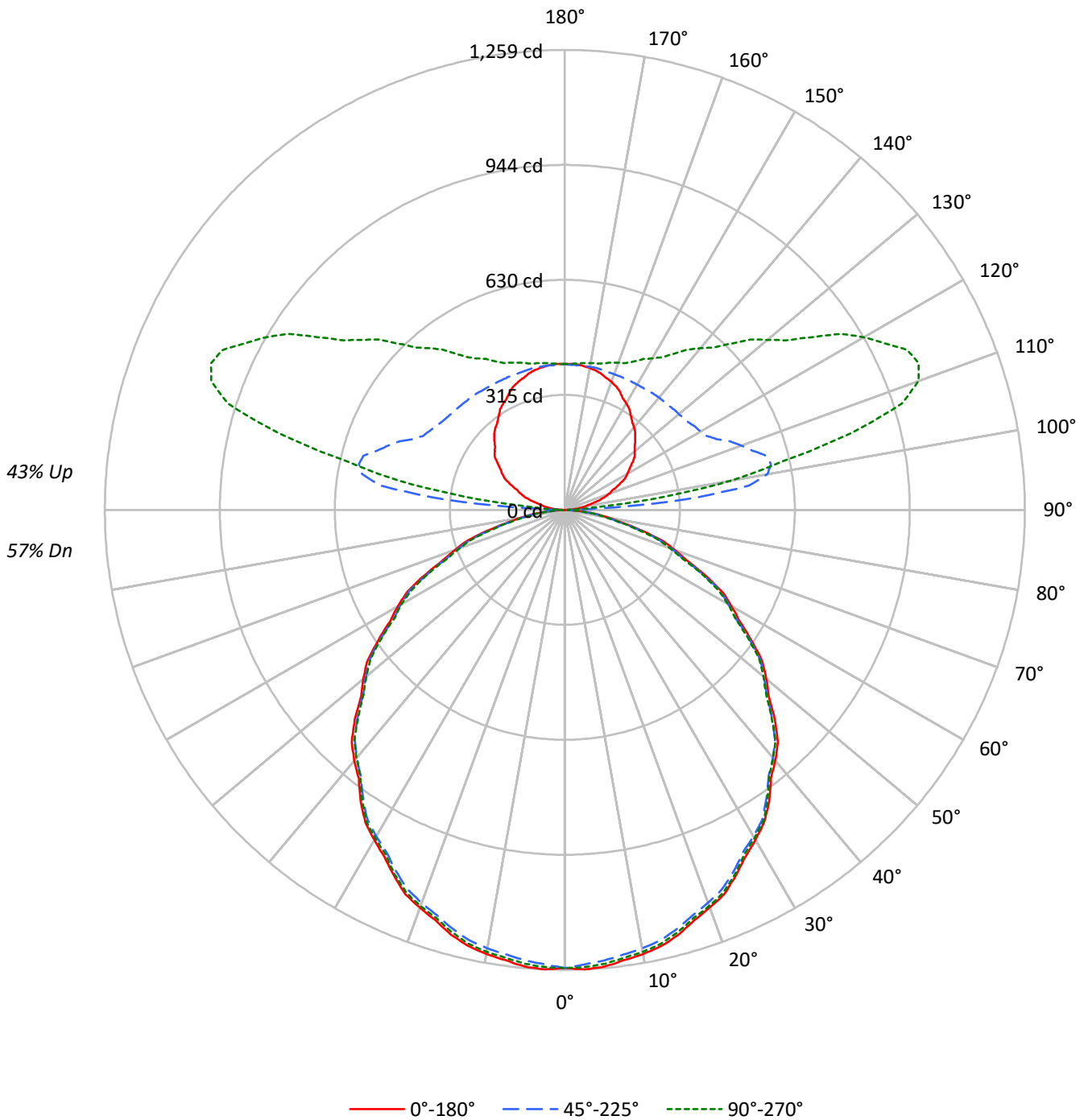
Lumens per Lamp: N/A
Luminaire Lumens: 6023.5 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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: P520044
CATALOG NUMBER: SQ4-F-075U-100D-935-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P520044

CATALOG NUMBER: SQ4-F-075U-100D-935-1D-UNV-STD-W-4

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11254	11122	11209
30°	11116	10997	11052
35°	10977	10841	10898
40°	10794	10670	10681
45°	10604	10458	10424
50°	10330	10207	10182
55°	10026	9915	9846
60°	9723	9547	9516
65°	9248	9040	8966
70°	8592	8384	8222
75°	7671	7429	7272
80°	6312	6084	5807
85°	3737	4097	4192



TEST NUMBER: P520044

CATALOG NUMBER: SQ4-F-075U-100D-935-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	2.0
10°-20°	337.1	5.6
20°-30°	506.3	8.4
30°-40°	604.2	10.0
40°-50°	619.3	10.3
50°-60°	551.5	9.2
60°-70°	411.1	6.8
70°-80°	222.6	3.7
80°-90°	51.7	0.9
90°-100°	188.3	3.1
100°-110°	518.1	8.6
110°-120°	534.8	8.9
120°-130°	428.5	7.1
130°-140°	336.5	5.6
140°-150°	257.9	4.3
150°-160°	185.4	3.1
160°-170°	113.4	1.9
170°-180°	38.2	0.6
0°-30°	961.8	16.0
0°-40°	1566.0	26.0
0°-60°	2736.8	45.4
0°-90°	3422.2	56.8
90°-120°	1241.3	20.6
90°-150°	2264.2	37.6
90°-180°	2601.0	43.2
0°-180°	6023.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1255	1253	1238	1249	1247	119
15°	1204	1199	1187	1197	1197	339
25°	1106	1103	1092	1099	1101	509
35°	975	970	962	964	968	608
45°	813	808	802	797	799	625
55°	623	624	616	610	612	558
65°	424	422	414	410	411	419
75°	215	213	208	204	204	229
85°	35	39	39	40	40	49
90°	1	3	6	8	8	3
95°	28	103	333	142	91	30
105°	93	142	571	869	811	98
115°	164	200	458	912	1035	162
125°	226	258	415	703	823	202
135°	273	303	404	568	643	210
145°	315	337	398	484	522	198
155°	357	368	395	435	448	164
165°	386	391	397	413	415	109
175°	399	400	398	403	402	38
180°	399	399	399	399	399	

TEST NUMBER: P520044

CATALOG NUMBER: SQ4-F-075U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.4	1254.4	1254.4	1254.4	1254.4
2.5°	1259.1	1256.5	1245.4	1254.3	1253.0
5°	1255.2	1252.7	1238.0	1249.1	1247.4
7.5°	1243.5	1241.0	1228.0	1238.3	1236.8
10°	1234.6	1232.0	1219.1	1229.4	1228.5
12.5°	1222.9	1220.3	1207.3	1217.6	1216.8
15°	1203.6	1199.4	1187.2	1196.7	1196.7
17.5°	1178.1	1174.9	1163.6	1171.5	1171.7
20°	1158.8	1156.3	1145.0	1153.6	1154.5
22.5°	1139.5	1137.0	1124.4	1132.3	1133.8
25°	1105.5	1102.9	1092.5	1098.6	1101.1
27.5°	1070.3	1066.6	1056.3	1061.8	1063.5
30°	1043.4	1041.8	1032.2	1034.9	1037.4
32.5°	1015.2	1013.5	1005.4	1006.7	1011.2
35°	974.6	970.3	962.5	964.3	967.6
37.5°	926.5	924.5	916.9	915.9	919.1
40°	896.2	892.8	885.9	884.2	886.8
42.5°	863.2	859.8	851.4	849.8	853.0
45°	812.7	808.5	801.5	797.2	798.9
47.5°	756.2	756.2	749.0	744.1	746.6
50°	719.7	719.7	711.1	706.9	709.4
52.5°	681.9	682.5	673.3	671.0	670.1
55°	623.3	624.1	616.4	610.4	612.1
57.5°	566.8	565.0	556.0	552.1	552.9
60°	526.9	524.3	517.4	511.5	515.7
62.5°	486.3	485.1	478.2	471.4	470.9
65°	423.6	421.9	414.1	409.8	410.7
67.5°	361.3	359.2	352.1	346.0	348.2
70°	318.5	318.5	310.8	307.3	304.8
72.5°	279.3	275.9	270.2	265.3	263.5
75°	215.2	212.7	208.4	204.0	204.0
77.5°	156.6	154.5	151.7	148.7	147.9
80°	118.8	118.0	114.5	113.5	109.3
82.5°	83.7	83.5	81.4	79.2	79.1
85°	35.3	38.6	38.7	39.6	39.6
87.5°	6.3	10.9	10.8	9.8	9.8
90°	0.9	3.3	6.0	7.6	7.6
92.5°	11.7	50.1	86.9	33.4	27.4
95°	28.1	102.8	333.0	142.4	90.9
97.5°	45.7	114.0	508.2	391.5	276.3
100°	58.6	120.9	563.3	568.6	463.8
102.5°	70.8	129.2	577.6	705.3	609.3
105°	92.6	142.4	570.9	869.4	811.3
107.5°	113.4	158.8	538.5	949.9	967.2
110°	128.3	169.8	514.0	969.9	1029.7



TEST NUMBER: P520044

CATALOG NUMBER: SQ4-F-075U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.9	182.1	489.5	957.0	1048.1
115°	163.9	199.7	458.0	911.8	1034.8
117.5°	185.1	217.9	437.9	848.5	987.5
120°	198.0	229.6	429.0	801.0	944.8
122.5°	209.5	241.1	422.9	759.4	895.8
125°	225.9	257.5	415.4	702.8	823.3
127.5°	241.6	271.7	410.5	655.5	761.2
130°	249.8	280.5	407.8	627.5	723.8
132.5°	259.3	290.0	405.7	602.8	689.9
135°	272.7	302.6	403.6	568.4	643.1
137.5°	285.3	313.0	401.7	540.5	602.1
140°	294.8	320.5	401.0	522.0	577.7
142.5°	302.9	326.7	399.7	505.6	553.2
145°	315.1	336.8	397.6	484.3	521.6
147.5°	328.3	346.8	396.6	465.4	495.3
150°	336.5	353.0	395.9	455.0	478.3
152.5°	343.9	359.2	395.3	446.1	465.4
155°	356.8	368.5	395.1	435.3	447.7
157.5°	366.2	375.6	395.1	426.4	435.0
160°	373.0	380.4	395.1	421.6	428.2
162.5°	378.4	384.5	395.7	417.5	422.7
165°	385.7	390.7	396.7	413.0	415.4
167.5°	390.8	394.7	397.6	409.1	409.8
170°	394.2	396.7	397.6	407.8	407.8
172.5°	396.9	398.1	397.6	405.7	405.0
175°	399.3	400.1	397.6	402.7	401.8
177.5°	400.0	400.0	397.2	401.3	400.0
180°	399.3	399.3	399.3	399.3	399.3

(END OF REPORT)