

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: P520209

Luminaire Tested: **SQ4-F-100U-075D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520209
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

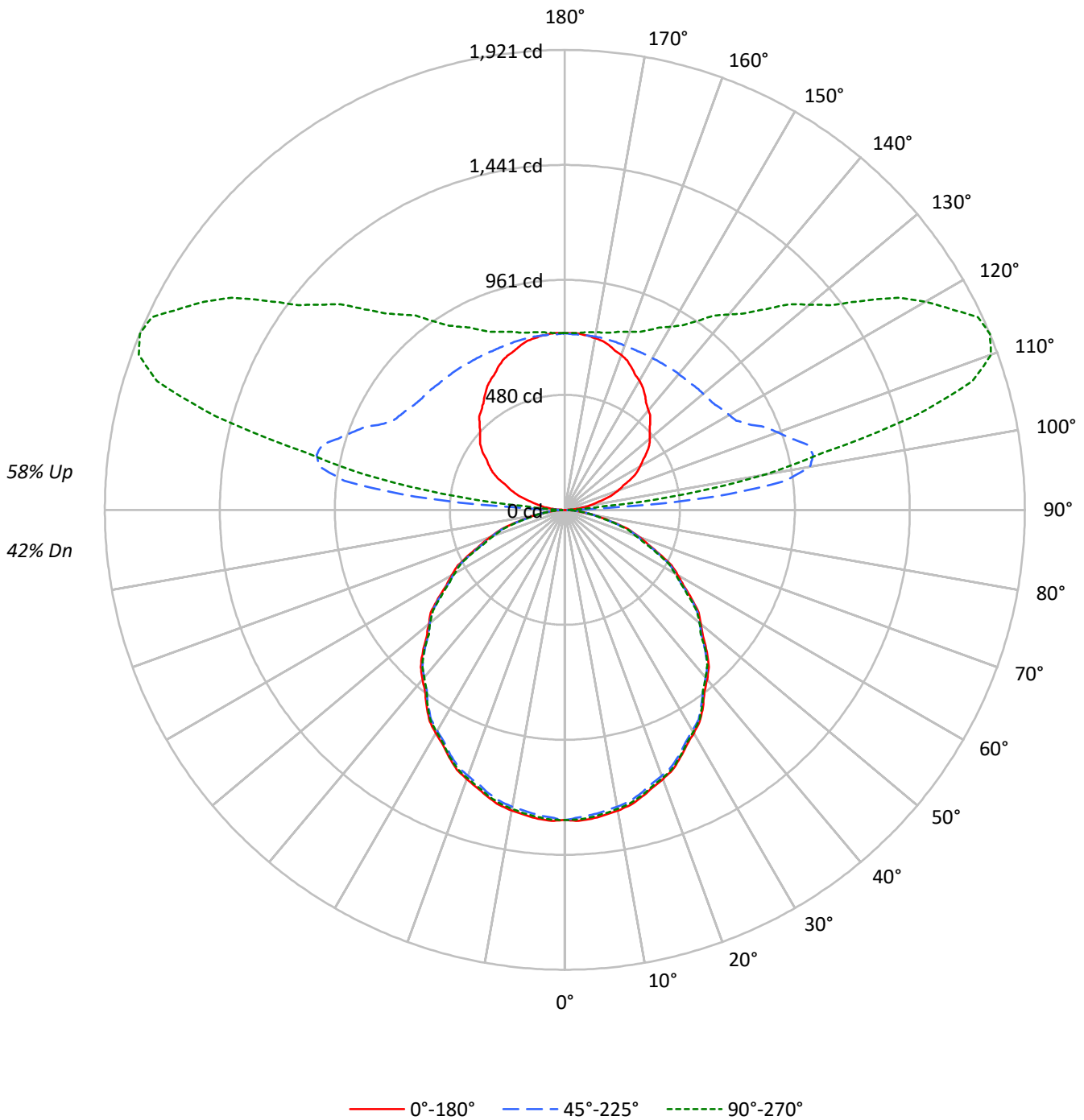
Lumens per Lamp: N/A
Luminaire Lumens: 8332.4 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7865	7923
15°	7906	7809	7876
20°	7834	7742	7804
25°	7748	7669	7725
30°	7651	7566	7608
35°	7550	7470	7506
40°	7422	7347	7337
45°	7295	7203	7223
50°	7093	7036	7036
55°	6927	6840	6777
60°	6704	6589	6531
65°	6341	6223	6137
70°	5956	5809	5661
75°	5359	5164	5052
80°	4282	4204	4162
85°	2569	2901	2985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	1.5
10°-20°	348.1	4.2
20°-30°	523.1	6.3
30°-40°	624.1	7.5
40°-50°	640.1	7.7
50°-60°	570.3	6.8
60°-70°	425.2	5.1
70°-80°	230.6	2.8
80°-90°	54.5	0.7
90°-100°	345.5	4.1
100°-110°	953.9	11.4
110°-120°	983.8	11.8
120°-130°	790.5	9.5
130°-140°	621.3	7.5
140°-150°	476.5	5.7
150°-160°	342.4	4.1
160°-170°	209.4	2.5
170°-180°	70.6	0.8
0°-30°	993.5	11.9
0°-40°	1617.6	19.4
0°-60°	2828.0	33.9
0°-90°	3538.4	42.5
90°-120°	2283.2	27.4
90°-150°	4171.5	50.1
90°-180°	4794.0	57.5
0°-180°	8332.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1296	1293	1279	1290	1288	123
15°	1242	1239	1226	1236	1237	350
25°	1142	1140	1130	1136	1138	526
35°	1006	1003	995	995	1000	628
45°	839	835	828	828	830	645
55°	646	645	638	632	632	577
65°	436	436	428	423	422	434
75°	226	221	217	214	213	237
85°	36	39	41	41	42	50
90°	2	5	9	11	12	5
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1295.6	1295.6	1295.6	1295.6	1295.6
2.5°	1300.3	1297.6	1286.2	1295.6	1294.6
5°	1295.6	1293.3	1279.2	1289.7	1288.5
7.5°	1285.0	1282.5	1268.6	1279.2	1278.9
10°	1275.6	1272.2	1259.2	1269.7	1268.6
12.5°	1263.4	1260.0	1247.0	1257.5	1256.4
15°	1241.6	1239.2	1226.3	1235.7	1236.9
17.5°	1216.7	1212.3	1200.7	1209.9	1211.0
20°	1196.9	1193.5	1182.8	1191.1	1192.2
22.5°	1176.2	1172.8	1162.2	1170.4	1171.5
25°	1141.7	1140.5	1130.0	1135.9	1138.2
27.5°	1104.4	1101.2	1092.6	1097.1	1099.4
30°	1077.2	1074.8	1065.3	1069.0	1071.2
32.5°	1048.9	1047.5	1039.1	1040.7	1044.0
35°	1005.5	1003.2	994.9	995.0	999.6
37.5°	957.3	954.7	947.9	946.8	948.6
40°	924.4	921.0	915.0	913.8	913.8
42.5°	890.6	888.0	880.2	878.2	880.9
45°	838.7	835.3	828.1	828.2	830.4
47.5°	782.5	781.1	772.9	769.1	770.0
50°	741.2	743.5	735.3	730.7	735.3
52.5°	705.5	704.1	696.8	692.1	694.0
55°	646.0	644.9	637.8	632.0	632.0
57.5°	586.4	583.4	576.1	571.6	575.1
60°	545.0	543.9	535.6	527.5	530.9
62.5°	503.6	501.6	493.3	488.0	490.6
65°	435.7	435.7	427.6	422.9	421.7
67.5°	376.3	370.8	366.3	360.6	359.0
70°	331.2	326.6	323.0	318.2	314.8
72.5°	287.1	284.3	278.9	274.2	273.5
75°	225.5	220.9	217.3	213.7	212.6
77.5°	160.5	159.5	156.3	154.4	155.1
80°	120.9	120.9	118.7	118.6	117.5
82.5°	85.3	86.2	85.7	83.8	83.6
85°	36.4	38.7	41.1	41.1	42.3
87.5°	7.1	12.1	12.2	12.5	12.7
90°	2.4	4.6	9.4	10.7	11.8
92.5°	21.3	88.2	157.7	57.6	44.8
95°	50.7	187.0	626.9	257.7	167.7
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.1	1047.4	851.1
102.5°	132.3	238.2	1061.7	1294.1	1108.0
105°	169.9	262.3	1049.5	1602.2	1508.8
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.8	1893.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	263.9	335.0	903.1	1757.5	1921.0
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	426.0	792.2	1474.5	1737.8
122.5°	386.3	445.8	779.9	1399.6	1648.9
125°	417.9	475.6	766.1	1296.6	1521.7
127.5°	444.9	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.5	1271.4
135°	502.9	557.1	744.9	1050.2	1184.1
137.5°	528.8	578.3	742.1	998.7	1113.0
140°	543.1	591.6	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.4
145°	583.1	623.6	735.5	894.1	962.1
147.5°	606.3	641.6	732.9	860.4	913.2
150°	623.3	652.2	731.9	840.3	883.1
152.5°	636.6	663.6	730.9	823.1	858.4
155°	657.5	679.5	729.5	802.2	827.6
157.5°	676.9	693.7	729.8	786.8	804.1
160°	688.2	703.2	730.7	778.2	791.0
162.5°	697.7	710.9	731.7	770.6	780.6
165°	711.8	721.0	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.1	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.3	748.4
175°	737.9	738.9	734.3	744.9	742.5
177.5°	739.7	738.7	734.0	740.6	738.7
180°	737.9	737.9	737.9	737.9	737.9

(END OF REPORT)