

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: P520212

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520212
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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

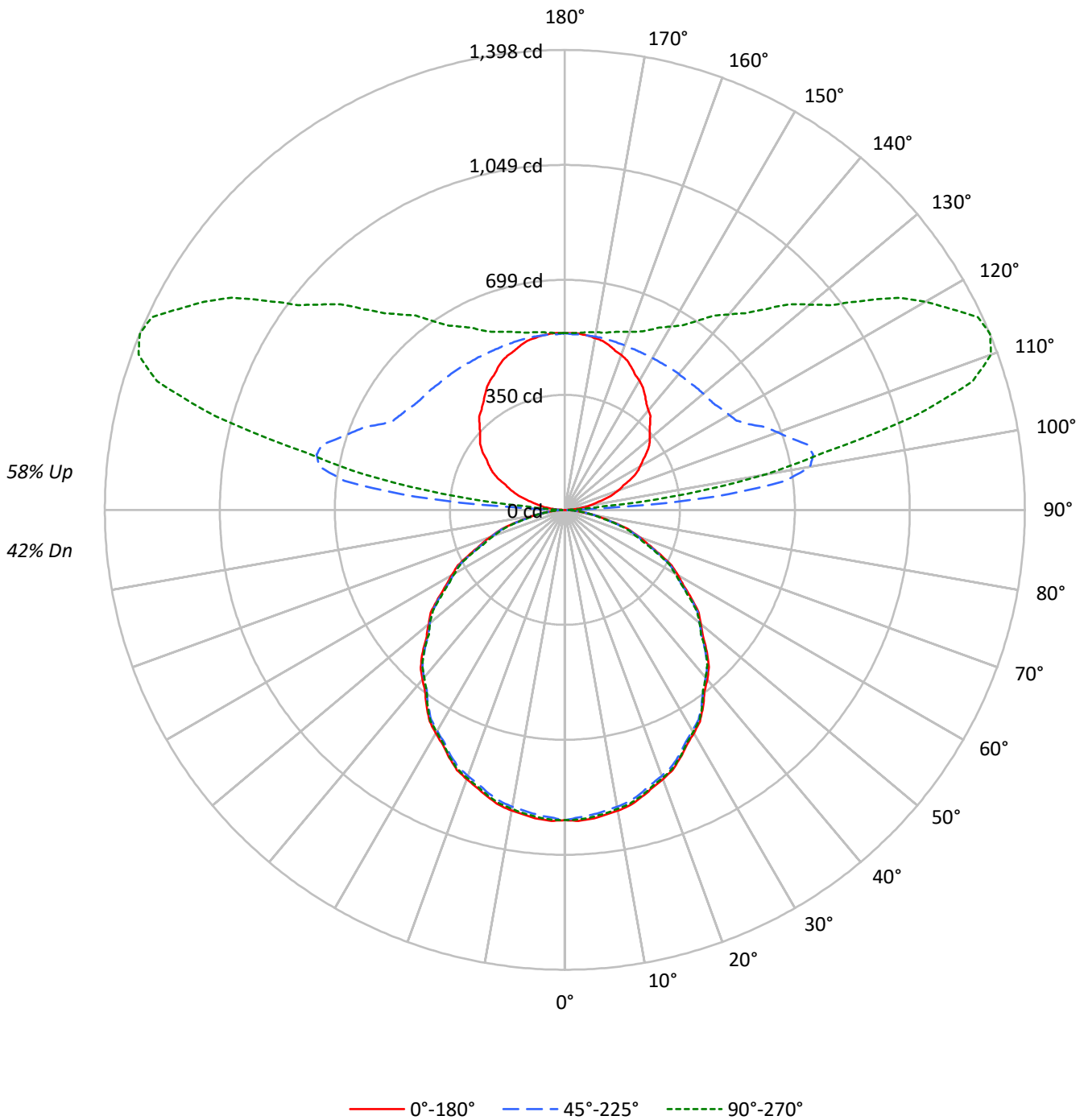
Lumens per Lamp: N/A
Luminaire Lumens: 6065.4 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
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°	8701	8701	8701
5°	8734	8623	8687
10°	8700	8588	8651
15°	8633	8526	8599
20°	8555	8455	8520
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8158	8195
40°	8104	8022	8012
45°	7966	7865	7887
50°	7745	7682	7682
55°	7565	7468	7399
60°	7322	7195	7130
65°	6927	6796	6700
70°	6504	6342	6183
75°	5850	5636	5518
80°	4681	4591	4543
85°	2805	3165	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.5
10°-20°	253.4	4.2
20°-30°	380.8	6.3
30°-40°	454.3	7.5
40°-50°	465.9	7.7
50°-60°	415.2	6.8
60°-70°	309.6	5.1
70°-80°	167.9	2.8
80°-90°	39.7	0.7
90°-100°	251.5	4.1
100°-110°	694.4	11.4
110°-120°	716.1	11.8
120°-130°	575.5	9.5
130°-140°	452.3	7.5
140°-150°	346.9	5.7
150°-160°	249.3	4.1
160°-170°	152.5	2.5
170°-180°	51.4	0.8
0°-30°	723.2	11.9
0°-40°	1177.5	19.4
0°-60°	2058.6	33.9
0°-90°	2575.7	42.5
90°-120°	1662.0	27.4
90°-150°	3036.6	50.1
90°-180°	3490.0	57.5
0°-180°	6065.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	943	942	931	939	938	89
15°	904	902	893	900	900	255
25°	831	830	823	827	829	383
35°	732	730	724	724	728	457
45°	610	608	603	603	604	470
55°	470	469	464	460	460	420
65°	317	317	311	308	307	316
75°	164	161	158	156	155	172
85°	26	28	30	30	31	37
90°	2	3	7	8	9	3
95°	37	136	456	188	122	40
105°	124	191	764	1166	1098	132
115°	222	268	615	1218	1385	218
125°	304	346	558	944	1108	271
135°	366	406	542	764	862	283
145°	424	454	535	651	700	266
155°	479	495	531	584	602	221
165°	518	525	534	554	559	146
175°	537	538	534	542	540	51
180°	537	537	537	537	537	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	943.1	943.1	943.1	943.1	943.1
2.5°	946.6	944.5	936.2	943.1	942.4
5°	943.1	941.5	931.1	938.8	938.0
7.5°	935.4	933.6	923.4	931.1	931.0
10°	928.6	926.1	916.7	924.3	923.4
12.5°	919.7	917.1	907.7	915.4	914.6
15°	903.8	902.1	892.6	899.5	900.3
17.5°	885.7	882.5	874.0	880.7	881.5
20°	871.3	868.8	861.1	867.1	867.8
22.5°	856.2	853.8	846.0	852.0	852.8
25°	831.1	830.3	822.6	826.9	828.6
27.5°	803.9	801.6	795.3	798.7	800.3
30°	784.1	782.4	775.5	778.1	779.8
32.5°	763.5	762.5	756.3	757.6	760.0
35°	731.9	730.3	724.3	724.3	727.6
37.5°	696.8	695.0	690.0	689.2	690.5
40°	672.9	670.4	666.1	665.2	665.2
42.5°	648.3	646.4	640.7	639.2	641.3
45°	610.5	608.0	602.8	602.8	604.5
47.5°	569.7	568.6	562.6	559.9	560.5
50°	539.6	541.2	535.2	531.9	535.2
52.5°	513.6	512.5	507.2	503.8	505.1
55°	470.3	469.4	464.3	460.0	460.0
57.5°	426.9	424.6	419.3	416.2	418.6
60°	396.8	395.9	389.9	384.0	386.4
62.5°	366.7	365.2	359.1	355.2	357.1
65°	317.3	317.3	311.3	307.8	306.9
67.5°	274.0	269.9	266.6	262.4	261.3
70°	241.1	237.7	235.1	231.6	229.2
72.5°	209.0	206.9	203.0	199.6	199.1
75°	164.1	160.8	158.1	155.6	154.8
77.5°	116.8	116.1	113.8	112.4	112.9
80°	88.1	88.1	86.4	86.3	85.5
82.5°	62.1	62.8	62.4	61.0	60.9
85°	26.5	28.1	29.9	29.9	30.8
87.5°	5.1	8.9	8.9	9.1	9.3
90°	1.7	3.4	6.8	7.7	8.6
92.5°	15.4	64.2	114.8	41.9	32.6
95°	37.0	136.1	456.3	187.6	122.1
97.5°	61.2	152.4	675.9	520.4	376.9
100°	79.0	162.2	757.0	762.4	619.5
102.5°	96.3	173.4	772.9	942.0	806.6
105°	123.8	190.9	764.0	1166.3	1098.2
107.5°	152.9	212.8	721.3	1274.5	1299.3
110°	173.6	227.3	688.3	1297.8	1378.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	192.1	243.9	657.4	1279.4	1398.4
115°	221.7	267.9	615.3	1218.0	1385.3
117.5°	247.5	293.5	587.6	1131.8	1322.0
120°	264.7	310.0	576.6	1073.4	1264.9
122.5°	281.1	324.6	567.7	1018.8	1200.3
125°	304.2	346.2	557.7	943.8	1107.7
127.5°	323.8	365.8	551.9	880.4	1021.8
130°	336.8	378.9	549.1	841.6	970.2
132.5°	349.2	389.3	546.3	809.1	925.5
135°	366.1	405.6	542.3	764.5	861.9
137.5°	385.0	420.9	540.2	727.0	810.2
140°	395.3	430.6	538.8	702.0	775.2
142.5°	407.0	439.6	537.4	679.8	744.2
145°	424.5	454.0	535.4	650.8	700.4
147.5°	441.4	467.1	533.5	626.3	664.8
150°	453.8	474.7	532.8	611.7	642.8
152.5°	463.3	483.0	532.1	599.2	624.9
155°	478.7	494.6	531.1	583.9	602.4
157.5°	492.7	505.0	531.2	572.8	585.4
160°	501.0	511.9	531.9	566.5	575.7
162.5°	507.9	517.5	532.6	561.0	568.2
165°	518.2	524.9	533.7	554.4	558.6
167.5°	526.1	530.1	534.5	550.4	551.7
170°	530.2	533.6	534.5	548.2	548.2
172.5°	533.7	535.7	534.5	545.5	544.9
175°	537.0	537.9	534.5	542.2	540.5
177.5°	538.4	537.8	534.4	539.1	537.7
180°	537.0	537.0	537.0	537.0	537.0

(END OF REPORT)