

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: P520216

Luminaire Tested: **SQ4-F-100U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520216
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-940-1D-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

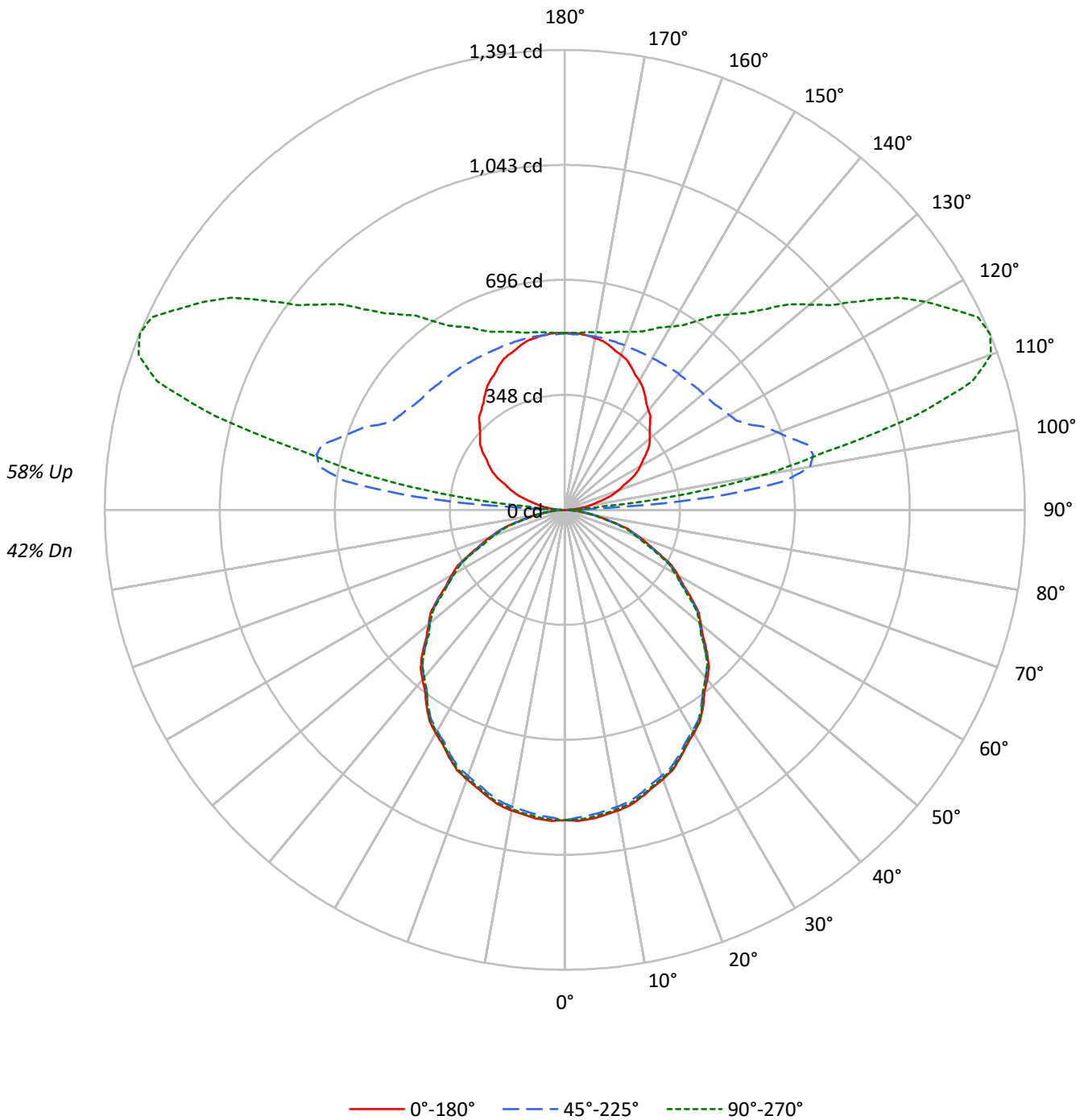
Lumens per Lamp: N/A
Luminaire Lumens: 6034.7 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P520216
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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°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8543	8607
15°	8589	8483	8556
20°	8512	8410	8477
25°	8418	8330	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7972
45°	7925	7826	7848
50°	7705	7645	7645
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6761	6667
70°	6471	6310	6150
75°	5825	5611	5490
80°	4654	4564	4516
85°	2795	3155	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	1.5
10°-20°	252.1	4.2
20°-30°	378.8	6.3
30°-40°	452.0	7.5
40°-50°	463.6	7.7
50°-60°	413.1	6.8
60°-70°	308.0	5.1
70°-80°	167.0	2.8
80°-90°	39.5	0.7
90°-100°	250.2	4.1
100°-110°	690.9	11.4
110°-120°	712.5	11.8
120°-130°	572.6	9.5
130°-140°	450.0	7.5
140°-150°	345.1	5.7
150°-160°	248.0	4.1
160°-170°	151.7	2.5
170°-180°	51.1	0.8
0°-30°	719.5	11.9
0°-40°	1171.5	19.4
0°-60°	2048.2	33.9
0°-90°	2562.7	42.5
90°-120°	1653.6	27.4
90°-150°	3021.2	50.1
90°-180°	3472.0	57.5
0°-180°	6034.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	938	937	926	934	933	89
15°	899	898	888	895	896	254
25°	827	826	818	823	824	381
35°	728	726	720	721	724	455
45°	607	605	600	600	602	467
55°	468	467	462	458	458	418
65°	316	316	310	306	305	314
75°	163	160	157	155	154	172
85°	26	28	30	30	31	37
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	647	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	539	538	51
180°	534	534	534	534	534	

TEST NUMBER: P520216

CATALOG NUMBER: SQ4-F-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.3	938.3	938.3	938.3	938.3
2.5°	941.7	939.8	931.5	938.3	937.6
5°	938.3	936.6	926.4	934.1	933.2
7.5°	930.6	928.9	918.7	926.4	926.2
10°	923.8	921.4	911.9	919.6	918.7
12.5°	915.0	912.5	903.1	910.7	909.9
15°	899.2	897.6	888.1	895.0	895.8
17.5°	881.1	878.0	869.6	876.2	877.1
20°	866.9	864.4	856.6	862.6	863.4
22.5°	851.9	849.4	841.7	847.7	848.5
25°	826.9	826.0	818.3	822.7	824.3
27.5°	799.8	797.5	791.3	794.6	796.3
30°	780.1	778.4	771.6	774.2	775.8
32.5°	759.7	758.7	752.5	753.8	756.2
35°	728.2	726.5	720.5	720.6	724.0
37.5°	693.4	691.5	686.5	685.7	687.1
40°	669.5	667.0	662.7	661.9	661.9
42.5°	645.1	643.2	637.5	636.0	638.1
45°	607.4	604.9	599.8	599.8	601.5
47.5°	566.7	565.7	559.7	557.1	557.8
50°	536.8	538.5	532.6	529.2	532.6
52.5°	510.9	509.9	504.6	501.3	502.6
55°	467.9	467.0	461.9	457.7	457.7
57.5°	424.6	422.6	417.1	414.0	416.6
60°	394.7	393.9	387.9	382.0	384.5
62.5°	364.8	363.3	357.3	353.4	355.2
65°	315.6	315.6	309.7	306.2	305.4
67.5°	272.6	268.6	265.2	261.2	260.0
70°	239.9	236.6	233.9	230.5	228.0
72.5°	207.9	206.0	201.9	198.6	198.1
75°	163.4	160.0	157.4	154.8	154.0
77.5°	116.2	115.5	113.2	111.8	112.3
80°	87.6	87.6	85.9	85.9	85.0
82.5°	61.8	62.4	62.1	60.7	60.6
85°	26.4	28.0	29.8	29.8	30.6
87.5°	5.1	8.8	8.9	9.1	9.2
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.3	41.6	32.4
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.8	151.6	672.6	517.8	375.0
100°	78.6	161.4	753.3	758.5	616.5
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.2	190.0	760.1	1160.4	1092.7
107.5°	152.1	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



TEST NUMBER: P520216

CATALOG NUMBER: SQ4-F-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.8	1391.2
115°	220.6	266.6	612.1	1211.9	1378.3
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.4	573.6	1068.0	1258.6
122.5°	279.8	322.9	564.8	1013.7	1194.3
125°	302.7	344.4	554.9	939.1	1102.1
127.5°	322.2	363.9	549.1	876.0	1016.6
130°	335.1	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	804.9	920.9
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.3	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.4	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.5	472.4	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.3	581.0	599.4
157.5°	490.3	502.4	528.5	569.9	582.5
160°	498.5	509.3	529.2	563.7	572.9
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.5	531.8	547.5	548.9
170°	527.6	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.4	537.7
177.5°	535.8	535.1	531.6	536.4	535.1
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)