

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: P564930

Luminaire Tested: **SQ4-PW1-100U-075D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

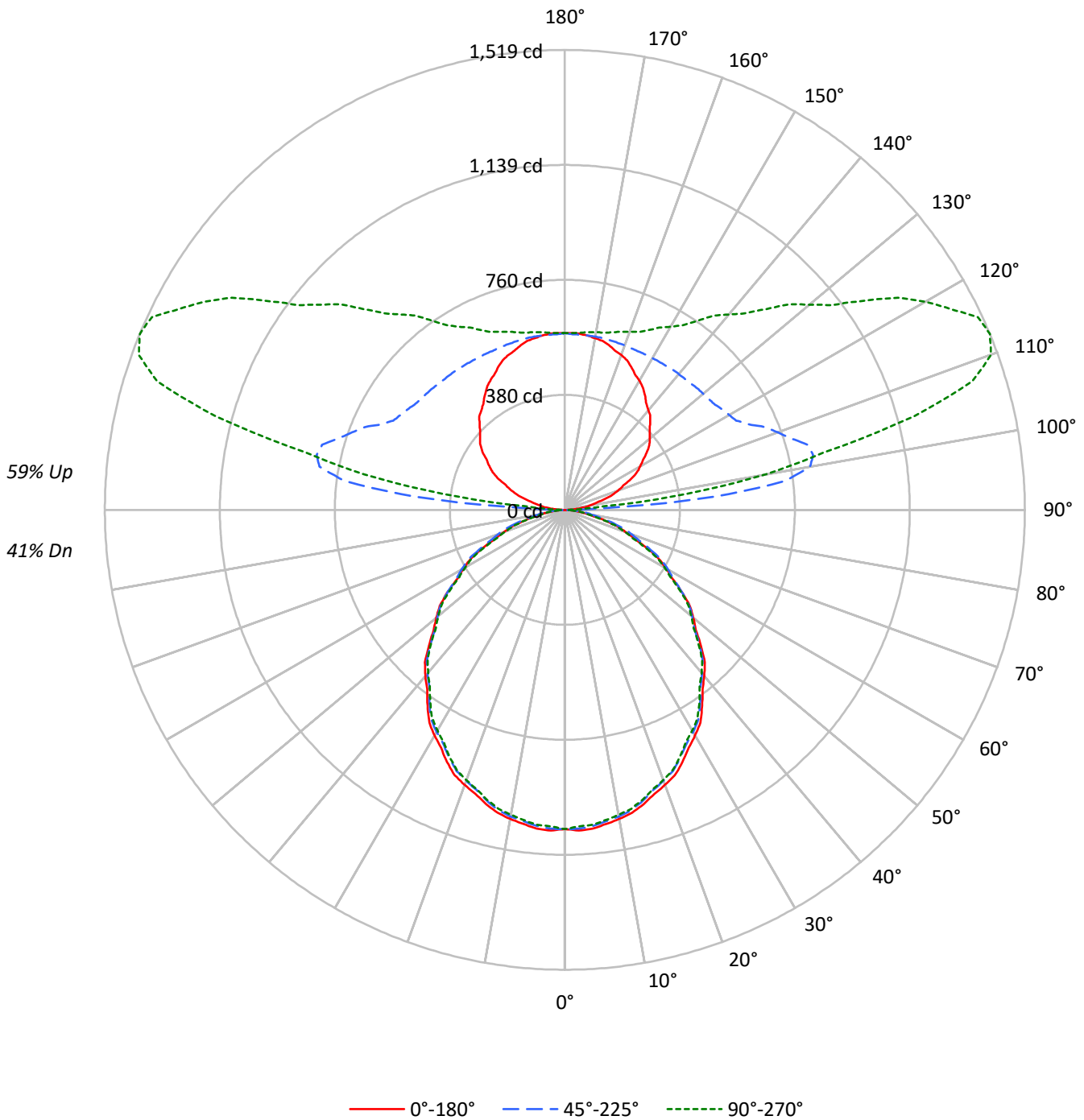
Lumens per Lamp: N/A
Luminaire Lumens: 6474.4 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9726	9726	9726
5°	9789	9712	9669
10°	9711	9633	9581
15°	9608	9502	9467
20°	9493	9348	9329
25°	9362	9190	9163
30°	9163	9025	8965
35°	8903	8777	8726
40°	8625	8491	8457
45°	8289	8181	8144
50°	7946	7879	7825
55°	7575	7575	7456
60°	7113	7250	6993
65°	6510	6833	6346
70°	5738	6288	5587
75°	4902	5629	4770
80°	3799	4739	3852
85°	2456	3642	3250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	1.5
10°-20°	280.3	4.3
20°-30°	415.7	6.4
30°-40°	486.5	7.5
40°-50°	484.3	7.5
50°-60°	418.2	6.5
60°-70°	301.0	4.6
70°-80°	157.9	2.4
80°-90°	40.3	0.6
90°-100°	273.2	4.2
100°-110°	754.3	11.7
110°-120°	777.9	12.0
120°-130°	625.1	9.7
130°-140°	491.3	7.6
140°-150°	376.8	5.8
150°-160°	270.8	4.2
160°-170°	165.6	2.6
170°-180°	55.8	0.9
0°-30°	795.3	12.3
0°-40°	1281.7	19.8
0°-60°	2184.2	33.7
0°-90°	2683.5	41.4
90°-120°	1805.5	27.9
90°-150°	3298.7	50.9
90°-180°	3791.0	58.6
0°-180°	6474.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1057	1045	1049	1046	1044	100
15°	1006	993	995	993	991	284
25°	920	904	903	897	900	423
35°	790	780	779	772	775	494
45°	635	630	627	625	624	490
55°	471	470	471	464	464	420
65°	298	307	313	301	291	295
75°	138	150	158	147	134	147
85°	23	30	34	32	31	31
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1054.2	1054.2	1054.2	1054.2	1054.2
2.5°	1060.2	1051.5	1054.2	1051.9	1046.8
5°	1057.0	1045.2	1048.7	1045.8	1044.0
7.5°	1046.3	1035.4	1037.9	1034.9	1033.8
10°	1036.6	1025.7	1028.2	1024.5	1022.7
12.5°	1025.4	1013.8	1016.3	1012.6	1011.5
15°	1005.9	993.2	994.8	992.9	991.1
17.5°	983.3	970.4	970.6	967.7	967.3
20°	966.9	953.3	952.1	948.4	950.2
22.5°	949.1	934.7	933.5	928.3	930.9
25°	919.6	904.1	902.8	897.3	900.1
27.5°	885.4	870.1	870.1	862.4	865.3
30°	860.1	845.6	847.1	837.9	841.5
32.5°	833.4	820.3	821.1	811.9	815.5
35°	790.5	779.6	779.3	771.9	774.7
37.5°	746.6	737.0	735.5	731.2	731.9
40°	716.1	708.0	705.0	702.2	702.2
42.5°	684.2	676.7	673.8	671.7	671.0
45°	635.3	629.9	627.0	625.1	624.2
47.5°	587.0	581.9	579.4	578.1	577.2
50°	553.6	550.0	548.9	546.1	545.2
52.5°	520.2	518.0	517.0	513.4	512.5
55°	470.9	470.0	470.9	464.4	463.5
57.5°	419.7	421.1	424.1	415.3	413.2
60°	385.5	389.1	392.9	382.6	379.0
62.5°	350.5	356.4	361.7	349.9	344.8
65°	298.2	307.2	313.0	300.7	290.7
67.5°	247.6	258.9	265.8	252.6	241.3
70°	212.7	225.4	233.1	219.8	207.1
72.5°	182.2	196.4	202.7	190.1	177.4
75°	137.5	150.2	157.9	147.4	133.8
77.5°	97.5	109.5	115.9	106.7	95.5
80°	71.5	84.2	89.2	81.5	72.5
82.5°	50.7	61.3	64.6	60.0	53.9
85°	23.2	30.5	34.4	32.5	30.7
87.5°	6.3	11.8	15.6	15.8	16.7
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)