

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: P564974

Luminaire Tested: **SQ4-PW1-100U-100D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564974
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-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

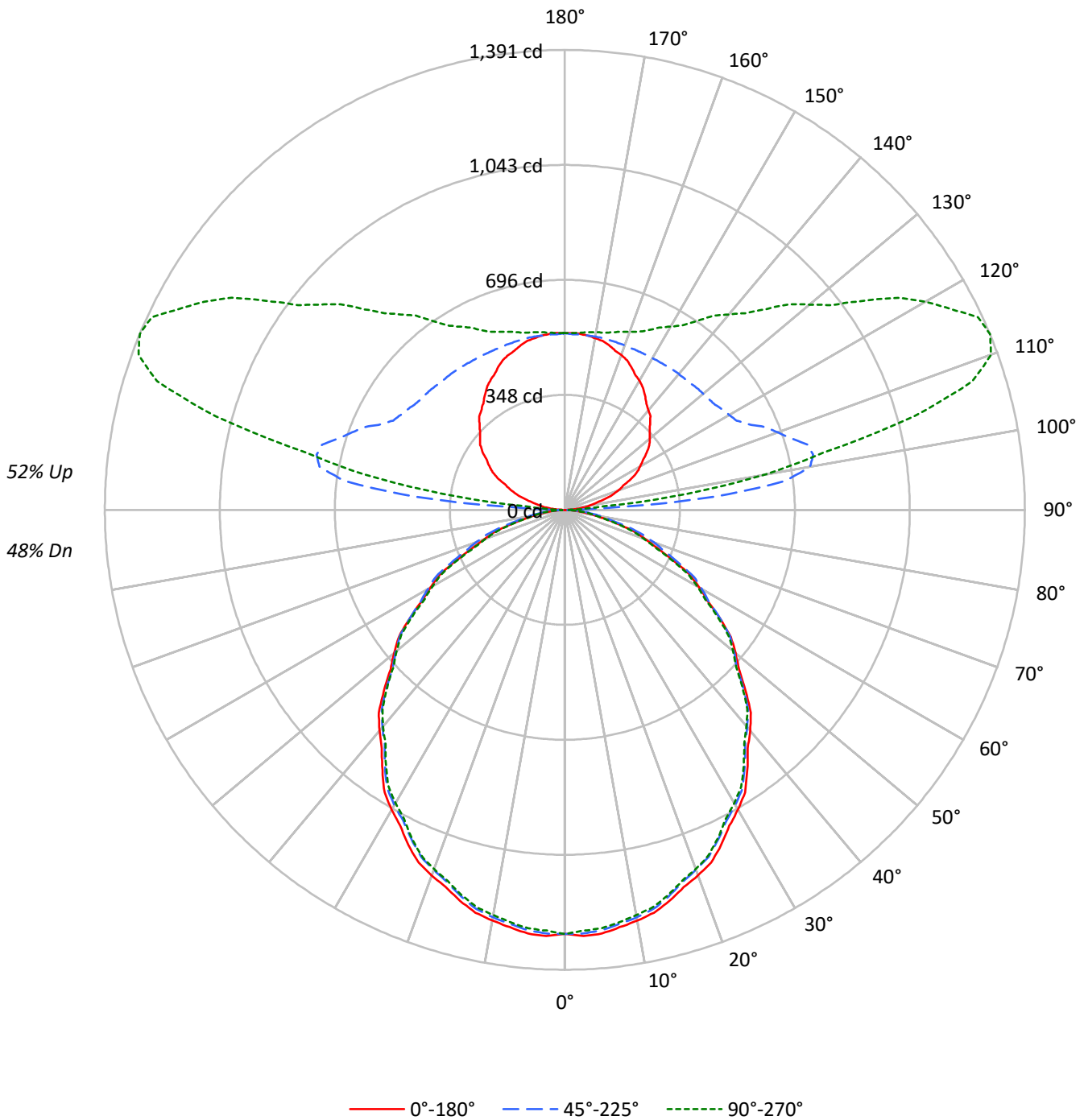
Lumens per Lamp: N/A
Luminaire Lumens: 6737.3 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.9
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29				29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25				25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17				17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15				15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11836	11836	11836
5°	11913	11819	11767
10°	11818	11723	11659
15°	11692	11563	11520
20°	11553	11376	11353
25°	11391	11185	11150
30°	11151	10983	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10087	9955	9911
50°	9670	9588	9523
55°	9219	9219	9072
60°	8656	8822	8510
65°	7920	8315	7724
70°	6981	7653	6801
75°	5964	6851	5803
80°	4622	5765	4686
85°	2996	4425	3949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.8
10°-20°	341.1	5.1
20°-30°	505.9	7.5
30°-40°	592.0	8.8
40°-50°	589.3	8.7
50°-60°	508.9	7.6
60°-70°	366.3	5.4
70°-80°	192.1	2.9
80°-90°	48.7	0.7
90°-100°	250.2	3.7
100°-110°	690.9	10.3
110°-120°	712.5	10.6
120°-130°	572.6	8.5
130°-140°	450.0	6.7
140°-150°	345.1	5.1
150°-160°	248.0	3.7
160°-170°	151.7	2.3
170°-180°	51.1	0.8
0°-30°	967.8	14.4
0°-40°	1559.8	23.2
0°-60°	2658.0	39.5
0°-90°	3265.2	48.5
90°-120°	1653.6	24.5
90°-150°	3021.2	44.8
90°-180°	3472.0	51.5
0°-180°	6737.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1286	1272	1276	1273	1270	122
15°	1224	1209	1211	1208	1206	345
25°	1119	1100	1099	1092	1095	515
35°	962	949	948	939	943	601
45°	773	766	763	761	760	597
55°	573	572	573	565	564	511
65°	363	374	381	366	354	360
75°	167	183	192	179	163	179
85°	28	37	42	40	37	37
90°	2	3	7	8	8	4
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	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.9	1282.9	1282.9	1282.9	1282.9
2.5°	1290.2	1279.6	1282.9	1280.1	1273.9
5°	1286.3	1271.9	1276.1	1272.7	1270.5
7.5°	1273.2	1259.9	1263.0	1259.4	1258.1
10°	1261.5	1248.2	1251.3	1246.7	1244.5
12.5°	1247.9	1233.7	1236.8	1232.3	1230.9
15°	1224.1	1208.7	1210.6	1208.3	1206.1
17.5°	1196.6	1180.9	1181.2	1177.6	1177.1
20°	1176.7	1160.1	1158.6	1154.1	1156.3
22.5°	1155.0	1137.5	1136.0	1129.7	1132.8
25°	1119.0	1100.2	1098.7	1092.0	1095.3
27.5°	1077.4	1058.9	1058.9	1049.5	1053.0
30°	1046.7	1029.0	1030.9	1019.7	1024.1
32.5°	1014.1	998.2	999.2	988.0	992.4
35°	961.9	948.6	948.3	939.4	942.7
37.5°	908.6	896.8	895.0	889.8	890.7
40°	871.5	861.5	857.9	854.5	854.5
42.5°	832.6	823.5	819.9	817.4	816.6
45°	773.1	766.5	763.0	760.7	759.6
47.5°	714.4	708.2	705.1	703.5	702.4
50°	673.7	669.3	668.0	664.6	663.5
52.5°	633.0	630.3	629.1	624.8	623.7
55°	573.1	572.0	573.1	565.1	564.0
57.5°	510.7	512.5	516.1	505.4	502.8
60°	469.1	473.5	478.1	465.6	461.2
62.5°	426.6	433.7	440.2	425.8	419.6
65°	362.8	373.9	380.9	366.0	353.8
67.5°	301.3	315.1	323.5	307.4	293.7
70°	258.8	274.3	283.7	267.5	252.1
72.5°	221.8	239.0	246.6	231.4	215.9
75°	167.3	182.8	192.2	179.3	162.8
77.5°	118.7	133.3	141.1	129.9	116.2
80°	87.0	102.5	108.5	99.2	88.2
82.5°	61.7	74.5	78.7	73.1	65.6
85°	28.3	37.1	41.8	39.5	37.3
87.5°	7.6	14.1	18.5	18.7	19.8
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
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	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
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	527.4	531.8	547.6	548.9
170°	527.5	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	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)