

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: P564686

Luminaire Tested: **SQ4-PW1-050U-100D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564686
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4987.1 lumens
Efficiency: N/A
Efficacy: 110.6 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: Semi-Direct

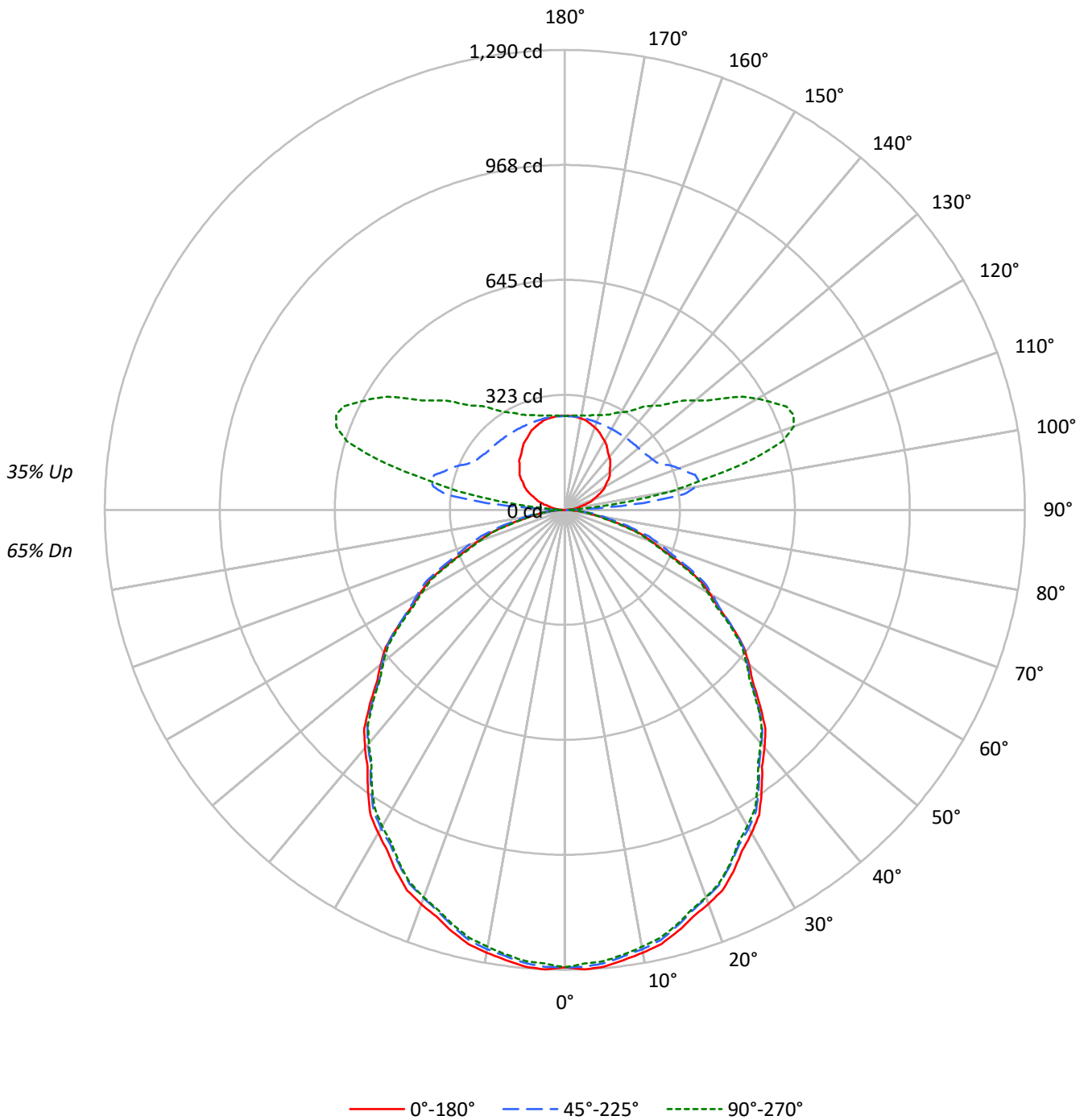
Input Watts (W): 45.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

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	2.4
10°-20°	341.1	6.8
20°-30°	505.9	10.1
30°-40°	592.0	11.9
40°-50°	589.3	11.8
50°-60°	508.9	10.2
60°-70°	366.3	7.3
70°-80°	192.1	3.9
80°-90°	48.6	1.0
90°-100°	126.6	2.5
100°-110°	343.9	6.9
110°-120°	353.6	7.1
120°-130°	282.7	5.7
130°-140°	222.2	4.5
140°-150°	170.3	3.4
150°-160°	122.5	2.5
160°-170°	74.9	1.5
170°-180°	25.2	0.5
0°-30°	967.8	19.4
0°-40°	1559.8	31.3
0°-60°	2658.0	53.3
0°-90°	3265.1	65.5
90°-120°	824.1	16.5
90°-150°	1499.3	30.1
90°-180°	1722.0	34.5
0°-180°	4987.1	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°	1	3	6	8	8	2
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	343	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

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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°	7.4	14.1	18.4	18.7	19.6
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)