

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: P564670

Luminaire Tested: **SQ4-PW1-050U-100D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564670
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

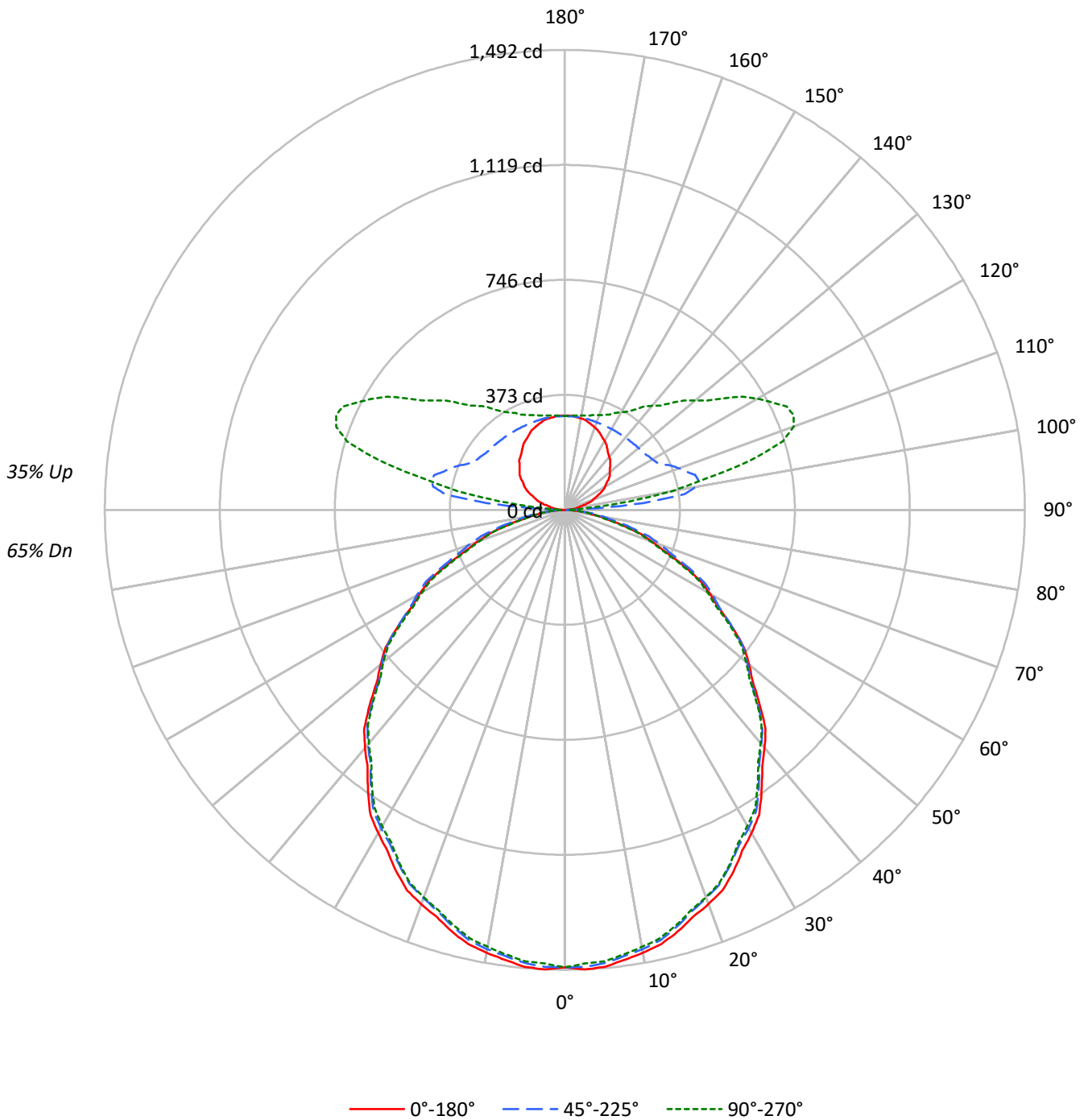
Lumens per Lamp: N/A
Luminaire Lumens: 5768.9 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	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°	13692	13692	13692
5°	13781	13672	13612
10°	13671	13560	13487
15°	13526	13376	13326
20°	13364	13159	13133
25°	13178	12938	12898
30°	12899	12704	12620
35°	12532	12356	12282
40°	12142	11952	11905
45°	11669	11516	11465
50°	11186	11091	11016
55°	10663	10663	10496
60°	10012	10206	9844
65°	9162	9619	8935
70°	8076	8853	7866
75°	6898	7924	6712
80°	5350	6668	5419
85°	3462	5124	4563



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	2.4
10°-20°	394.5	6.8
20°-30°	585.2	10.1
30°-40°	684.8	11.9
40°-50°	681.7	11.8
50°-60°	588.7	10.2
60°-70°	423.7	7.3
70°-80°	222.2	3.9
80°-90°	56.3	1.0
90°-100°	146.4	2.5
100°-110°	397.8	6.9
110°-120°	409.0	7.1
120°-130°	327.0	5.7
130°-140°	257.0	4.5
140°-150°	197.0	3.4
150°-160°	141.7	2.5
160°-170°	86.7	1.5
170°-180°	29.2	0.5
0°-30°	1119.5	19.4
0°-40°	1804.3	31.3
0°-60°	3074.7	53.3
0°-90°	3777.0	65.5
90°-120°	953.3	16.5
90°-150°	1734.4	30.1
90°-180°	1992.0	34.5
0°-180°	5768.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1488	1471	1476	1472	1470	141
15°	1416	1398	1400	1398	1395	399
25°	1294	1273	1271	1263	1267	595
35°	1113	1097	1097	1087	1090	696
45°	894	887	883	880	879	690
55°	663	662	663	654	652	591
65°	420	432	441	423	409	416
75°	194	211	222	208	188	207
85°	33	43	48	46	43	43
90°	1	4	7	9	9	3
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.0	1484.0	1484.0	1484.0	1484.0
2.5°	1492.4	1480.1	1484.0	1480.7	1473.6
5°	1488.0	1471.3	1476.2	1472.2	1469.7
7.5°	1472.8	1457.5	1461.0	1456.8	1455.3
10°	1459.2	1443.9	1447.4	1442.1	1439.6
12.5°	1443.5	1427.1	1430.7	1425.4	1423.9
15°	1416.1	1398.2	1400.4	1397.7	1395.1
17.5°	1384.1	1366.0	1366.4	1362.2	1361.7
20°	1361.1	1342.0	1340.2	1335.0	1337.6
22.5°	1336.0	1315.8	1314.1	1306.8	1310.4
25°	1294.5	1272.7	1270.9	1263.2	1267.0
27.5°	1246.3	1224.9	1224.9	1214.0	1218.1
30°	1210.8	1190.3	1192.5	1179.5	1184.6
32.5°	1173.1	1154.7	1155.9	1142.9	1148.0
35°	1112.7	1097.4	1097.0	1086.6	1090.5
37.5°	1051.0	1037.4	1035.3	1029.3	1030.3
40°	1008.1	996.6	992.4	988.5	988.5
42.5°	963.1	952.6	948.5	945.6	944.6
45°	894.3	886.7	882.6	879.9	878.7
47.5°	826.4	819.2	815.6	813.8	812.5
50°	779.3	774.2	772.7	768.8	767.5
52.5°	732.2	729.1	727.8	722.8	721.5
55°	662.9	661.6	662.9	653.7	652.5
57.5°	590.7	592.8	597.0	584.7	581.6
60°	542.6	547.7	553.1	538.6	533.5
62.5°	493.5	501.6	509.2	492.5	485.4
65°	419.7	432.5	440.6	423.3	409.3
67.5°	348.6	364.4	374.2	355.5	339.7
70°	299.4	317.3	328.2	309.5	291.6
72.5°	256.5	276.5	285.3	267.6	249.7
75°	193.5	211.4	222.3	207.5	188.3
77.5°	137.3	154.2	163.2	150.3	134.4
80°	100.7	118.6	125.5	114.8	102.0
82.5°	71.4	86.2	91.0	84.5	75.8
85°	32.7	42.9	48.4	45.7	43.1
87.5°	8.6	16.3	21.2	21.7	22.7
90°	1.0	3.9	6.9	8.8	8.8
92.5°	8.8	40.1	69.6	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.5	391.0	304.2	213.7
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.5	99.6	443.6	542.3	467.9
105°	70.6	110.0	437.5	666.1	626.8
107.5°	87.3	122.0	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.7	789.7

TEST NUMBER: P564670

CATALOG NUMBER: SQ4-PW1-050U-100D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.5	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.6	334.7	646.4	755.5
120°	151.1	176.0	327.6	612.6	721.0
122.5°	159.7	184.6	322.9	578.8	683.3
125°	172.6	196.6	316.8	533.9	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	311.9	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	208.0	231.0	308.0	434.8	490.5
137.5°	218.4	239.3	306.8	412.5	459.3
140°	224.6	244.8	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.5	303.1	347.6	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.8	333.1
160°	284.5	291.2	302.1	321.9	327.6
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.8
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.1	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.0	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.6	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)