

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: P564678

Luminaire Tested: **SQ4-PW1-050U-100D-930-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564678
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-930-1D-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

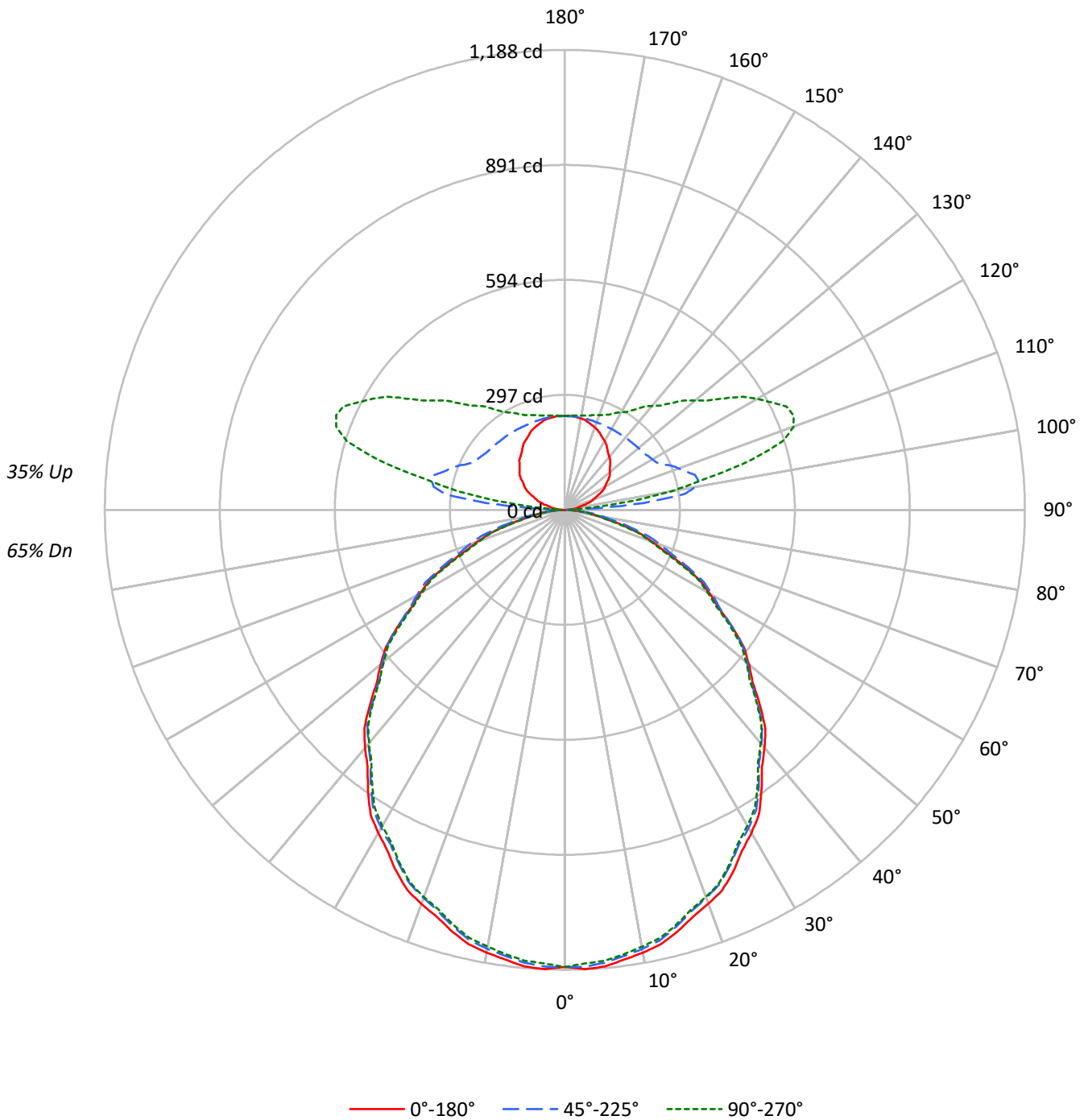
Lumens per Lamp: N/A
Luminaire Lumens: 4590.6 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	10895	10895	10895
5°	10966	10879	10831
10°	10879	10791	10733
15°	10763	10643	10604
20°	10634	10471	10451
25°	10486	10295	10263
30°	10265	10109	10043
35°	9972	9833	9774
40°	9662	9511	9474
45°	9286	9163	9123
50°	8901	8826	8767
55°	8485	8485	8352
60°	7968	8121	7833
65°	7292	7654	7110
70°	6428	7046	6258
75°	5490	6306	5340
80°	4256	5308	4314
85°	2752	4076	3631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	2.4
10°-20°	314.0	6.8
20°-30°	465.7	10.1
30°-40°	544.9	11.9
40°-50°	542.5	11.8
50°-60°	468.5	10.2
60°-70°	337.2	7.3
70°-80°	176.8	3.9
80°-90°	44.8	1.0
90°-100°	116.5	2.5
100°-110°	316.6	6.9
110°-120°	325.5	7.1
120°-130°	260.2	5.7
130°-140°	204.5	4.5
140°-150°	156.8	3.4
150°-160°	112.8	2.5
160°-170°	69.0	1.5
170°-180°	23.2	0.5
0°-30°	890.9	19.4
0°-40°	1435.8	31.3
0°-60°	2446.7	53.3
0°-90°	3005.6	65.5
90°-120°	758.6	16.5
90°-150°	1380.1	30.1
90°-180°	1585.0	34.5
0°-180°	4590.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1184	1171	1175	1172	1170	112
15°	1127	1113	1114	1112	1110	318
25°	1030	1013	1011	1005	1008	474
35°	885	873	873	865	868	554
45°	712	706	702	700	699	549
55°	528	526	528	520	519	471
65°	334	344	351	337	326	331
75°	154	168	177	165	150	165
85°	26	34	38	36	34	34
90°	1	3	6	7	7	2
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	166	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.9	1180.9	1180.9	1180.9	1180.9
2.5°	1187.6	1177.8	1180.9	1178.3	1172.6
5°	1184.1	1170.8	1174.7	1171.5	1169.5
7.5°	1172.0	1159.8	1162.6	1159.3	1158.0
10°	1161.2	1149.0	1151.8	1147.6	1145.6
12.5°	1148.7	1135.7	1138.5	1134.3	1133.1
15°	1126.8	1112.6	1114.3	1112.2	1110.2
17.5°	1101.4	1087.0	1087.3	1084.0	1083.5
20°	1083.1	1067.9	1066.5	1062.4	1064.4
22.5°	1063.2	1047.1	1045.7	1039.9	1042.8
25°	1030.1	1012.8	1011.3	1005.2	1008.2
27.5°	991.8	974.7	974.7	966.0	969.3
30°	963.5	947.2	948.9	938.6	942.7
32.5°	933.5	918.9	919.8	909.5	913.5
35°	885.4	873.2	873.0	864.7	867.8
37.5°	836.3	825.5	823.8	819.1	819.9
40°	802.2	793.0	789.7	786.6	786.6
42.5°	766.4	758.1	754.8	752.5	751.6
45°	711.7	705.6	702.3	700.2	699.2
47.5°	657.6	651.9	649.0	647.6	646.5
50°	620.1	616.1	614.9	611.8	610.8
52.5°	582.7	580.2	579.1	575.1	574.1
55°	527.5	526.5	527.5	520.2	519.2
57.5°	470.1	471.7	475.1	465.2	462.8
60°	431.8	435.9	440.1	428.6	424.5
62.5°	392.7	399.2	405.2	391.9	386.2
65°	334.0	344.2	350.6	336.9	325.7
67.5°	277.4	290.0	297.8	282.9	270.3
70°	238.3	252.5	261.2	246.3	232.0
72.5°	204.1	220.0	227.0	213.0	198.7
75°	154.0	168.2	176.9	165.1	149.8
77.5°	109.2	122.7	129.9	119.6	107.0
80°	80.1	94.4	99.9	91.3	81.2
82.5°	56.8	68.6	72.4	67.3	60.3
85°	26.0	34.2	38.5	36.4	34.3
87.5°	6.8	13.0	16.9	17.2	18.1
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>87.0</i>	110.9	298.0	582.7	639.0
115°	<i>99.9</i>	121.3	278.7	554.4	631.5
117.5°	<i>112.1</i>	132.5	266.3	514.4	601.2
120°	<i>120.2</i>	140.1	260.7	487.5	573.7
122.5°	<i>127.1</i>	146.9	257.0	460.6	543.8
125°	<i>137.4</i>	156.5	252.1	424.8	501.1
127.5°	<i>146.6</i>	165.5	249.5	397.7	463.2
130°	<i>152.2</i>	170.5	248.2	380.7	439.5
132.5°	<i>157.8</i>	176.2	247.0	366.2	418.2
135°	<i>165.5</i>	183.8	245.1	346.0	390.3
137.5°	<i>173.8</i>	190.4	244.2	328.2	365.5
140°	<i>178.8</i>	194.8	243.5	316.9	350.5
142.5°	<i>183.8</i>	198.6	242.9	308.0	336.1
145°	<i>191.2</i>	205.0	242.0	294.0	316.1
147.5°	<i>199.7</i>	211.4	241.2	283.0	300.4
150°	<i>205.3</i>	215.2	241.2	276.6	290.4
152.5°	<i>209.7</i>	218.4	240.6	271.0	282.3
155°	<i>216.2</i>	223.9	240.4	264.0	271.6
157.5°	<i>222.6</i>	228.6	240.4	259.3	265.1
160°	<i>226.4</i>	231.7	240.4	256.1	260.7
162.5°	<i>230.1</i>	234.2	241.0	253.6	257.0
165°	<i>234.2</i>	237.2	241.2	251.4	252.1
167.5°	<i>238.4</i>	239.9	242.0	248.7	249.3
170°	<i>239.6</i>	241.2	242.0	247.4	247.4
172.5°	<i>240.9</i>	241.8	242.0	246.2	246.2
175°	<i>242.8</i>	243.5	242.0	245.1	244.3
177.5°	<i>243.4</i>	243.4	241.5	244.0	242.8
180°	<i>242.8</i>	242.8	242.8	242.8	242.8

(END OF REPORT)