

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: P564906

Luminaire Tested: **SQ4-PW1-100U-050D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564906
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-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

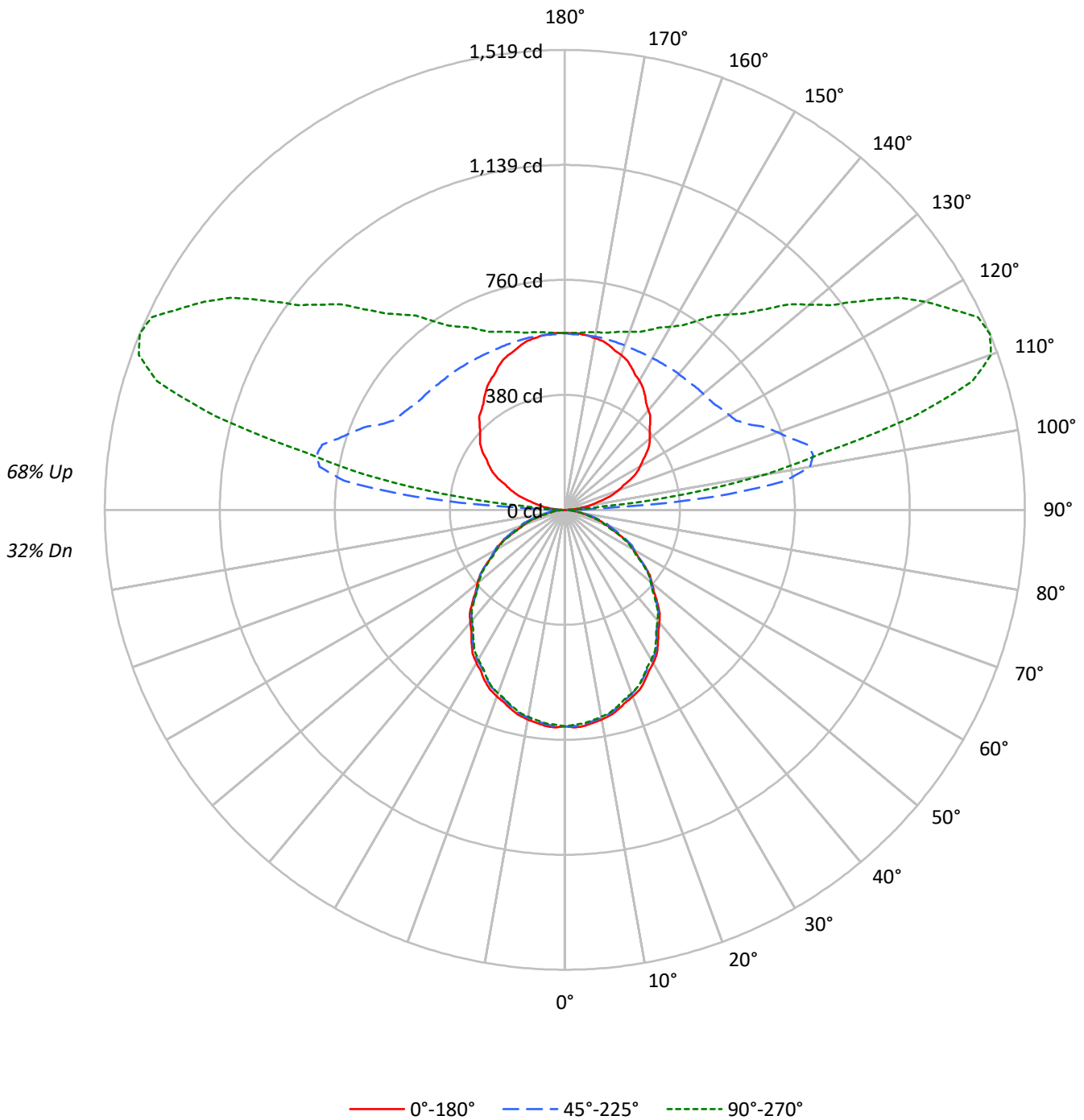
Lumens per Lamp: N/A
Luminaire Lumens: 5612.0 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6600	6600	6600
5°	6642	6590	6561
10°	6589	6535	6501
15°	6519	6446	6423
20°	6441	6343	6330
25°	6351	6236	6217
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5625	5551	5526
50°	5391	5347	5309
55°	5139	5139	5059
60°	4825	4919	4744
65°	4416	4637	4307
70°	3893	4268	3790
75°	3326	3818	3233
80°	2577	3214	2614
85°	1673	2467	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	1.2
10°-20°	190.2	3.4
20°-30°	282.1	5.0
30°-40°	330.0	5.9
40°-50°	328.6	5.9
50°-60°	283.7	5.1
60°-70°	204.3	3.6
70°-80°	107.1	1.9
80°-90°	27.8	0.5
90°-100°	273.2	4.9
100°-110°	754.3	13.4
110°-120°	777.9	13.9
120°-130°	625.1	11.1
130°-140°	491.3	8.8
140°-150°	376.8	6.7
150°-160°	270.8	4.8
160°-170°	165.6	3.0
170°-180°	55.8	1.0
0°-30°	539.6	9.6
0°-40°	869.6	15.5
0°-60°	1482.0	26.4
0°-90°	1821.1	32.4
90°-120°	1805.5	32.2
90°-150°	3298.7	58.8
90°-180°	3791.0	67.6
0°-180°	5612.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	717	709	712	710	708	68
15°	682	674	675	674	672	192
25°	624	613	613	609	611	287
35°	536	529	529	524	526	335
45°	431	427	425	424	424	333
55°	320	319	320	315	314	285
65°	202	208	212	204	197	200
75°	93	102	107	100	91	100
85°	16	21	23	22	21	21
90°	2	4	8	8	9	3
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°	715.3	715.3	715.3	715.3	715.3
2.5°	719.3	713.4	715.3	713.7	710.2
5°	717.2	709.2	711.5	709.6	708.4
7.5°	709.9	702.5	704.2	702.2	701.4
10°	703.3	695.9	697.6	695.1	693.9
12.5°	695.7	687.9	689.6	687.0	686.3
15°	682.5	673.9	674.9	673.7	672.4
17.5°	667.1	658.4	658.6	656.5	656.3
20°	656.0	646.8	646.0	643.5	644.7
22.5°	643.9	634.2	633.4	629.9	631.6
25°	623.9	613.4	612.6	608.8	610.7
27.5°	600.7	590.4	590.4	585.1	587.1
30°	583.6	573.7	574.7	568.5	571.0
32.5°	565.4	556.5	557.1	550.9	553.3
35°	536.3	528.9	528.7	523.7	525.6
37.5°	506.6	500.0	499.0	496.1	496.6
40°	485.9	480.3	478.3	476.4	476.4
42.5°	464.2	459.2	457.2	455.8	455.3
45°	431.1	427.4	425.4	424.1	423.5
47.5°	398.3	394.8	393.1	392.2	391.6
50°	375.6	373.1	372.5	370.5	369.9
52.5°	352.9	351.4	350.8	348.4	347.7
55°	319.5	318.9	319.5	315.1	314.5
57.5°	284.7	285.7	287.8	281.8	280.3
60°	261.5	264.0	266.6	259.6	257.1
62.5°	237.8	241.8	245.4	237.4	233.9
65°	202.3	208.5	212.4	204.0	197.3
67.5°	168.0	175.7	180.4	171.4	163.7
70°	144.3	152.9	158.2	149.2	140.5
72.5°	123.6	133.3	137.5	129.0	120.4
75°	93.3	101.9	107.1	100.0	90.7
77.5°	66.2	74.3	78.6	72.4	64.8
80°	48.5	57.2	60.5	55.3	49.2
82.5°	34.4	41.6	43.9	40.7	36.6
85°	15.8	20.7	23.3	22.0	20.8
87.5°	4.4	8.2	11.1	11.3	12.0
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)