

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: P563947

Luminaire Tested: **SQ4-PR1-050U-050D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563947
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

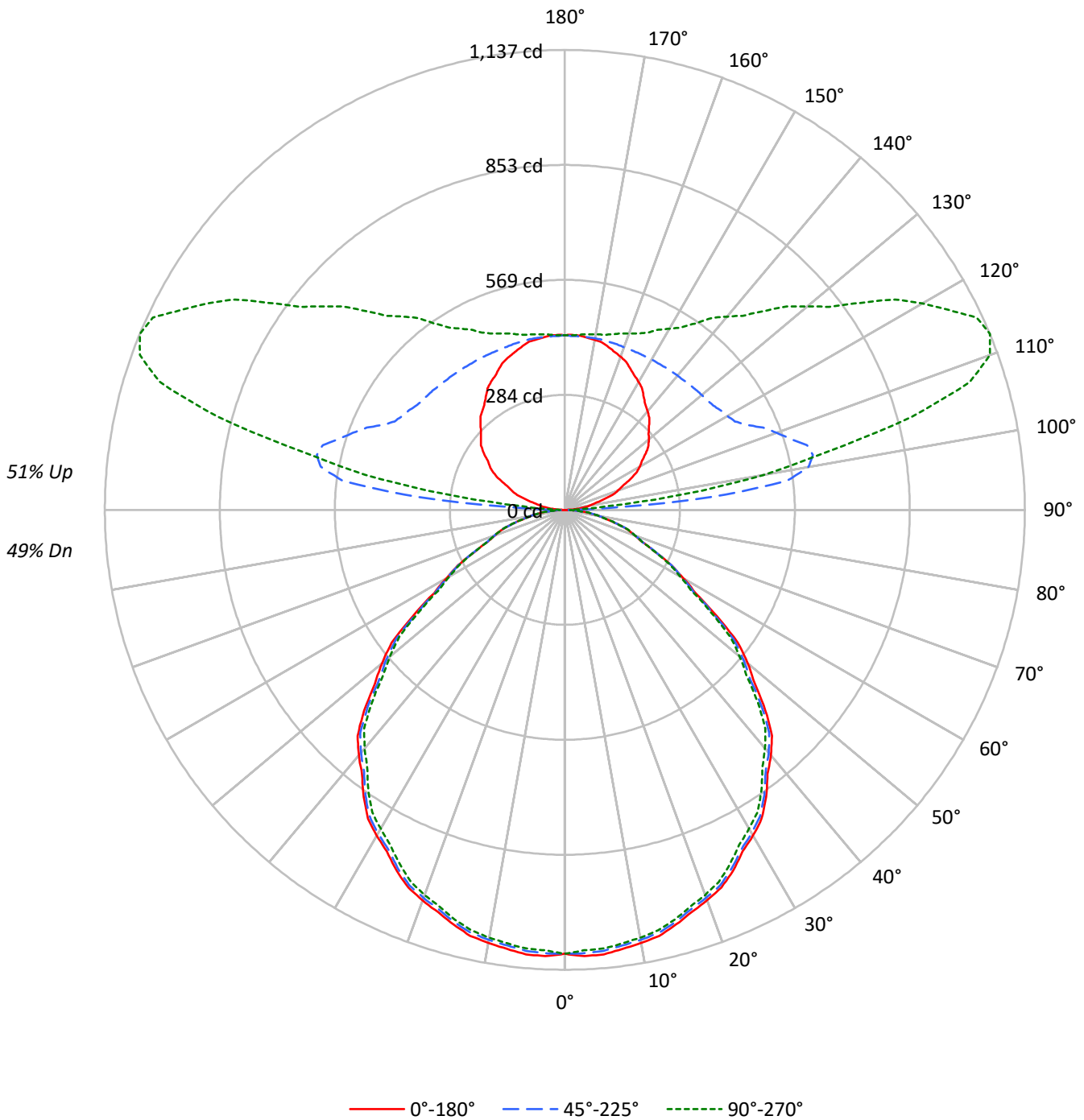
Lumens per Lamp: N/A
Luminaire Lumens: 5565.5 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 44.8
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6751	6751	6751
5°	6811	6759	6724
10°	6790	6742	6707
15°	6760	6718	6682
20°	6726	6682	6633
25°	6679	6633	6557
30°	6607	6560	6465
35°	6509	6452	6360
40°	6361	6293	6179
45°	6101	5994	5871
50°	5645	5509	5400
55°	4926	4815	4714
60°	4152	4116	4035
65°	3590	3605	3577
70°	3298	3314	3314
75°	3168	3168	3189
80°	2979	3014	2979
85°	2399	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.8	1.9
10°-20°	296.9	5.3
20°-30°	447.9	8.0
30°-40°	533.6	9.6
40°-50°	526.1	9.5
50°-60°	402.1	7.2
60°-70°	248.8	4.5
70°-80°	141.3	2.5
80°-90°	44.7	0.8
90°-100°	207.4	3.7
100°-110°	563.3	10.1
110°-120°	579.1	10.4
120°-130°	463.0	8.3
130°-140°	363.8	6.5
140°-150°	279.0	5.0
150°-160°	200.6	3.6
160°-170°	122.7	2.2
170°-180°	41.3	0.7
0°-30°	848.6	15.2
0°-40°	1382.2	24.8
0°-60°	2310.5	41.5
0°-90°	2745.3	49.3
90°-120°	1349.8	24.3
90°-150°	2455.6	44.1
90°-180°	2820.0	50.7
0°-180°	5565.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1103	1091	1095	1091	1089	105
15°	1062	1050	1055	1051	1049	300
25°	984	972	977	967	966	453
35°	867	857	859	848	847	541
45°	701	692	689	677	675	537
55°	459	452	449	441	440	412
65°	247	245	248	246	246	250
75°	133	133	133	134	134	141
85°	34	36	38	38	38	40
90°	1	6	10	12	12	3
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1097.5	1097.5	1097.5	1097.5	1097.5
2.5°	1104.3	1094.7	1097.5	1095.1	1089.9
5°	1103.2	1091.2	1094.7	1090.8	1089.0
7.5°	1094.7	1082.8	1086.3	1082.5	1081.4
10°	1087.1	1076.0	1079.5	1075.7	1073.9
12.5°	1078.8	1067.0	1071.2	1066.6	1064.8
15°	1061.6	1050.5	1055.0	1051.1	1049.3
17.5°	1042.7	1030.8	1035.3	1030.9	1028.5
20°	1027.5	1016.5	1020.9	1014.3	1013.4
22.5°	1010.9	999.8	1004.3	995.4	995.2
25°	984.1	972.0	977.4	967.0	966.1
27.5°	952.1	941.0	945.5	934.9	933.8
30°	930.2	919.1	923.6	912.2	910.3
32.5°	905.2	894.9	898.6	887.2	886.1
35°	866.8	856.7	859.3	847.9	847.0
37.5°	823.2	813.9	815.4	802.9	802.0
40°	792.2	782.9	783.7	770.4	769.5
42.5°	758.1	748.9	748.1	734.9	733.9
45°	701.4	692.2	689.1	676.8	674.9
47.5°	636.8	627.5	621.8	611.8	610.5
50°	589.9	580.6	575.7	567.1	564.3
52.5°	539.2	530.0	525.8	518.0	515.2
55°	459.4	452.0	449.0	441.4	439.6
57.5°	383.6	378.6	377.7	370.4	369.6
60°	337.5	334.7	334.6	328.0	328.0
62.5°	298.1	296.1	297.6	293.2	292.5
65°	246.7	244.9	247.7	245.8	245.8
67.5°	206.1	206.1	207.8	207.0	207.0
70°	183.4	183.4	184.3	184.3	184.3
72.5°	163.0	162.2	164.7	164.7	163.9
75°	133.3	133.3	133.3	134.2	134.2
77.5°	103.8	104.0	104.7	104.5	103.8
80°	84.1	85.1	85.1	84.1	84.1
82.5°	64.5	65.4	65.4	65.2	64.5
85°	34.0	35.9	37.8	37.8	37.8
87.5°	10.1	13.9	17.1	17.6	16.9
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)