

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: P563946

Luminaire Tested: **SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563946  
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-4  
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**

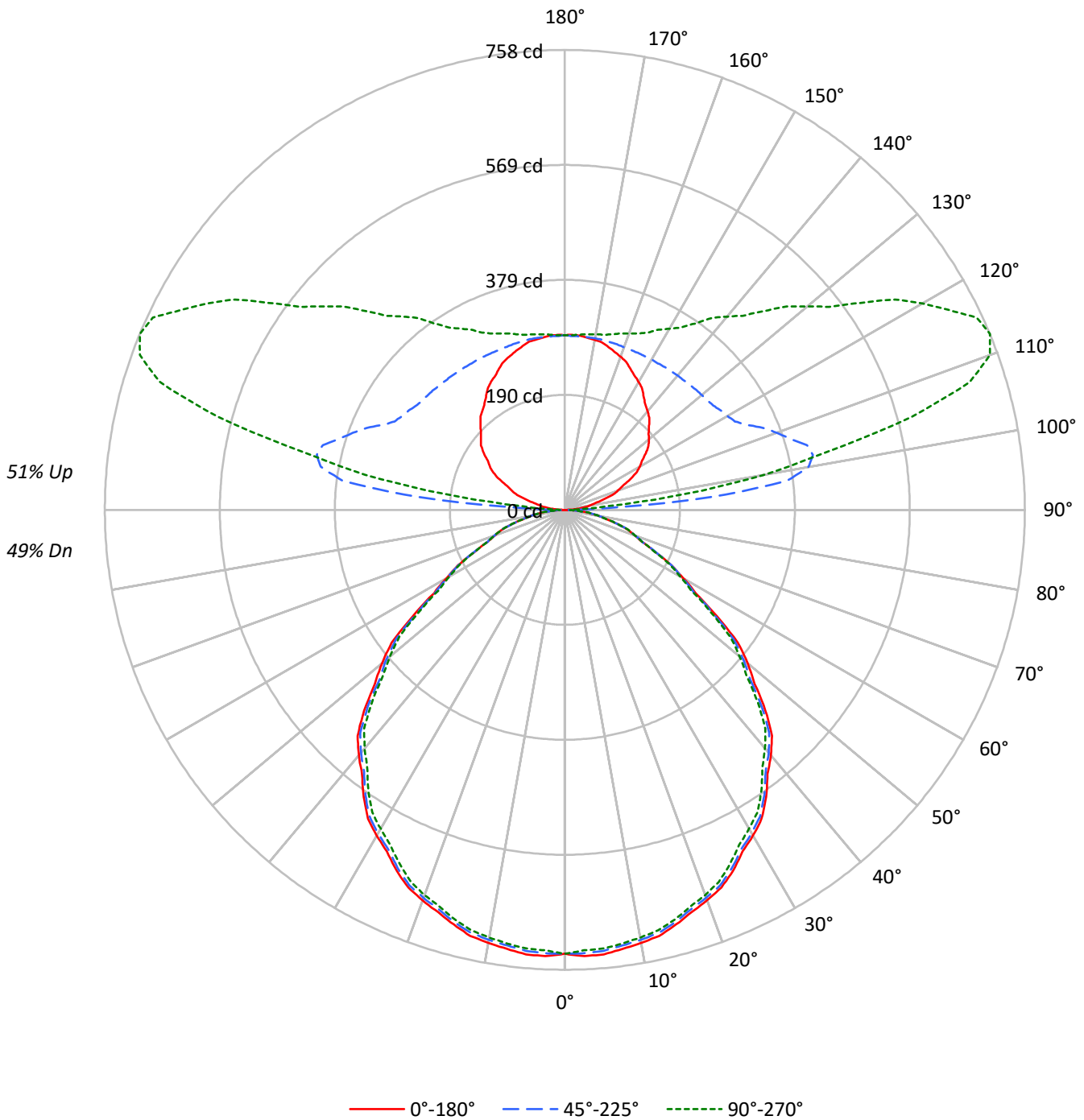
Lumens per Lamp: N/A  
Luminaire Lumens: 3710.3 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 28.5  
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



TEST NUMBER: P563946  
CATALOG NUMBER: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P563946

CATALOG NUMBER: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4

**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°	6789	6743	6707
15°	6760	6718	6681
20°	6726	6682	6633
25°	6678	6633	6557
30°	6606	6559	6466
35°	6509	6453	6360
40°	6360	6292	6179
45°	6101	5994	5872
50°	5644	5509	5400
55°	4927	4814	4713
60°	4152	4117	4036
65°	3591	3604	3578
70°	3299	3315	3315
75°	3169	3169	3190
80°	2981	3013	2981
85°	2403	2668	2668



TEST NUMBER: P563946

CATALOG NUMBER: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.2	1.9
10°-20°	198.0	5.3
20°-30°	298.6	8.0
30°-40°	355.8	9.6
40°-50°	350.7	9.5
50°-60°	268.1	7.2
60°-70°	165.9	4.5
70°-80°	94.2	2.5
80°-90°	29.8	0.8
90°-100°	138.2	3.7
100°-110°	375.5	10.1
110°-120°	386.1	10.4
120°-130°	308.7	8.3
130°-140°	242.5	6.5
140°-150°	186.0	5.0
150°-160°	133.7	3.6
160°-170°	81.8	2.2
170°-180°	27.6	0.7
0°-30°	565.7	15.2
0°-40°	921.5	24.8
0°-60°	1540.3	41.5
0°-90°	1830.2	49.3
90°-120°	899.8	24.3
90°-150°	1637.0	44.1
90°-180°	1880.0	50.7
0°-180°	3710.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	735	727	730	727	726	70
15°	708	700	703	701	700	200
25°	656	648	652	645	644	302
35°	578	571	573	565	565	361
45°	468	461	459	451	450	358
55°	306	301	299	294	293	274
65°	164	163	165	164	164	167
75°	89	89	89	90	90	94
85°	23	24	25	25	25	26
90°	1	4	6	8	8	2
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

TEST NUMBER: P563946

CATALOG NUMBER: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	731.7	731.7	731.7	731.7	731.7
2.5°	736.2	729.8	731.7	730.1	726.6
5°	735.4	727.4	729.8	727.2	726.0
7.5°	729.8	721.9	724.2	721.7	721.0
10°	724.7	717.3	719.7	717.1	715.9
12.5°	719.2	711.3	714.1	711.1	709.9
15°	707.7	700.3	703.3	700.8	699.5
17.5°	695.1	687.2	690.2	687.3	685.7
20°	685.0	677.6	680.6	676.2	675.6
22.5°	673.9	666.5	669.5	663.6	663.5
25°	656.0	648.0	651.6	644.7	644.1
27.5°	634.7	627.3	630.3	623.3	622.5
30°	620.1	612.7	615.7	608.1	606.9
32.5°	603.5	596.6	599.1	591.5	590.8
35°	577.9	571.1	572.9	565.3	564.7
37.5°	548.8	542.6	543.6	535.3	534.7
40°	528.1	521.9	522.4	513.6	513.0
42.5°	505.4	499.3	498.7	489.9	489.3
45°	467.6	461.4	459.4	451.2	450.0
47.5°	424.5	418.3	414.5	407.8	407.0
50°	393.2	387.1	383.8	378.1	376.2
52.5°	359.5	353.3	350.5	345.3	343.5
55°	306.3	301.3	299.3	294.3	293.0
57.5°	255.7	252.4	251.8	246.9	246.4
60°	225.0	223.1	223.1	218.7	218.7
62.5°	198.8	197.4	198.4	195.5	195.0
65°	164.5	163.3	165.1	163.9	163.9
67.5°	137.4	137.4	138.5	138.0	138.0
70°	122.3	122.3	122.9	122.9	122.9
72.5°	108.6	108.2	109.8	109.8	109.3
75°	88.9	88.9	88.9	89.5	89.5
77.5°	69.2	69.3	69.8	69.7	69.2
80°	56.1	56.7	56.7	56.1	56.1
82.5°	43.0	43.6	43.6	43.5	43.0
85°	22.7	23.9	25.2	25.2	25.2
87.5°	6.7	9.3	11.4	11.7	11.2
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4



TEST NUMBER: P563946

CATALOG NUMBER: SQ4-PR1-050U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)