

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: P564645

Luminaire Tested: **SQ4-PW1-050U-075D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564645  
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-075D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

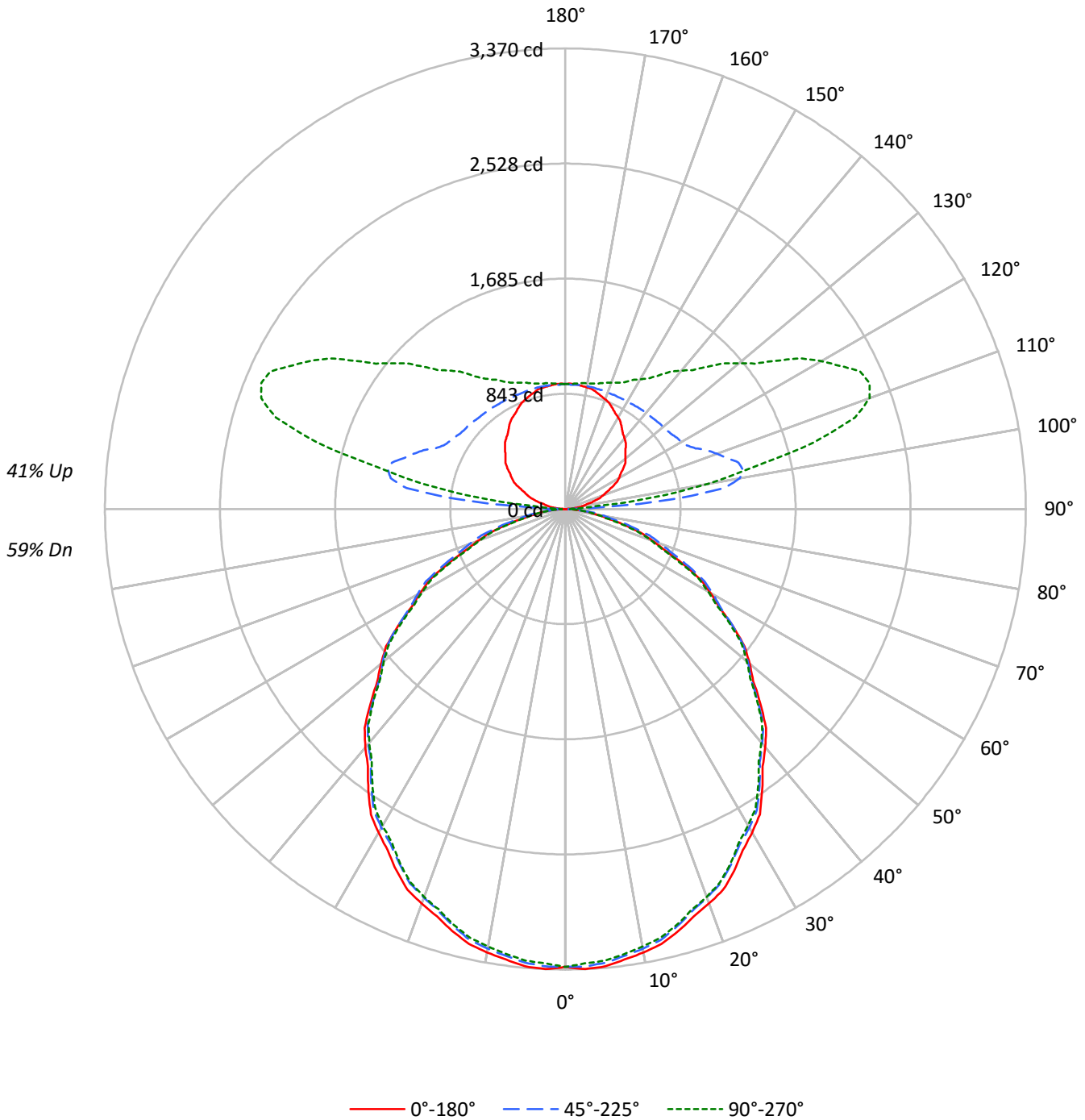
Lumens per Lamp: N/A  
Luminaire Lumens: 14504.4 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 105.6  
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									
RC	80									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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59																			
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50																			
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42																			
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36																			
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31																			
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27																			
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23																			
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21																			
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19																			
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17																			
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10305	10305	10305
5°	10372	10289	10244
10°	10289	10206	10150
15°	10180	10067	10029
20°	10058	9903	9884
25°	9918	9737	9707
30°	9708	9561	9498
35°	9432	9299	9244
40°	9138	8996	8960
45°	8782	8667	8629
50°	8418	8347	8291
55°	8026	8026	7898
60°	7536	7681	7409
65°	6896	7240	6724
70°	6079	6663	5919
75°	5191	5964	5051
80°	4026	5019	4079
85°	2604	3853	3437



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.5	2.2
10°-20°	890.8	6.1
20°-30°	1321.4	9.1
30°-40°	1546.1	10.7
40°-50°	1539.2	10.6
50°-60°	1329.2	9.2
60°-70°	956.8	6.6
70°-80°	501.7	3.5
80°-90°	127.9	0.9
90°-100°	439.4	3.0
100°-110°	1193.5	8.2
110°-120°	1227.1	8.5
120°-130°	981.1	6.8
130°-140°	770.9	5.3
140°-150°	591.1	4.1
150°-160°	425.1	2.9
160°-170°	260.0	1.8
170°-180°	87.6	0.6
0°-30°	2527.7	17.4
0°-40°	4073.8	28.1
0°-60°	6942.3	47.9
0°-90°	8528.7	58.8
90°-120°	2860.0	19.7
90°-150°	5203.1	35.9
90°-180°	5976.0	41.2
0°-180°	14504.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3351	3351	3351	3351	3351	
5°	3360	3322	3333	3324	3318	318
15°	3197	3157	3162	3156	3150	901
25°	2923	2874	2870	2852	2861	1344
35°	2512	2478	2477	2454	2462	1571
45°	2019	2002	1993	1987	1984	1558
55°	1497	1494	1497	1476	1473	1335
65°	948	976	995	956	924	939
75°	437	477	502	468	425	468
85°	74	97	109	103	97	97
90°	3	12	21	26	26	7
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3350.7	3350.7	3350.7	3350.7	3350.7
2.5°	3369.6	3341.9	3350.7	3343.3	3327.1
5°	3359.6	3322.1	3333.0	3324.0	3318.3
7.5°	3325.3	3290.7	3298.8	3289.2	3285.8
10°	3294.6	3260.0	3268.1	3256.1	3250.4
12.5°	3259.2	3222.3	3230.3	3218.4	3214.9
15°	3197.2	3156.8	3161.8	3155.8	3150.0
17.5°	3125.2	3084.2	3085.0	3075.6	3074.4
20°	3073.2	3029.9	3026.0	3014.3	3020.1
22.5°	3016.5	2970.9	2966.9	2950.6	2958.7
25°	2922.7	2873.6	2869.5	2852.0	2860.7
27.5°	2814.0	2765.5	2765.6	2741.0	2750.3
30°	2733.7	2687.5	2692.4	2663.1	2674.7
32.5°	2648.7	2607.1	2609.7	2580.5	2592.0
35°	2512.3	2477.7	2476.9	2453.5	2462.1
37.5°	2373.0	2342.4	2337.5	2324.0	2326.3
40°	2276.1	2250.2	2240.7	2231.9	2231.9
42.5°	2174.6	2150.9	2141.5	2135.0	2132.7
45°	2019.3	2002.0	1992.7	1986.8	1983.9
47.5°	1865.8	1849.6	1841.6	1837.4	1834.5
50°	1759.5	1748.0	1744.7	1735.8	1732.9
52.5°	1653.2	1646.3	1643.2	1631.9	1629.0
55°	1496.8	1493.9	1496.8	1476.0	1473.1
57.5°	1333.8	1338.4	1348.0	1320.1	1313.1
60°	1225.2	1236.7	1248.8	1216.0	1204.5
62.5°	1114.2	1132.6	1149.6	1112.0	1095.9
65°	947.7	976.5	994.9	955.8	924.0
67.5°	787.1	822.8	844.9	802.8	767.0
70°	676.1	716.5	741.0	698.8	658.3
72.5°	579.2	624.3	644.2	604.3	563.9
75°	436.9	477.3	501.9	468.4	425.1
77.5°	310.0	348.1	368.4	339.3	303.5
80°	227.3	267.7	283.4	259.1	230.3
82.5°	161.2	194.7	205.5	190.9	171.2
85°	73.8	96.9	109.2	103.2	97.4
87.5°	19.5	37.4	49.0	50.2	52.5
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)