

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: P520086

Luminaire Tested: **SQ4-F-0U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520086  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-0U-050D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

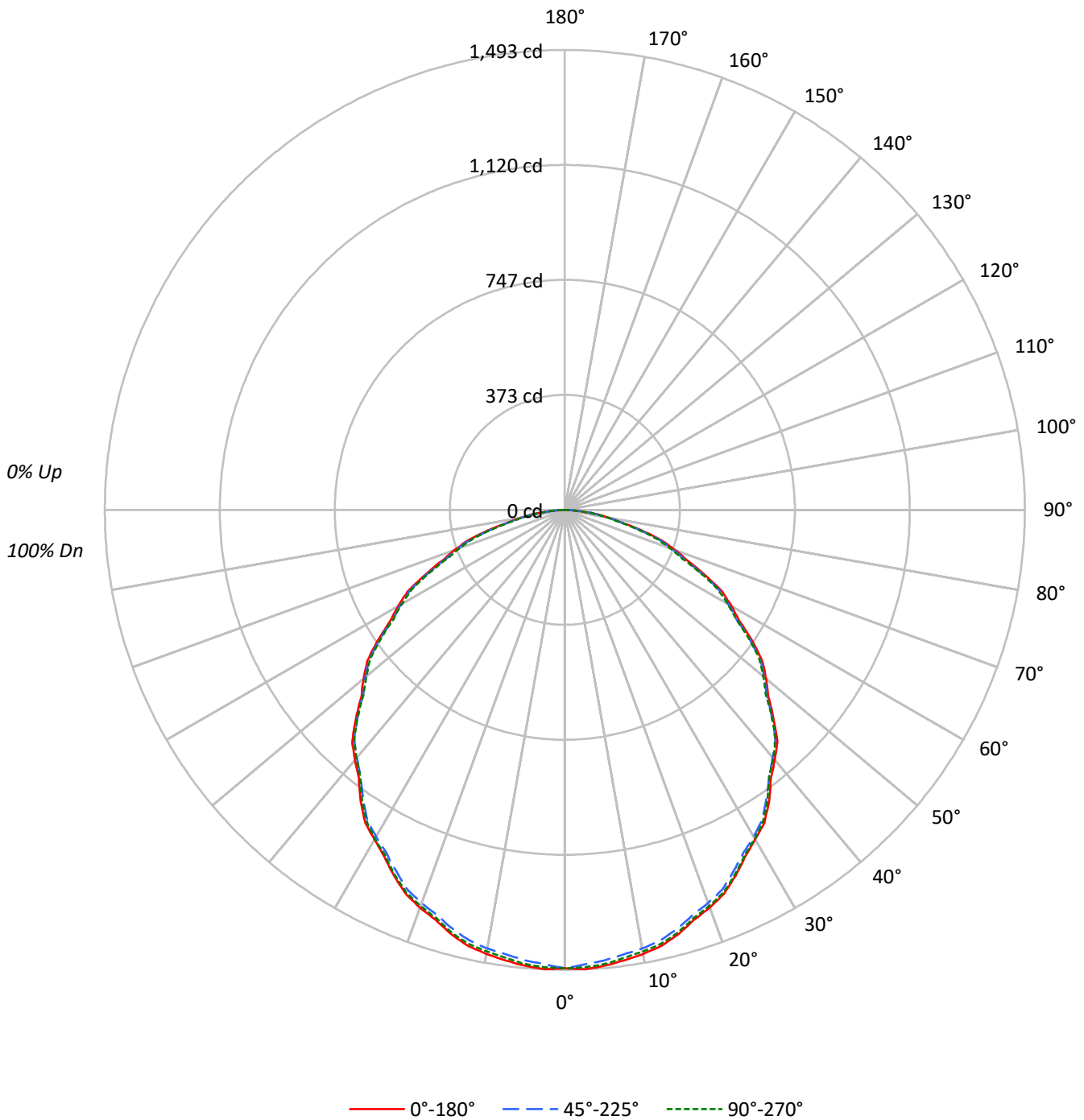
Lumens per Lamp: N/A  
Luminaire Lumens: 4061.2 lumens  
Efficiency: N/A  
Efficacy: 121.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.5  
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



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6854
10°	6858	6774	6821
15°	6811	6726	6783
20°	6748	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6507	6428	6462
40°	6381	6322	6333
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5895	5864
60°	5753	5660	5624
65°	5480	5370	5305
70°	5104	4997	4891
75°	4581	4438	4333
80°	3703	3653	3544
85°	2212	2530	2636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.4	3.5
10°-20°	399.8	9.8
20°-30°	600.5	14.8
30°-40°	716.8	17.7
40°-50°	734.5	18.1
50°-60°	655.1	16.1
60°-70°	487.9	12.0
70°-80°	264.8	6.5
80°-90°	61.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1140.7	28.1
0°-40°	1857.5	45.7
0°-60°	3247.1	80.0
0°-90°	4061.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4061.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1486	1484	1468	1482	1480	141
15°	1426	1422	1408	1420	1420	402
25°	1311	1307	1295	1303	1307	604
35°	1155	1151	1141	1142	1147	721
45°	958	960	950	948	950	739
55°	743	743	733	727	729	662
65°	502	500	492	486	486	497
75°	257	255	249	245	243	272
85°	42	46	48	50	50	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	1492.8	1489.6	1476.8	1488.0	1486.4
5°	1486.0	1484.0	1468.0	1481.9	1480.1
7.5°	1475.2	1471.4	1455.7	1469.2	1467.3
10°	1464.1	1460.2	1446.2	1458.1	1456.1
12.5°	1449.7	1447.4	1431.9	1443.8	1443.4
15°	1426.2	1422.4	1408.3	1420.2	1420.2
17.5°	1395.2	1392.8	1379.2	1390.7	1389.2
20°	1374.5	1370.5	1358.5	1368.4	1368.4
22.5°	1348.9	1346.7	1334.6	1343.0	1344.6
25°	1310.7	1306.8	1294.8	1302.8	1306.7
27.5°	1268.5	1265.4	1255.3	1260.6	1263.3
30°	1235.0	1235.0	1225.1	1227.1	1233.1
32.5°	1204.8	1204.8	1193.2	1195.2	1198.0
35°	1155.4	1151.4	1141.4	1141.6	1147.4
37.5°	1098.0	1096.0	1089.6	1088.4	1090.0
40°	1059.7	1057.7	1049.8	1051.7	1051.7
42.5°	1021.5	1019.5	1011.5	1008.8	1011.9
45°	958.2	960.1	950.2	948.2	950.2
47.5°	895.5	895.5	887.6	882.1	885.2
50°	852.5	852.5	844.6	840.6	840.6
52.5°	808.0	809.5	800.0	794.5	795.9
55°	743.0	743.0	733.0	727.1	729.1
57.5°	671.3	671.3	661.3	655.4	659.0
60°	623.5	623.5	613.5	607.6	609.6
62.5°	575.7	575.7	565.7	559.8	560.2
65°	502.0	500.0	492.0	486.0	486.0
67.5°	431.1	426.0	419.9	412.0	412.0
70°	378.4	376.5	370.5	362.6	362.6
72.5°	330.6	327.2	321.1	314.7	314.7
75°	257.0	255.0	249.0	244.9	243.1
77.5°	184.1	182.5	182.0	176.5	178.1
80°	139.4	139.4	137.5	133.4	133.4
82.5°	99.6	101.2	97.6	96.7	95.3
85°	41.8	45.8	47.8	49.8	49.8
87.5°	8.0	12.6	11.1	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)