

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: P519989

Luminaire Tested: **SQ4-F-075U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519989  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

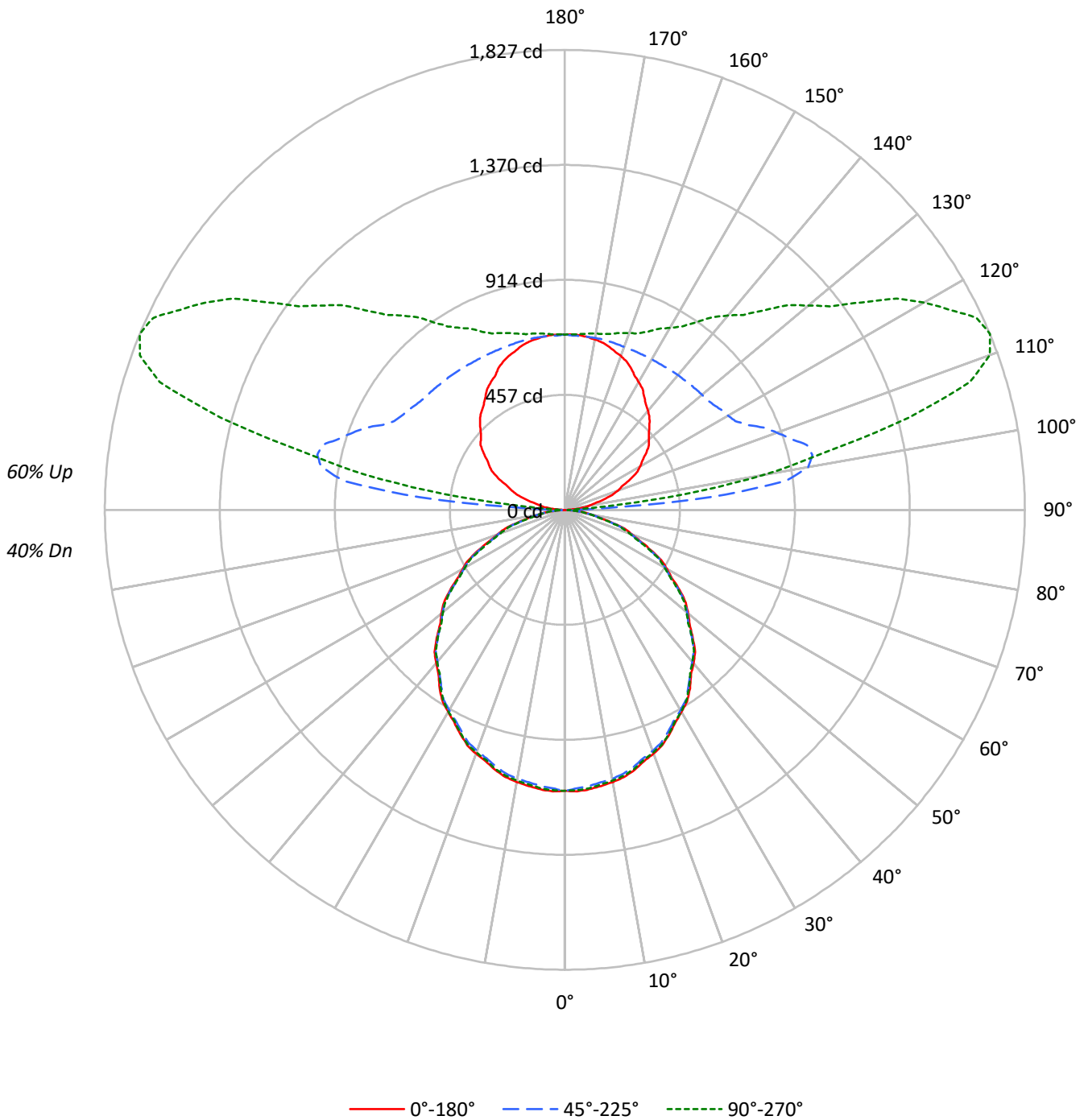
Lumens per Lamp: N/A  
Luminaire Lumens: 7583.5 lumens  
Efficiency: N/A  
Efficacy: 141.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 53.6  
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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6775	6821
15°	6812	6726	6783
20°	6747	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6506	6427	6461
40°	6382	6322	6334
45°	6251	6199	6199
50°	6119	6061	6033
55°	5975	5896	5864
60°	5752	5660	5623
65°	5480	5370	5305
70°	5106	4998	4890
75°	4579	4439	4330
80°	3705	3648	3546
85°	2216	2534	2639



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.3	1.4
10°-20°	299.9	4.0
20°-30°	450.4	5.9
30°-40°	537.6	7.1
40°-50°	550.9	7.3
50°-60°	491.3	6.5
60°-70°	365.9	4.8
70°-80°	198.6	2.6
80°-90°	47.8	0.6
90°-100°	328.4	4.3
100°-110°	903.5	11.9
110°-120°	932.5	12.3
120°-130°	747.2	9.9
130°-140°	586.8	7.7
140°-150°	449.7	5.9
150°-160°	323.3	4.3
160°-170°	197.7	2.6
170°-180°	66.6	0.9
0°-30°	855.5	11.3
0°-40°	1393.1	18.4
0°-60°	2435.3	32.1
0°-90°	3047.6	40.2
90°-120°	2164.4	28.5
90°-150°	3948.2	52.1
90°-180°	4536.0	59.8
0°-180°	7583.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1114	1113	1101	1112	1110	106
15°	1070	1067	1056	1065	1065	301
25°	983	980	971	977	980	453
35°	866	864	856	856	860	541
45°	719	720	713	711	713	555
55°	557	557	550	545	547	496
65°	376	375	369	364	364	373
75°	193	191	187	184	182	204
85°	31	34	36	37	37	44
90°	2	6	10	13	13	4
95°	49	179	581	248	159	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.0	1116.0	1116.0	1116.0	1116.0
2.5°	1119.6	1117.2	1107.6	1115.9	1114.8
5°	1114.5	1113.1	1101.0	1111.5	1110.0
7.5°	1106.5	1103.5	1091.8	1101.9	1100.4
10°	1098.1	1095.1	1084.7	1093.5	1092.1
12.5°	1087.3	1085.5	1073.8	1082.8	1082.5
15°	1069.7	1066.7	1056.3	1065.2	1065.2
17.5°	1046.4	1044.6	1034.4	1043.1	1041.9
20°	1030.8	1028.0	1018.9	1026.4	1026.4
22.5°	1011.7	1009.9	1000.9	1007.3	1008.4
25°	983.0	980.1	971.1	977.1	980.0
27.5°	951.3	949.0	941.5	945.4	947.5
30°	926.3	926.3	918.8	920.4	924.7
32.5°	903.5	903.5	894.8	896.4	898.5
35°	866.5	863.6	856.0	856.1	860.5
37.5°	823.5	822.0	817.2	816.4	817.5
40°	794.8	793.3	787.4	788.8	788.8
42.5°	766.1	764.7	758.7	756.6	759.0
45°	718.6	720.0	712.6	711.1	712.6
47.5°	671.7	671.7	665.7	661.5	663.9
50°	639.5	639.5	633.4	630.5	630.5
52.5°	605.9	607.1	600.0	595.8	597.0
55°	557.2	557.2	549.8	545.3	546.8
57.5°	503.5	503.5	496.0	491.5	494.2
60°	467.6	467.6	460.1	455.7	457.1
62.5°	431.8	431.8	424.3	419.8	420.1
65°	376.5	375.0	369.0	364.5	364.5
67.5°	323.3	319.5	314.9	308.9	308.9
70°	283.9	282.4	277.9	271.9	271.9
72.5°	248.0	245.3	240.8	236.1	236.1
75°	192.7	191.3	186.8	183.7	182.2
77.5°	138.0	136.9	136.6	132.4	133.5
80°	104.6	104.6	103.0	100.1	100.1
82.5°	74.7	75.8	73.2	72.6	71.4
85°	31.4	34.3	35.9	37.4	37.4
87.5°	6.3	10.6	10.5	12.2	12.2
90°	1.5	5.9	10.4	13.3	13.3
92.5°	20.4	87.3	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.6
97.5°	79.7	198.8	886.2	682.8	481.7
100°	102.2	210.9	982.1	991.3	808.8
102.5°	123.5	225.3	1007.1	1229.9	1062.4
105°	161.5	248.3	995.5	1516.2	1414.8
107.5°	197.6	277.0	938.9	1656.3	1686.5
110°	223.7	296.1	896.3	1691.2	1795.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.4
115°	285.9	348.2	798.4	1589.9	1804.3
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.8	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.6	489.2	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.6	527.7	703.7	991.0	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.3	910.3	1007.4
142.5°	528.3	569.7	696.8	881.6	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.7	615.6	690.4	793.4	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.4	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.4
160°	650.4	663.4	688.9	735.1	746.6
162.5°	659.8	670.5	690.1	727.9	737.1
165°	672.6	681.3	691.8	720.1	724.4
167.5°	681.5	688.1	693.3	713.4	714.6
170°	687.3	691.7	693.3	711.1	711.1
172.5°	692.1	694.2	693.3	707.5	706.3
175°	696.2	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.7	697.4
180°	696.2	696.2	696.2	696.2	696.2

(END OF REPORT)