

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: P519814

Luminaire Tested: **SQ4-F-025U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519814  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-025U-075D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

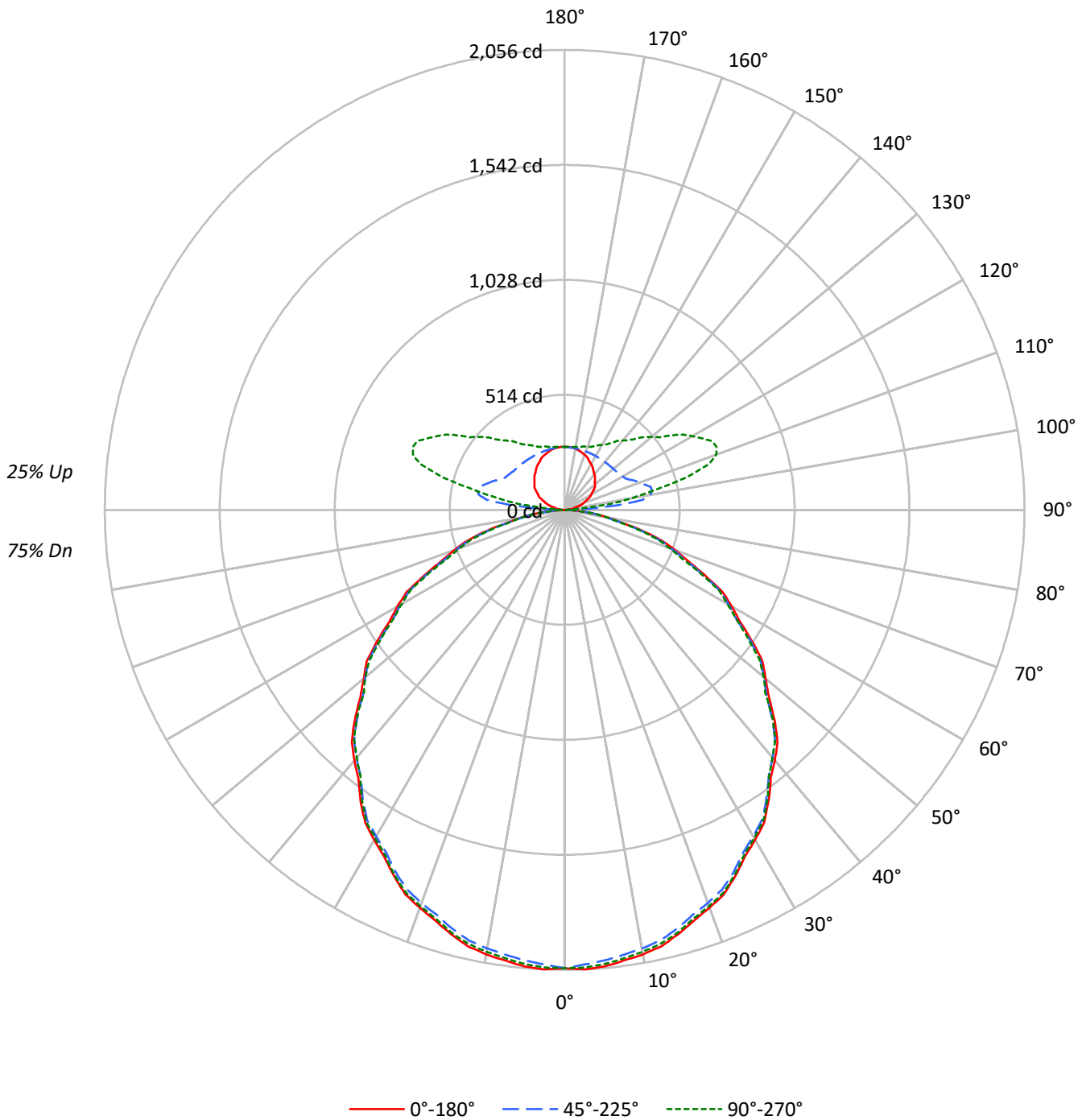
Lumens per Lamp: N/A  
Luminaire Lumens: 7418.7 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.2  
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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	103	99	95	91	98	94	91	87	86	83	80	78	75	73	70	69	67	63
2	94	86	80	74	89	82	77	72	75	70	66	68	64	61	62	59	56	53
3	86	76	68	62	81	72	65	60	66	60	56	60	56	52	55	51	48	45
4	79	67	59	52	74	64	57	51	59	52	47	53	48	44	49	45	41	38
5	72	60	51	45	68	57	49	44	52	46	41	48	43	38	44	39	36	33
6	67	54	45	39	63	52	44	38	47	41	36	43	38	34	40	35	31	29
7	62	49	40	34	58	47	39	33	43	36	32	39	34	30	36	32	28	26
8	57	44	36	31	54	43	35	30	39	33	28	36	31	27	33	29	25	23
9	53	41	33	27	51	39	32	27	36	30	25	33	28	24	31	26	23	21
10	50	37	30	25	48	36	29	24	33	27	23	31	25	22	28	24	20	19

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

	0°	45°	90°
0°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9328	9398
15°	9378	9262	9342
20°	9293	9184	9257
25°	9191	9097	9162
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8704
45°	8653	8544	8569
50°	8413	8347	8347
55°	8218	8113	8038
60°	7952	7816	7747
65°	7523	7381	7280
70°	7066	6890	6714
75°	6358	6124	5994
80°	5082	4986	4936
85°	3049	3440	3541



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	2.6
10°-20°	550.6	7.4
20°-30°	827.2	11.2
30°-40°	987.1	13.3
40°-50°	1012.3	13.6
50°-60°	902.0	12.2
60°-70°	672.6	9.1
70°-80°	364.7	4.9
80°-90°	85.3	1.2
90°-100°	137.1	1.8
100°-110°	360.5	4.9
110°-120°	373.8	5.0
120°-130°	299.8	4.0
130°-140°	235.2	3.2
140°-150°	180.5	2.4
150°-160°	130.0	1.8
160°-170°	79.6	1.1
170°-180°	26.9	0.4
0°-30°	1571.3	21.2
0°-40°	2558.3	34.5
0°-60°	4472.7	60.3
0°-90°	5595.3	75.4
90°-120°	871.3	11.7
90°-150°	1587.0	21.4
90°-180°	1823.0	24.6
0°-180°	7418.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2049	2045	2023	2040	2038	194
15°	1964	1960	1939	1954	1956	554
25°	1806	1804	1787	1796	1800	832
35°	1590	1587	1574	1574	1581	993
45°	1326	1321	1310	1310	1313	1021
55°	1022	1020	1009	999	999	913
65°	689	689	676	669	667	686
75°	357	349	344	338	336	375
85°	58	61	65	65	67	80
90°	2	5	14	7	7	3
95°	18	71	236	122	83	20
105°	65	98	399	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2049.0	2049.0	2049.0	2049.0	2049.0
2.5°	2056.5	2052.1	2034.2	2049.0	2047.5
5°	2049.0	2045.4	2023.0	2039.7	2037.9
7.5°	2032.3	2028.3	2006.3	2023.0	2022.6
10°	2017.4	2012.0	1991.4	2008.2	2006.3
12.5°	1998.1	1992.7	1972.2	1988.8	1987.0
15°	1963.6	1960.0	1939.4	1954.3	1956.1
17.5°	1924.2	1917.3	1898.9	1913.5	1915.3
20°	1893.0	1887.5	1870.7	1883.8	1885.6
22.5°	1860.3	1854.9	1838.0	1851.0	1852.9
25°	1805.7	1803.9	1787.2	1796.5	1800.1
27.5°	1746.6	1741.5	1728.0	1735.2	1738.8
30°	1703.5	1699.9	1684.9	1690.6	1694.3
32.5°	1658.9	1656.8	1643.3	1646.0	1651.2
35°	1590.1	1586.6	1573.5	1573.6	1580.9
37.5°	1514.0	1510.0	1499.1	1497.3	1500.3
40°	1462.0	1456.6	1447.2	1445.3	1445.3
42.5°	1408.5	1404.6	1392.2	1388.9	1393.2
45°	1326.4	1320.9	1309.7	1309.8	1313.4
47.5°	1237.6	1235.4	1222.4	1216.5	1217.9
50°	1172.2	1175.9	1163.0	1155.7	1163.0
52.5°	1115.7	1113.6	1102.0	1094.7	1097.5
55°	1021.8	1019.9	1008.8	999.4	999.4
57.5°	927.4	922.7	911.0	904.1	909.6
60°	861.9	860.2	847.1	834.2	839.7
62.5°	796.6	793.4	780.3	771.8	775.7
65°	689.2	689.2	676.2	668.8	666.9
67.5°	595.2	586.5	579.2	570.3	567.7
70°	523.9	516.6	510.8	503.3	497.8
72.5°	454.0	449.6	441.1	433.6	432.5
75°	356.7	349.4	343.6	338.0	336.3
77.5°	253.8	252.3	247.1	244.1	245.2
80°	191.3	191.3	187.7	187.6	185.8
82.5°	134.9	136.3	135.6	132.7	132.3
85°	57.6	61.2	65.0	65.0	66.9
87.5°	10.7	18.8	19.3	17.8	17.8
90°	1.8	5.4	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.7	23.0
95°	18.1	70.9	236.3	121.8	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.8	306.5
102.5°	50.1	89.7	399.6	491.7	416.2
105°	64.9	98.5	398.6	605.1	564.4
107.5°	80.1	111.1	375.8	663.8	673.8
110°	90.1	118.3	357.1	679.0	721.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.0	339.7	669.5	734.3
115°	115.4	140.1	319.2	636.8	726.7
117.5°	130.2	152.7	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.1	530.9	626.5
125°	160.5	179.9	290.4	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.1
137.5°	200.2	219.2	280.9	377.9	421.2
140°	207.4	225.0	279.5	363.4	403.9
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.9	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.3	248.6	277.7	317.8	335.4
152.5°	242.0	251.6	277.7	311.9	325.4
155°	250.6	257.7	277.7	305.0	313.8
157.5°	257.1	263.8	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	293.0	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.8	286.8
172.5°	279.2	279.5	279.5	285.2	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)