

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: P519795

Luminaire Tested: **SQ4-F-025U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519795  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

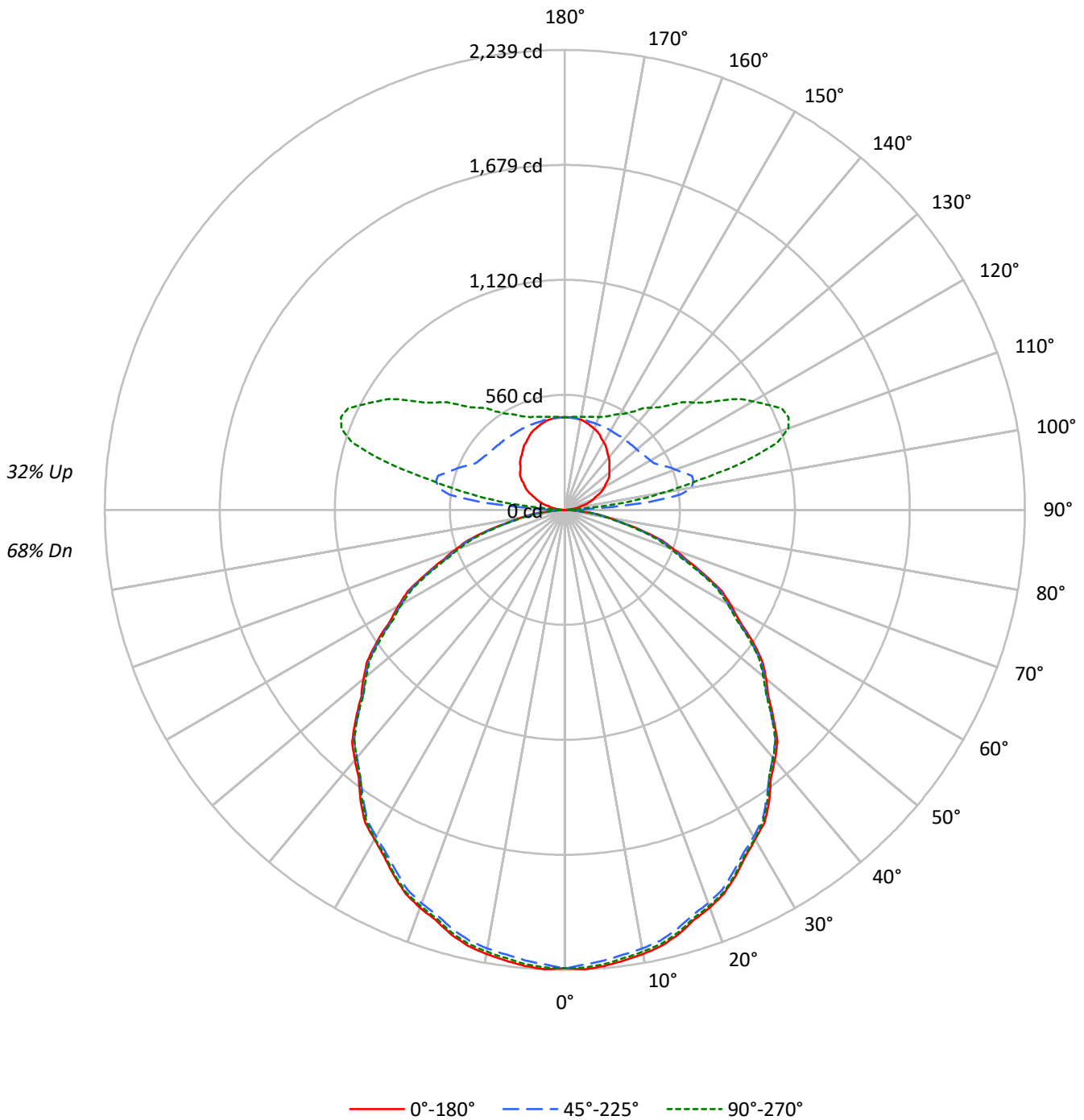
Lumens per Lamp: N/A  
Luminaire Lumens: 9021.1 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 69.6  
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61	57
2	93	85	78	73	87	80	75	70	72	67	63	63	60	57	56	54	51	47
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29	26
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

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

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6774	6821
15°	6811	6726	6783
20°	6747	6669	6718
25°	6672	6590	6651
30°	6579	6526	6568
35°	6506	6428	6462
40°	6382	6321	6334
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5896	5863
60°	5752	5661	5624
65°	5480	5371	5306
70°	5105	4997	4890
75°	4579	4438	4331
80°	3703	3652	3546
85°	2212	2530	2636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.6	2.3
10°-20°	599.7	6.6
20°-30°	900.7	10.0
30°-40°	1075.2	11.9
40°-50°	1101.8	12.2
50°-60°	982.6	10.9
60°-70°	731.8	8.1
70°-80°	397.3	4.4
80°-90°	94.4	1.0
90°-100°	220.1	2.4
100°-110°	578.6	6.4
110°-120°	600.0	6.7
120°-130°	481.3	5.3
130°-140°	377.6	4.2
140°-150°	289.8	3.2
150°-160°	208.7	2.3
160°-170°	127.7	1.4
170°-180°	43.1	0.5
0°-30°	1711.0	19.0
0°-40°	2786.3	30.9
0°-60°	4870.7	54.0
0°-90°	6094.2	67.6
90°-120°	1398.7	15.5
90°-150°	2547.3	28.2
90°-180°	2927.0	32.4
0°-180°	9021.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2232	2232	2232	2232	2232	
5°	2229	2226	2202	2223	2220	212
15°	2139	2134	2112	2130	2130	603
25°	1966	1960	1942	1954	1960	905
35°	1733	1727	1712	1712	1721	1081
45°	1437	1440	1425	1422	1425	1109
55°	1114	1114	1100	1091	1094	993
65°	753	750	738	729	729	746
75°	385	382	374	367	364	407
85°	63	69	72	75	75	88
90°	3	9	23	12	12	4
95°	29	114	379	195	133	32
105°	104	158	640	971	906	110
115°	185	225	512	1022	1166	183
125°	258	289	466	788	929	229
135°	307	338	452	636	721	237
145°	356	379	446	542	585	223
155°	402	414	446	490	504	185
165°	434	440	446	463	469	123
175°	452	452	449	454	454	43
180°	452	452	452	452	452	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2231.9	2231.9	2231.9	2231.9	2231.9
2.5°	2239.1	2234.5	2215.3	2231.9	2229.6
5°	2229.0	2226.1	2202.1	2223.0	2220.0
7.5°	2212.9	2207.0	2183.6	2203.8	2200.9
10°	2196.1	2190.3	2169.2	2187.1	2184.2
12.5°	2174.6	2171.1	2147.7	2165.7	2165.1
15°	2139.3	2133.5	2112.4	2130.4	2130.4
17.5°	2092.7	2089.3	2068.8	2086.1	2083.8
20°	2061.6	2055.8	2037.8	2052.7	2052.7
22.5°	2023.4	2019.9	2001.9	2014.5	2016.9
25°	1966.1	1960.2	1942.1	1954.3	1960.1
27.5°	1902.7	1898.1	1883.0	1890.9	1894.9
30°	1852.5	1852.5	1837.6	1840.8	1849.5
32.5°	1807.1	1807.1	1789.8	1792.8	1797.0
35°	1733.0	1727.2	1712.1	1712.3	1721.1
37.5°	1646.9	1644.1	1634.4	1632.6	1635.0
40°	1589.6	1586.7	1574.6	1577.6	1577.6
42.5°	1532.2	1529.3	1517.2	1513.2	1517.8
45°	1437.2	1440.1	1425.2	1422.3	1425.2
47.5°	1343.4	1343.4	1331.4	1323.2	1327.8
50°	1278.8	1278.8	1266.9	1260.9	1260.9
52.5°	1211.9	1214.2	1199.9	1191.6	1194.0
55°	1114.5	1114.5	1099.6	1090.7	1093.5
57.5°	1007.0	1007.0	992.0	983.2	988.4
60°	935.2	935.2	920.3	911.4	914.3
62.5°	863.5	863.5	848.6	839.6	840.2
65°	753.0	750.0	738.1	729.1	729.1
67.5°	646.6	639.0	629.9	617.9	617.9
70°	567.7	564.8	555.7	543.8	543.8
72.5°	496.0	490.8	481.7	472.1	472.1
75°	385.4	382.5	373.5	367.4	364.5
77.5°	276.1	273.7	273.1	264.8	267.1
80°	209.1	209.1	206.2	200.2	200.2
82.5°	149.4	151.8	146.4	145.1	142.8
85°	62.7	68.6	71.7	74.7	74.7
87.5°	12.5	20.7	21.5	21.5	21.5
90°	2.9	8.6	23.1	11.6	11.6
92.5°	12.1	58.6	129.7	57.4	37.1
95°	29.0	113.8	379.2	195.4	133.2
97.5°	50.4	125.1	567.4	451.2	332.4
100°	66.6	134.5	625.2	633.6	492.1
102.5°	80.5	143.9	641.5	789.3	668.1
105°	104.2	158.0	639.8	971.2	906.1
107.5°	128.6	178.4	603.2	1065.6	1081.5
110°	144.7	190.0	573.1	1090.0	1157.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.0	204.0	545.3	1074.6	1178.8
115°	185.2	224.9	512.3	1022.2	1166.5
117.5°	209.0	245.3	489.8	949.6	1109.8
120°	222.9	256.8	480.5	900.9	1056.6
122.5°	236.8	270.8	473.5	852.2	1005.7
125°	257.6	288.8	466.1	787.7	929.2
127.5°	274.4	306.2	459.7	735.6	855.1
130°	283.7	317.6	457.4	703.0	813.4
132.5°	293.0	326.9	455.1	674.9	774.1
135°	306.8	338.0	451.5	635.8	720.8
137.5°	321.3	351.9	451.0	606.6	676.2
140°	332.9	361.2	448.7	583.4	648.5
142.5°	342.2	368.2	448.7	566.9	622.9
145°	356.1	378.7	445.8	542.3	584.7
147.5°	369.9	392.0	445.8	521.8	557.0
150°	379.2	399.0	445.8	510.1	538.4
152.5°	388.5	403.8	445.8	500.7	522.2
155°	402.3	413.7	445.8	489.5	503.6
157.5°	412.7	423.5	445.8	479.6	489.8
160°	419.7	428.2	445.8	474.9	480.5
162.5°	426.7	432.9	445.8	470.2	475.9
165°	434.2	439.9	445.8	463.3	468.9
167.5°	441.1	444.0	448.7	460.3	462.5
170°	445.8	448.6	448.7	460.2	460.2
172.5°	448.1	448.7	448.7	457.9	455.7
175°	451.5	451.5	448.7	454.5	454.5
177.5°	451.5	451.5	449.3	453.8	451.5
180°	451.5	451.5	451.5	451.5	451.5

(END OF REPORT)