

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: P519964

Luminaire Tested: **SQ4-F-050U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519964  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-125D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

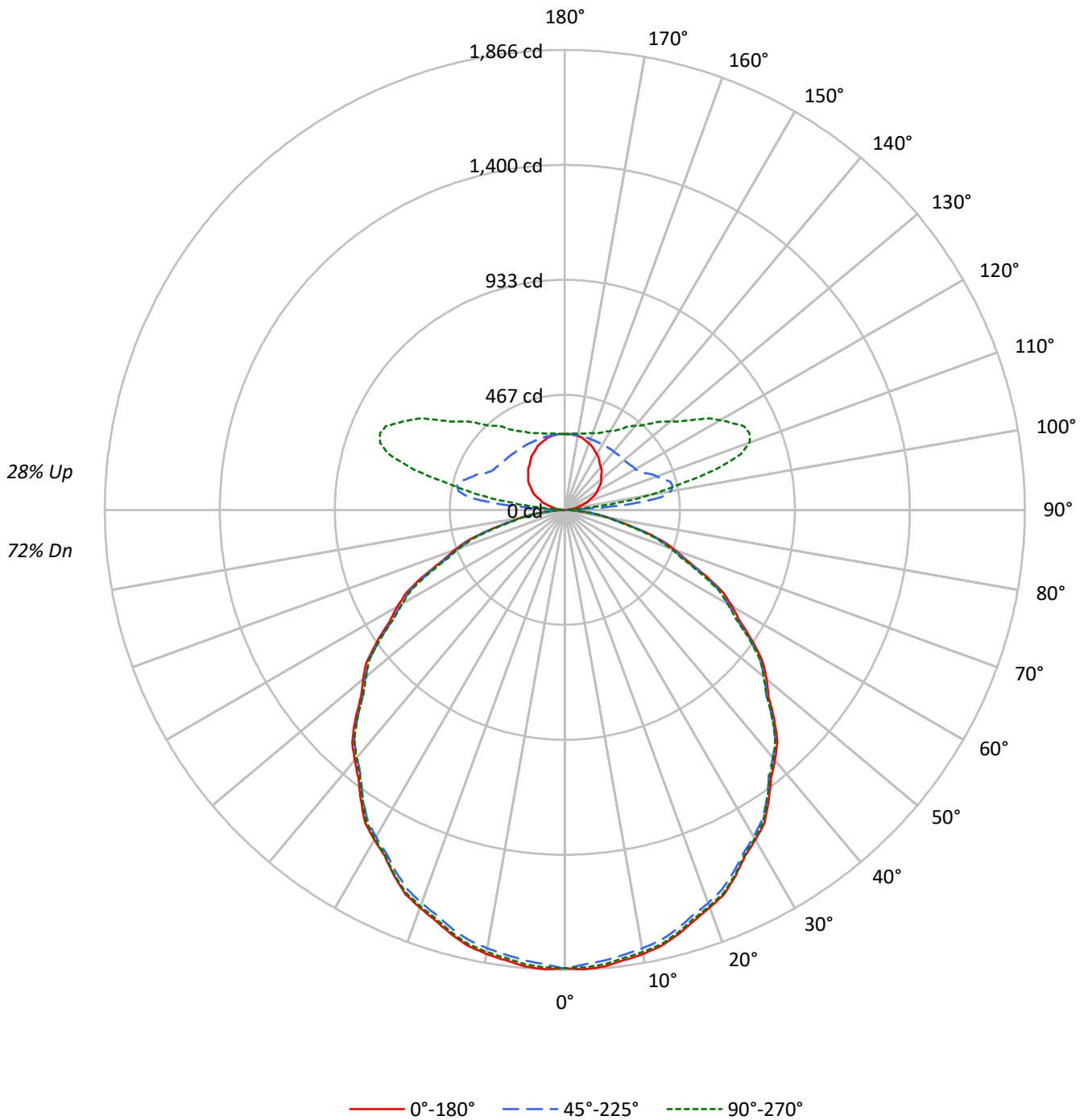
Lumens per Lamp: N/A  
Luminaire Lumens: 7088.1 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 55.9  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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

	0°	45°	90°
0°	17162	17162	17162
5°	17218	16999	17142
10°	17139	16928	17062
15°	17024	16819	16955
20°	16866	16675	16805
25°	16674	16497	16633
30°	16468	16326	16413
35°	16235	16096	16109
40°	15967	15794	15843
45°	15668	15494	15522
50°	15325	15150	15104
55°	14935	14721	14689
60°	14450	14129	14055
65°	13701	13409	13232
70°	12757	12425	12263
75°	11347	11097	10765
80°	9245	8979	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.5	2.5
10°-20°	499.8	7.1
20°-30°	751.0	10.6
30°-40°	896.0	12.6
40°-50°	918.5	13.0
50°-60°	818.6	11.5
60°-70°	609.4	8.6
70°-80°	330.2	4.7
80°-90°	77.0	1.1
90°-100°	147.9	2.1
100°-110°	401.8	5.7
110°-120°	413.2	5.8
120°-130°	330.3	4.7
130°-140°	259.6	3.7
140°-150°	199.0	2.8
150°-160°	143.1	2.0
160°-170°	87.5	1.2
170°-180°	29.5	0.4
0°-30°	1426.3	20.1
0°-40°	2322.4	32.8
0°-60°	4059.5	57.3
0°-90°	5076.0	71.6
90°-120°	963.0	13.6
90°-150°	1751.9	24.7
90°-180°	2012.0	28.4
0°-180°	7088.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1859	1856	1836	1852	1851	176
15°	1782	1778	1761	1776	1775	502
25°	1638	1635	1620	1630	1634	754
35°	1441	1440	1429	1429	1430	901
45°	1201	1198	1188	1186	1190	925
55°	928	926	915	908	913	829
65°	628	624	614	610	606	621
75°	318	318	311	305	302	338
85°	52	59	59	60	59	72
90°	1	4	7	9	9	3
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	496	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1860.1	1860.1	1860.1	1860.1	1860.1
2.5°	1865.8	1862.6	1846.1	1860.0	1857.7
5°	1859.1	1856.1	1835.5	1851.9	1850.9
7.5°	1843.3	1839.5	1820.8	1836.1	1834.3
10°	1829.4	1826.4	1806.9	1822.2	1821.2
12.5°	1812.2	1809.1	1789.7	1805.0	1804.8
15°	1782.3	1778.3	1760.8	1776.1	1775.1
17.5°	1746.5	1741.8	1724.6	1736.7	1738.7
20°	1717.8	1714.8	1698.4	1709.6	1711.6
22.5°	1688.3	1684.5	1667.2	1680.2	1682.1
25°	1637.9	1634.9	1620.5	1629.8	1633.9
27.5°	1582.7	1582.7	1569.3	1575.9	1578.4
30°	1545.8	1545.8	1532.5	1536.7	1540.6
32.5°	1506.5	1503.2	1490.8	1494.1	1498.1
35°	1441.4	1440.4	1429.1	1429.2	1430.2
37.5°	1374.0	1371.2	1358.9	1359.8	1364.6
40°	1325.7	1323.8	1311.4	1311.5	1315.4
42.5°	1276.5	1274.6	1263.9	1262.2	1263.9
45°	1200.8	1197.8	1187.5	1185.5	1189.6
47.5°	1120.1	1121.0	1108.7	1105.8	1108.1
50°	1067.7	1067.7	1055.5	1049.4	1052.3
52.5°	1012.9	1011.3	998.9	992.1	999.1
55°	928.5	925.5	915.2	908.1	913.2
57.5°	842.1	837.5	827.1	819.4	822.3
60°	783.1	776.2	765.7	759.6	761.7
62.5°	721.7	717.9	706.7	697.5	701.9
65°	627.6	623.5	614.2	610.0	606.1
67.5°	535.2	532.6	522.1	517.7	515.2
70°	472.9	467.9	460.6	455.6	454.6
72.5°	412.4	406.5	399.2	394.9	392.3
75°	318.3	318.3	311.3	305.0	302.0
77.5°	228.9	229.7	223.8	221.7	220.3
80°	174.0	174.0	169.0	166.9	167.9
82.5°	121.6	124.1	122.2	119.3	118.0
85°	52.2	59.2	59.4	60.4	59.4
87.5°	9.2	15.4	17.0	15.7	14.1
90°	1.0	3.9	7.0	8.9	8.9
92.5°	8.9	40.5	70.4	30.2	25.6
95°	21.8	80.9	257.6	112.2	75.3
97.5°	36.1	89.4	395.0	307.2	215.8
100°	45.5	95.0	437.0	443.0	357.7
102.5°	55.1	100.6	448.1	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.2	416.4	737.4	748.4
110°	100.1	132.1	397.3	750.1	797.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.8	703.7	801.6
117.5°	142.3	168.3	338.1	652.8	763.1
120°	152.6	177.8	330.9	618.8	728.2
122.5°	161.3	186.5	326.2	584.7	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.9	588.0
130°	193.2	216.5	315.1	483.2	557.9
132.5°	200.4	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.2	439.2	495.5
137.5°	220.6	241.7	309.9	416.7	463.9
140°	226.9	247.3	309.1	402.2	444.9
142.5°	233.3	252.0	308.3	391.0	426.7
145°	242.8	260.2	307.1	373.2	401.2
147.5°	253.5	268.4	306.2	359.2	381.2
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.2	305.2	335.1	344.8
157.5°	282.6	290.2	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	322.0	326.2
165°	297.2	301.2	306.2	319.1	320.0
167.5°	302.6	304.5	307.1	315.7	316.5
170°	304.2	306.2	307.1	314.1	314.1
172.5°	305.8	306.9	307.1	312.5	312.5
175°	308.1	309.1	307.1	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)