

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: P519435

Luminaire Tested: **SQ4-WB-100U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519435  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-125D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

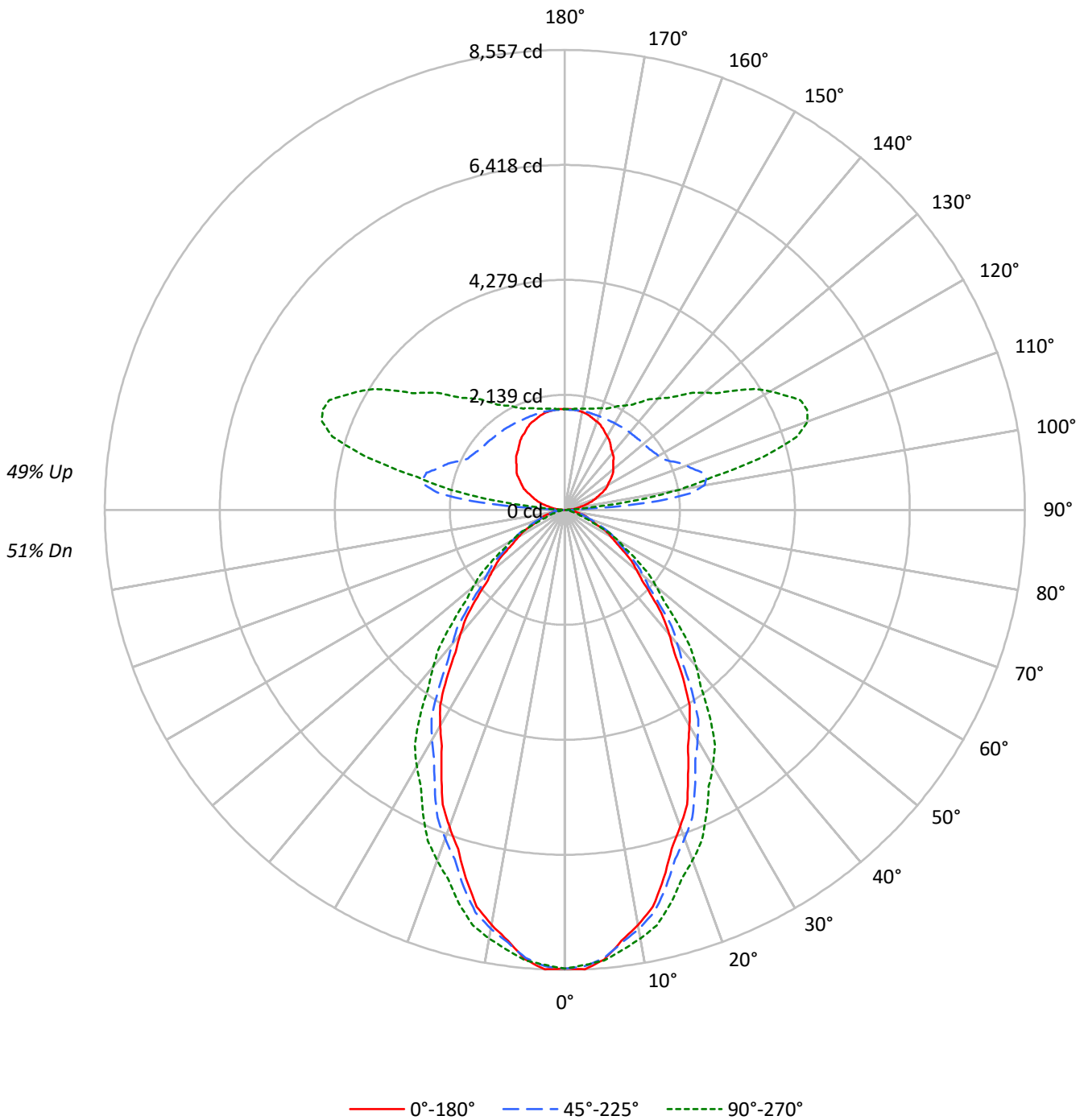
Lumens per Lamp: N/A  
Luminaire Lumens: 24612.8 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 214.8  
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

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

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25982
10°	24493	24715	25288
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15440	17648
40°	12120	13083	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7812	8776
60°	6059	6773	7004
65°	4825	5696	4525
70°	4277	4446	2761
75°	3962	3605	1691
80°	3648	3317	1459
85°	3303	3038	1189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	783.0	3.2
10°-20°	2036.5	8.3
20°-30°	2637.9	10.7
30°-40°	2583.2	10.5
40°-50°	1977.3	8.0
50°-60°	1317.6	5.4
60°-70°	719.0	2.9
70°-80°	299.6	1.2
80°-90°	88.7	0.4
90°-100°	877.2	3.6
100°-110°	2421.6	9.8
110°-120°	2497.4	10.1
120°-130°	2006.9	8.2
130°-140°	1577.2	6.4
140°-150°	1209.7	4.9
150°-160°	869.4	3.5
160°-170°	531.7	2.2
170°-180°	179.2	0.7
0°-30°	5457.4	22.2
0°-40°	8040.6	32.7
0°-60°	11335.4	46.1
0°-90°	12442.7	50.6
90°-120°	5796.2	23.5
90°-150°	10589.9	43.0
90°-180°	12170.0	49.4
0°-180°	24612.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8536	8536	8536	8536	8536	
5°	8398	8313	8368	8387	8416	781
15°	7102	7076	7266	7464	7592	1983
25°	5427	5442	5723	5973	6236	2496
35°	3836	3854	4113	4389	4701	2384
45°	2300	2344	2498	2687	2933	1793
55°	1322	1377	1457	1512	1637	1199
65°	663	718	783	684	622	689
75°	333	333	303	208	142	356
85°	94	94	86	56	34	102
90°	6	12	24	27	30	14
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8536.2	8536.2	8536.2	8536.2	8536.2
2.5°	8557.2	8481.0	8500.2	8499.7	8476.3
5°	8397.6	8313.4	8367.6	8387.0	8416.3
7.5°	8086.0	8022.2	8121.2	8194.4	8253.8
10°	7843.2	7788.3	7914.4	8021.0	8097.9
12.5°	7561.6	7515.4	7671.7	7814.8	7915.2
15°	7101.6	7076.0	7266.4	7464.1	7592.3
17.5°	6609.5	6597.0	6815.5	7046.2	7210.2
20°	6273.8	6270.2	6509.8	6750.1	6940.6
22.5°	5935.2	5943.3	6195.2	6445.1	6661.9
25°	5427.3	5442.0	5723.2	5972.7	6236.4
27.5°	4957.7	4964.2	5255.1	5518.4	5799.7
30°	4637.0	4655.3	4940.4	5213.0	5506.0
32.5°	4316.4	4337.6	4616.8	4898.5	5197.4
35°	3835.5	3853.8	4112.6	4389.4	4700.7
37.5°	3339.6	3364.5	3594.3	3855.9	4162.1
40°	3018.9	3055.6	3258.7	3505.2	3805.5
42.5°	2710.3	2755.7	2944.0	3177.9	3448.9
45°	2299.8	2343.7	2498.3	2687.4	2932.8
47.5°	1946.2	1996.7	2115.5	2278.3	2487.8
50°	1745.4	1793.1	1902.8	2023.4	2221.1
52.5°	1568.6	1616.3	1714.0	1807.0	1975.4
55°	1322.2	1377.1	1457.0	1512.3	1636.8
57.5°	1119.9	1172.7	1236.0	1261.0	1336.4
60°	985.1	1043.7	1101.2	1098.4	1138.7
62.5°	862.2	912.0	969.4	929.7	931.9
65°	663.0	717.9	782.8	684.0	621.8
67.5°	535.6	547.3	614.3	477.0	403.0
70°	475.7	475.7	494.4	369.4	307.1
72.5°	418.8	418.8	401.5	300.4	235.2
75°	333.4	333.4	303.4	208.3	142.3
77.5°	256.9	254.0	232.2	155.4	103.4
80°	206.0	206.0	187.3	122.7	82.4
82.5°	161.1	161.1	145.3	95.9	61.4
85°	93.6	93.6	86.1	55.7	33.7
87.5°	34.2	35.3	34.8	23.3	21.0
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)