

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: P519471

Luminaire Tested: **SQ4-WB-125U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519471  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

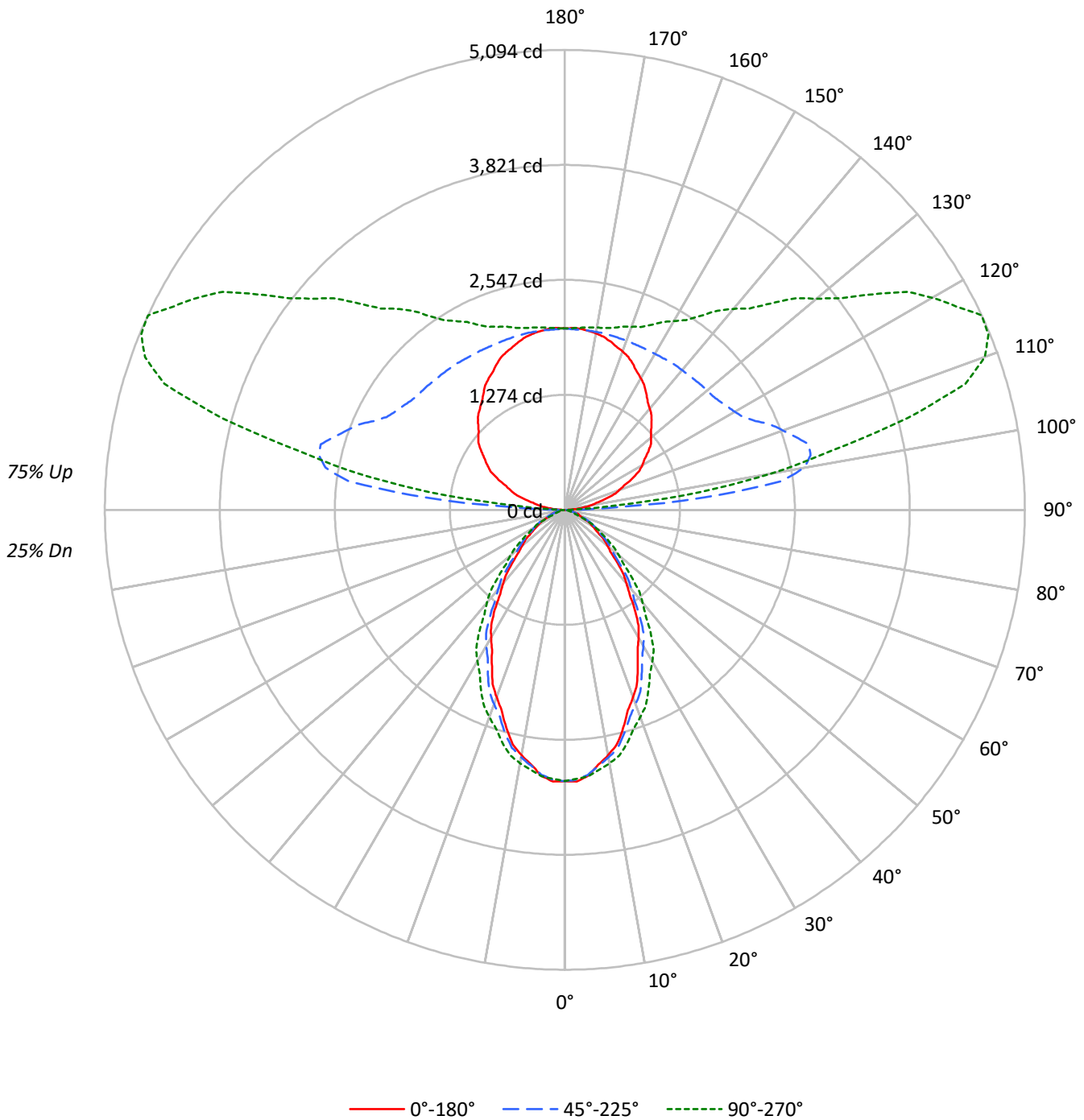
Lumens per Lamp: N/A  
Luminaire Lumens: 17348.7 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 146.4  
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	93	89	85	82	83	79	76	74	62	60	58	45	44	43	30	30	29	22
2	85	78	73	68	76	70	65	62	55	52	49	41	39	37	27	26	26	20
3	78	69	63	57	69	62	57	52	49	45	42	36	34	32	25	24	22	17
4	71	62	54	49	64	55	49	45	44	39	36	33	30	28	23	21	20	16
5	66	55	48	42	59	50	43	38	39	35	31	30	27	24	21	19	18	14
6	61	49	42	37	54	45	38	34	36	31	28	27	24	22	19	17	16	13
7	56	45	37	32	50	40	34	30	32	28	24	25	22	19	17	16	14	11
8	52	41	33	29	46	37	31	26	30	25	22	23	20	17	16	14	13	10
9	48	37	30	25	43	34	28	23	27	23	20	21	18	16	15	13	12	10
10	45	34	27	23	41	31	25	21	25	21	18	19	16	14	14	12	11	9

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

	0°	45°	90°
0°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1284	1167	514
85°	1164	1069	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.6	1.6
10°-20°	716.9	4.1
20°-30°	928.6	5.4
30°-40°	909.3	5.2
40°-50°	696.0	4.0
50°-60°	463.8	2.7
60°-70°	253.1	1.5
70°-80°	105.4	0.6
80°-90°	34.6	0.2
90°-100°	939.5	5.4
100°-110°	2530.9	14.6
110°-120°	2656.1	15.3
120°-130°	2155.4	12.4
130°-140°	1690.4	9.7
140°-150°	1297.8	7.5
150°-160°	933.1	5.4
160°-170°	570.1	3.3
170°-180°	192.2	1.1
0°-30°	1921.0	11.1
0°-40°	2830.3	16.3
0°-60°	3990.1	23.0
0°-90°	4383.2	25.3
90°-120°	6126.5	35.3
90°-150°	11270.0	65.0
90°-180°	12965.0	74.7
0°-180°	17348.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2956	2926	2945	2952	2963	275
15°	2500	2491	2558	2627	2672	698
25°	1910	1916	2015	2102	2195	879
35°	1350	1357	1448	1545	1655	839
45°	810	825	879	946	1032	631
55°	465	485	513	532	576	422
65°	233	253	276	241	219	243
75°	117	117	107	73	50	125
85°	33	33	30	20	12	36
90°	5	15	31	33	33	12
95°	143	511	1540	788	545	150
105°	468	728	2799	4188	3930	492
115°	826	1012	2331	4504	5094	813
125°	1128	1296	2093	3537	4163	1007
135°	1359	1516	2034	2854	3231	1049
145°	1571	1694	2008	2440	2620	985
155°	1783	1848	1990	2189	2259	821
165°	1934	1957	1998	2078	2088	545
175°	2011	2008	2001	2029	2024	191
180°	2008	2008	2008	2008	2008	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3004.8	3004.8	3004.8	3004.8	3004.8
2.5°	3012.2	2985.3	2992.1	2991.9	2983.7
5°	2956.0	2926.3	2945.4	2952.3	2962.6
7.5°	2846.3	2823.9	2858.7	2884.5	2905.4
10°	2760.9	2741.5	2785.9	2823.4	2850.5
12.5°	2661.7	2645.5	2700.5	2750.9	2786.2
15°	2499.8	2490.8	2557.8	2627.4	2672.5
17.5°	2326.6	2322.2	2399.1	2480.3	2538.0
20°	2208.4	2207.1	2291.5	2376.1	2443.1
22.5°	2089.2	2092.1	2180.7	2268.7	2345.0
25°	1910.5	1915.6	2014.6	2102.4	2195.2
27.5°	1745.1	1747.4	1849.8	1942.5	2041.5
30°	1632.3	1638.7	1739.1	1835.0	1938.1
32.5°	1519.4	1526.9	1625.1	1724.3	1829.5
35°	1350.1	1356.6	1447.7	1545.1	1654.7
37.5°	1175.5	1184.3	1265.2	1357.3	1465.1
40°	1062.7	1075.6	1147.1	1233.8	1339.6
42.5°	954.0	970.0	1036.3	1118.6	1214.0
45°	809.5	825.0	879.4	946.0	1032.4
47.5°	685.1	702.9	744.7	802.0	875.7
50°	614.4	631.2	669.8	712.2	781.8
52.5°	552.2	568.9	603.3	636.1	695.4
55°	465.4	484.8	512.9	532.3	576.2
57.5°	394.2	412.8	435.1	443.9	470.4
60°	346.8	367.4	387.6	386.6	400.8
62.5°	303.5	321.0	341.2	327.3	328.0
65°	233.4	252.7	275.6	240.8	218.9
67.5°	188.5	192.7	216.2	167.9	141.9
70°	167.4	167.4	174.0	130.0	108.1
72.5°	147.4	147.4	141.3	105.7	82.8
75°	117.3	117.3	106.8	73.3	50.1
77.5°	90.4	89.4	81.7	54.7	36.4
80°	72.5	72.5	65.9	43.2	29.0
82.5°	56.7	56.7	51.2	33.7	21.6
85°	33.0	33.0	30.3	19.6	11.9
87.5°	12.6	14.6	16.7	13.0	11.9
90°	5.1	15.1	30.7	33.3	33.3
92.5°	62.4	220.5	436.0	209.9	145.8
95°	143.3	511.0	1540.2	787.6	545.0
97.5°	228.7	585.0	2415.7	2018.1	1521.8
100°	294.2	614.4	2694.1	2818.8	2338.5
102.5°	357.7	655.9	2786.2	3418.4	3024.1
105°	468.2	728.4	2799.0	4187.5	3929.8
107.5°	572.6	804.7	2679.8	4582.7	4649.3
110°	642.2	862.3	2571.3	4705.4	4948.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	715.9	920.0	2466.9	4678.3	5077.1
115°	826.4	1011.5	2330.8	4503.6	5093.9
117.5°	927.2	1100.8	2225.4	4224.7	4882.1
120°	992.7	1160.3	2172.2	4024.5	4699.9
122.5°	1050.0	1215.6	2133.3	3819.8	4493.2
125°	1128.3	1295.9	2092.8	3537.2	4162.7
127.5°	1203.5	1368.6	2067.3	3288.1	3846.4
130°	1248.5	1413.6	2057.0	3145.3	3635.6
132.5°	1293.6	1456.7	2046.8	3019.5	3469.8
135°	1358.6	1516.2	2034.0	2853.6	3231.4
137.5°	1420.5	1571.6	2027.3	2712.9	3023.1
140°	1463.5	1608.5	2021.2	2626.3	2906.4
142.5°	1508.5	1643.6	2017.1	2545.4	2781.6
145°	1570.9	1693.5	2008.4	2439.8	2619.9
147.5°	1638.5	1745.0	1999.7	2350.9	2492.5
150°	1683.5	1776.0	1995.6	2295.1	2412.6
152.5°	1724.4	1805.0	1993.6	2249.5	2345.1
155°	1783.3	1848.3	1990.5	2189.1	2259.1
157.5°	1834.9	1885.5	1991.0	2146.6	2193.6
160°	1867.7	1910.2	1993.1	2121.8	2156.8
162.5°	1896.3	1930.9	1995.1	2101.1	2126.1
165°	1934.2	1956.7	1998.2	2077.7	2087.7
167.5°	1964.9	1977.9	2000.7	2059.7	2063.7
170°	1985.4	1990.4	2000.7	2049.3	2049.3
172.5°	1997.7	1998.7	2002.8	2039.1	2039.1
175°	2011.0	2008.5	2000.7	2028.8	2023.8
177.5°	2016.6	2012.6	2002.3	2018.6	2014.5
180°	2008.4	2008.4	2008.4	2008.4	2008.4

(END OF REPORT)