

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521946

Luminaire Tested: **SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521946  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

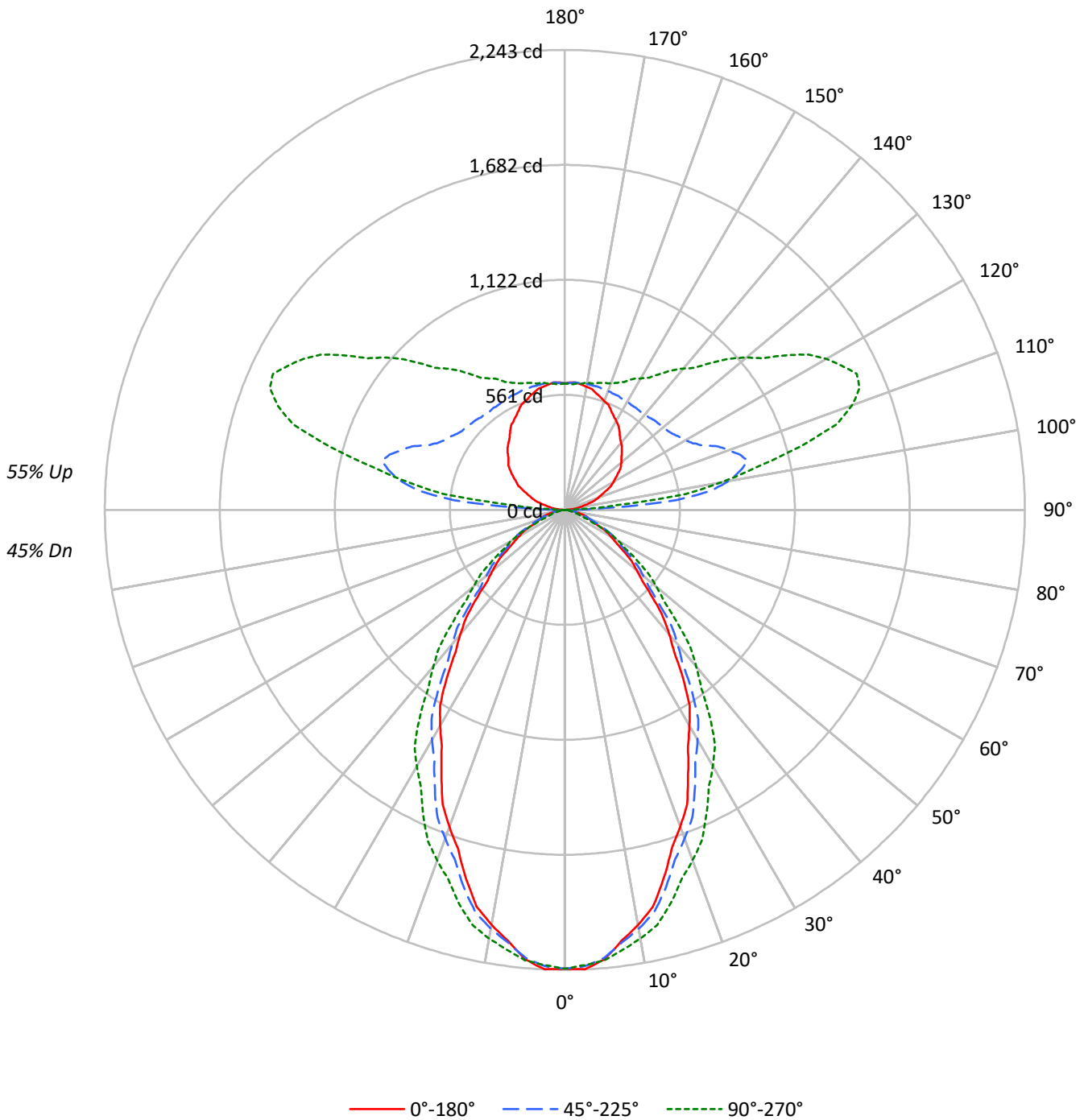
Lumens per Lamp: N/A  
Luminaire Lumens: 7256.2 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 74.8  
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45		
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	45	40		
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35		
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31		
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	28		
5	70	60	52	47	65	55	49	44	47	42	38	40	36	33	33	30	28	25		
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22		
7	60	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20		
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19		
9	53	41	34	29	49	38	32	28	33	28	25	29	25	22	24	21	19	17		
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16		

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

	0°	45°	90°
0°	20645	20645	20645
5°	20387	20315	20433
10°	19262	19437	19888
15°	17781	18194	19010
20°	16147	16755	17863
25°	14483	15273	16642
30°	12949	13797	15376
35°	11324	12143	13878
40°	9532	10288	12015
45°	7867	8545	10031
50°	6567	7159	8357
55°	5575	6143	6902
60°	4764	5327	5508
65°	3794	4480	3558
70°	3364	3496	2172
75°	3116	2834	1330
80°	2869	2609	1148
85°	2594	2392	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.2	2.8
10°-20°	533.9	7.4
20°-30°	691.5	9.5
30°-40°	677.1	9.3
40°-50°	518.3	7.1
50°-60°	345.4	4.8
60°-70°	188.5	2.6
70°-80°	78.5	1.1
80°-90°	22.2	0.3
90°-100°	318.1	4.4
100°-110°	768.8	10.6
110°-120°	820.0	11.3
120°-130°	664.1	9.2
130°-140°	514.2	7.1
140°-150°	392.3	5.4
150°-160°	283.9	3.9
160°-170°	174.9	2.4
170°-180°	59.2	0.8
0°-30°	1430.6	19.7
0°-40°	2107.7	29.0
0°-60°	2971.4	41.0
0°-90°	3260.7	44.9
90°-120°	1906.9	26.3
90°-150°	3477.5	47.9
90°-180°	3996.0	55.1
0°-180°	7256.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2238	2238	2238	2238	2238	
5°	2201	2179	2194	2199	2206	205
15°	1862	1855	1905	1957	1990	520
25°	1423	1427	1500	1566	1635	654
35°	1005	1010	1078	1151	1232	625
45°	603	614	655	704	769	470
55°	347	361	382	396	429	314
65°	174	188	205	179	163	181
75°	87	87	80	55	37	93
85°	24	24	23	15	9	27
90°	0	0	0	0	0	3
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2243.2	2223.2	2228.2	2228.1	2222.0
5°	2201.3	2179.3	2193.5	2198.6	2206.2
7.5°	2119.6	2102.9	2128.9	2148.1	2163.6
10°	2056.0	2041.6	2074.7	2102.6	2122.8
12.5°	1982.2	1970.1	2011.1	2048.6	2074.9
15°	1861.6	1854.9	1904.8	1956.6	1990.2
17.5°	1732.6	1729.3	1786.6	1847.1	1890.1
20°	1644.6	1643.7	1706.5	1769.5	1819.4
22.5°	1555.9	1558.0	1624.0	1689.5	1746.3
25°	1422.7	1426.6	1500.3	1565.7	1634.8
27.5°	1299.6	1301.3	1377.6	1446.6	1520.3
30°	1215.5	1220.3	1295.1	1366.5	1443.3
32.5°	1131.5	1137.1	1210.2	1284.1	1362.4
35°	1005.4	1010.2	1078.1	1150.6	1232.2
37.5°	875.4	882.0	942.2	1010.8	1091.0
40°	791.4	801.0	854.2	918.9	997.6
42.5°	710.5	722.4	771.7	833.1	904.1
45°	602.9	614.4	654.9	704.5	768.8
47.5°	510.2	523.4	554.6	597.2	652.2
50°	457.5	470.0	498.8	530.4	582.2
52.5°	411.2	423.7	449.3	473.7	517.8
55°	346.6	361.0	381.9	396.4	429.1
57.5°	293.6	307.4	324.0	330.6	350.3
60°	258.2	273.6	288.7	287.9	298.5
62.5°	226.0	239.1	254.1	243.7	244.3
65°	173.8	188.2	205.2	179.3	163.0
67.5°	140.4	143.5	161.0	125.0	105.6
70°	124.7	124.7	129.6	96.8	80.5
72.5°	109.8	109.8	105.3	78.7	61.7
75°	87.4	87.4	79.5	54.6	37.3
77.5°	67.4	66.6	60.9	40.7	27.1
80°	54.0	54.0	49.1	32.2	21.6
82.5°	42.2	42.2	38.1	25.1	16.1
85°	24.5	24.5	22.6	14.6	8.8
87.5°	8.6	8.6	7.9	4.7	3.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)