

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: P519090

Luminaire Tested: **SQ4-WB-050U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519090  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

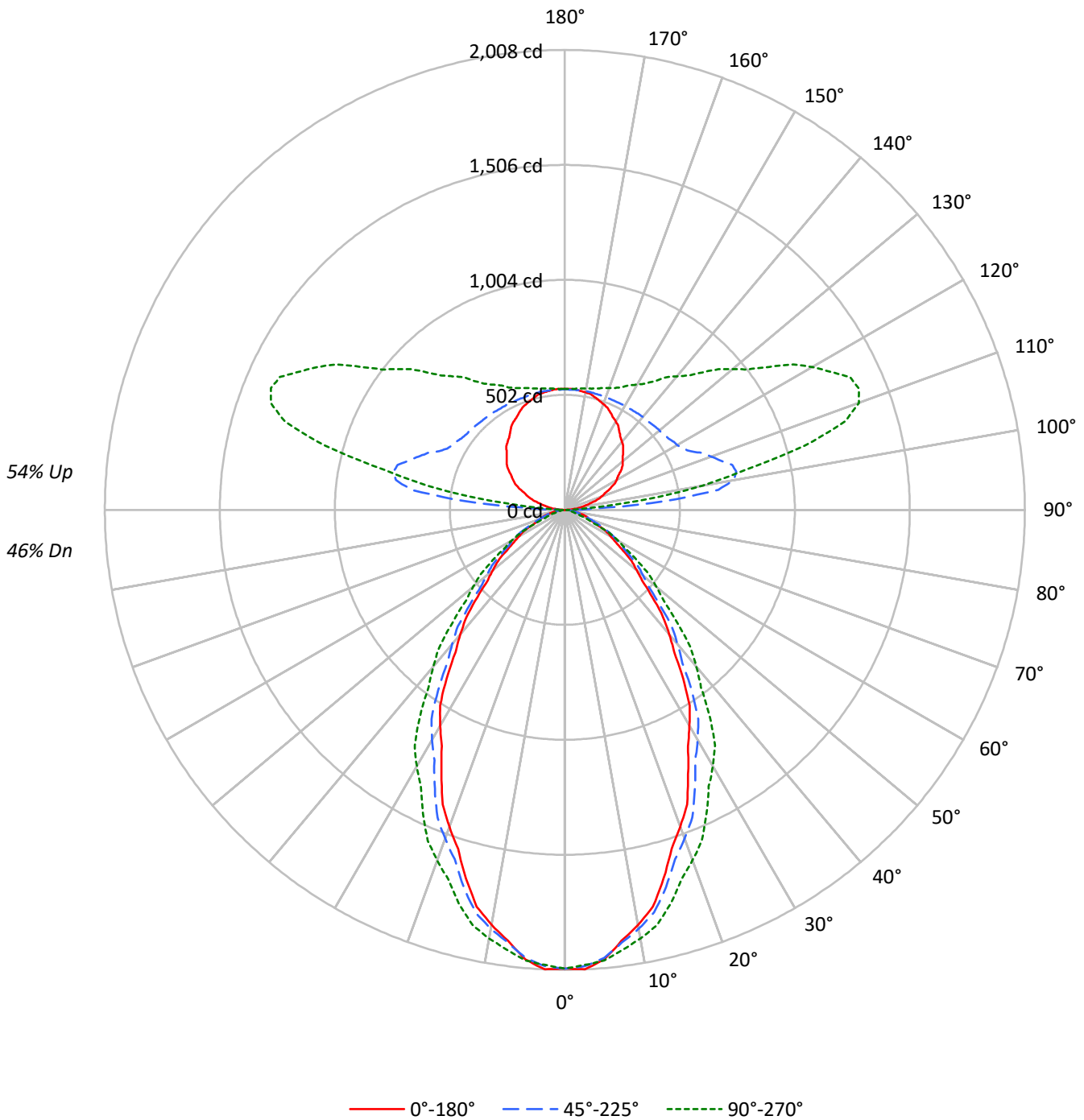
Lumens per Lamp: N/A  
Luminaire Lumens: 6365.0 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

**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°	4267	4605	5378
45°	3521	3825	4490
50°	2940	3204	3741
55°	2496	2750	3089
60°	2133	2384	2465
65°	1698	2005	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1283	1166	513
85°	1164	1069	418



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.7	2.9
10°-20°	477.9	7.5
20°-30°	619.0	9.7
30°-40°	606.2	9.5
40°-50°	464.0	7.3
50°-60°	309.2	4.9
60°-70°	168.7	2.7
70°-80°	70.3	1.1
80°-90°	21.9	0.3
90°-100°	253.2	4.0
100°-110°	687.8	10.8
110°-120°	707.2	11.1
120°-130°	565.4	8.9
130°-140°	444.3	7.0
140°-150°	340.7	5.4
150°-160°	245.0	3.8
160°-170°	149.8	2.4
170°-180°	50.5	0.8
0°-30°	1280.7	20.1
0°-40°	1886.9	29.6
0°-60°	2660.1	41.8
0°-90°	2921.0	45.9
90°-120°	1648.3	25.9
90°-150°	2998.6	47.1
90°-180°	3444.0	54.1
0°-180°	6365.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2003	2003	2003	2003	2003	
5°	1971	1951	1964	1968	1975	183
15°	1666	1660	1705	1752	1782	465
25°	1274	1277	1343	1402	1464	586
35°	900	904	965	1030	1103	560
45°	540	550	586	631	688	421
55°	310	323	342	355	384	281
65°	156	168	184	160	146	162
75°	78	78	71	49	33	84
85°	22	22	20	13	8	24
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2003.2	2003.2	2003.2	2003.2	2003.2
2.5°	2008.1	1990.2	1994.7	1994.6	1989.1
5°	1970.7	1950.9	1963.6	1968.2	1975.1
7.5°	1897.5	1882.6	1905.8	1923.0	1936.9
10°	1840.6	1827.7	1857.3	1882.3	1900.3
12.5°	1774.5	1763.6	1800.3	1833.9	1857.5
15°	1666.5	1660.5	1705.2	1751.6	1781.7
17.5°	1551.0	1548.1	1599.4	1653.5	1692.0
20°	1472.3	1471.4	1527.7	1584.1	1628.7
22.5°	1392.8	1394.7	1453.8	1512.5	1563.3
25°	1273.6	1277.1	1343.1	1401.6	1463.5
27.5°	1163.4	1165.0	1233.2	1295.0	1361.0
30°	1088.2	1092.5	1159.4	1223.3	1292.1
32.5°	1012.9	1017.9	1083.4	1149.5	1219.7
35°	900.1	904.4	965.1	1030.1	1103.1
37.5°	783.7	789.5	843.5	904.9	976.7
40°	708.5	717.0	764.7	822.6	893.0
42.5°	636.0	646.7	690.9	745.8	809.4
45°	539.7	550.0	586.3	630.7	688.2
47.5°	456.7	468.6	496.4	534.7	583.8
50°	409.6	420.8	446.5	474.8	521.2
52.5°	368.1	379.3	402.2	424.0	463.6
55°	310.3	323.2	341.9	354.9	384.1
57.5°	262.8	275.2	290.1	295.9	313.6
60°	231.2	244.9	258.4	257.8	267.2
62.5°	202.3	214.0	227.5	218.2	218.7
65°	155.6	168.5	183.7	160.5	145.9
67.5°	125.7	128.4	144.2	111.9	94.6
70°	111.6	111.6	116.0	86.7	72.1
72.5°	98.3	98.3	94.2	70.5	55.2
75°	78.2	78.2	71.2	48.9	33.4
77.5°	60.3	59.6	54.5	36.5	24.3
80°	48.3	48.3	43.9	28.8	19.3
82.5°	37.8	37.8	34.1	22.5	14.4
85°	22.0	22.0	20.2	13.1	7.9
87.5°	8.1	9.1	9.4	7.3	6.6
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)