

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: P519083

Luminaire Tested: **SQ4-WB-050U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519083  
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-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

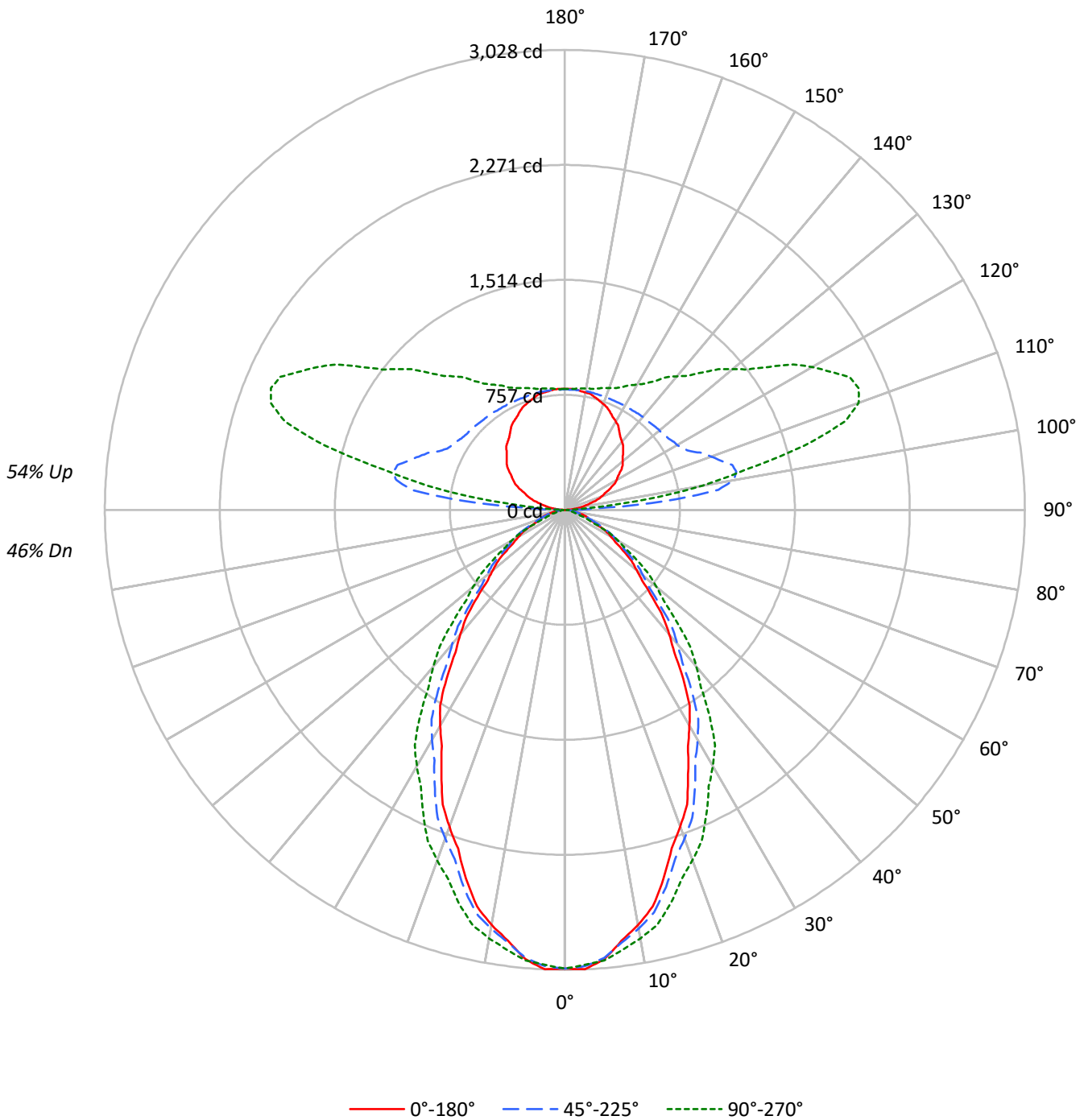
Lumens per Lamp: N/A  
Luminaire Lumens: 9596.2 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 79.6  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41				41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36				36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32				32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28				28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25				25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23				23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21				21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19				19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17				17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16				16

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

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9140	9193
10°	8666	8744	8947
15°	8000	8185	8553
20°	7265	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4628	5405
45°	3539	3844	4513
50°	2954	3221	3760
55°	2508	2764	3105
60°	2144	2396	2478
65°	1707	2016	1601
70°	1513	1573	977
75°	1401	1275	599
80°	1291	1174	517
85°	1168	1076	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.0	2.9
10°-20°	720.5	7.5
20°-30°	933.3	9.7
30°-40°	913.9	9.5
40°-50°	699.6	7.3
50°-60°	466.1	4.9
60°-70°	254.4	2.7
70°-80°	106.0	1.1
80°-90°	33.1	0.3
90°-100°	381.7	4.0
100°-110°	1037.0	10.8
110°-120°	1066.3	11.1
120°-130°	852.5	8.9
130°-140°	669.8	7.0
140°-150°	513.6	5.4
150°-160°	369.4	3.8
160°-170°	225.9	2.4
170°-180°	76.1	0.8
0°-30°	1930.8	20.1
0°-40°	2844.8	29.6
0°-60°	4010.5	41.8
0°-90°	4403.9	45.9
90°-120°	2485.0	25.9
90°-150°	4521.0	47.1
90°-180°	5192.0	54.1
0°-180°	9596.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3020	3020	3020	3020	3020	
5°	2971	2941	2960	2967	2978	276
15°	2513	2504	2571	2641	2686	702
25°	1920	1925	2025	2113	2206	883
35°	1357	1364	1455	1553	1663	844
45°	814	829	884	951	1038	635
55°	468	487	516	535	579	424
65°	235	254	277	242	220	244
75°	118	118	107	74	50	126
85°	33	33	30	20	12	36
90°	3	10	18	23	23	6
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3020.1	3020.1	3020.1	3020.1	3020.1
2.5°	3027.5	3000.6	3007.4	3007.2	2998.9
5°	2971.1	2941.3	2960.5	2967.3	2977.7
7.5°	2860.8	2838.3	2873.3	2899.2	2920.2
10°	2775.0	2755.5	2800.1	2837.9	2865.1
12.5°	2675.3	2659.0	2714.3	2764.9	2800.4
15°	2512.6	2503.5	2570.9	2640.8	2686.2
17.5°	2338.4	2334.0	2411.3	2492.9	2551.0
20°	2219.7	2218.4	2303.2	2388.2	2455.6
22.5°	2099.9	2102.8	2191.9	2280.3	2357.0
25°	1920.2	1925.4	2024.9	2113.2	2206.4
27.5°	1754.0	1756.4	1859.2	1952.4	2051.9
30°	1640.6	1647.1	1747.9	1844.4	1948.0
32.5°	1527.2	1534.7	1633.4	1733.1	1838.8
35°	1357.0	1363.5	1455.1	1553.0	1663.1
37.5°	1181.5	1190.4	1271.7	1364.2	1472.6
40°	1068.1	1081.1	1152.9	1240.1	1346.4
42.5°	958.9	975.0	1041.6	1124.4	1220.2
45°	813.7	829.2	883.9	950.8	1037.6
47.5°	688.6	706.5	748.5	806.1	880.2
50°	617.5	634.4	673.2	715.9	785.8
52.5°	555.0	571.8	606.4	639.3	698.9
55°	467.8	487.2	515.5	535.1	579.1
57.5°	396.2	414.9	437.3	446.1	472.8
60°	348.5	369.3	389.6	388.6	402.9
62.5°	305.1	322.7	343.0	328.9	329.7
65°	234.6	254.0	277.0	242.0	220.0
67.5°	189.5	193.6	217.3	168.8	142.6
70°	168.3	168.3	174.9	130.7	108.7
72.5°	148.2	148.2	142.1	106.3	83.2
75°	117.9	117.9	107.3	73.7	50.4
77.5°	90.9	89.9	82.2	55.0	36.6
80°	72.9	72.9	66.3	43.4	29.2
82.5°	57.0	57.0	51.4	33.9	21.7
85°	33.1	33.1	30.5	19.7	11.9
87.5°	12.2	13.7	14.2	10.9	9.9
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)