

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: P519067

Luminaire Tested: **SQ4-WB-050U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519067  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

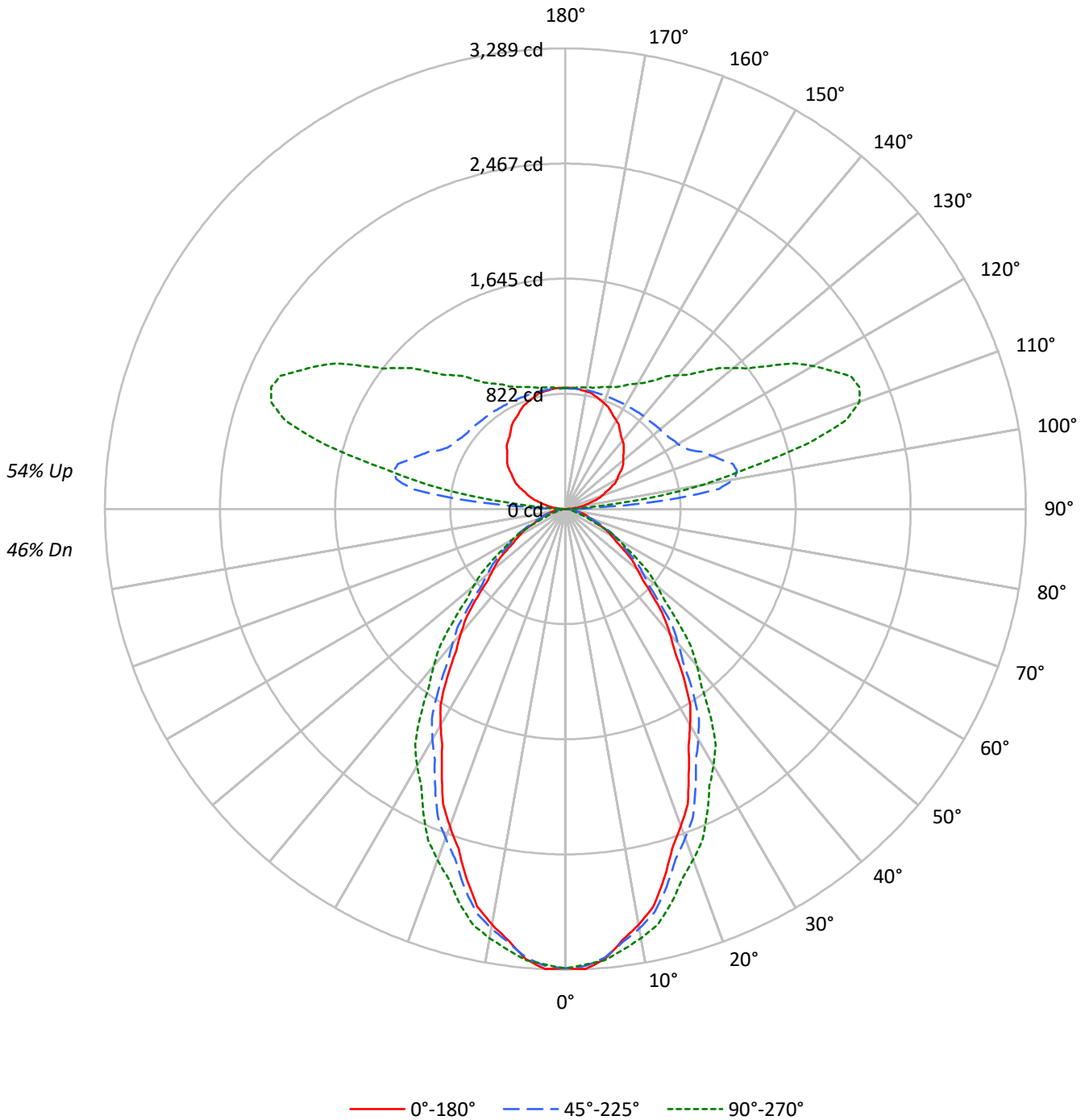
Lumens per Lamp: N/A  
Luminaire Lumens: 10424.5 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	
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°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5534	5935	6783
40°	4658	5028	5872
45°	3844	4176	4903
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2190	1739
70°	1644	1708	1061
75°	1522	1385	650
80°	1403	1275	561
85°	1270	1168	459



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.9	2.9
10°-20°	782.7	7.5
20°-30°	1013.9	9.7
30°-40°	992.8	9.5
40°-50°	759.9	7.3
50°-60°	506.4	4.9
60°-70°	276.3	2.7
70°-80°	115.1	1.1
80°-90°	35.9	0.3
90°-100°	414.7	4.0
100°-110°	1126.6	10.8
110°-120°	1158.3	11.1
120°-130°	926.1	8.9
130°-140°	727.6	7.0
140°-150°	557.9	5.4
150°-160°	401.2	3.8
160°-170°	245.4	2.4
170°-180°	82.7	0.8
0°-30°	2097.5	20.1
0°-40°	3090.3	29.6
0°-60°	4356.6	41.8
0°-90°	4784.0	45.9
90°-120°	2699.5	25.9
90°-150°	4911.2	47.1
90°-180°	5640.0	54.1
0°-180°	10424.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3281	3281	3281	3281	3281	
5°	3228	3195	3216	3224	3235	300
15°	2729	2720	2793	2869	2918	762
25°	2086	2092	2200	2296	2397	959
35°	1474	1481	1581	1687	1807	916
45°	884	901	960	1033	1127	689
55°	508	529	560	581	629	461
65°	255	276	301	263	239	265
75°	128	128	117	80	55	137
85°	36	36	33	21	13	39
90°	3	11	19	25	25	6
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3280.8	3280.8	3280.8	3280.8	3280.8
2.5°	3288.9	3259.6	3267.0	3266.8	3257.8
5°	3227.5	3195.2	3216.0	3223.5	3234.7
7.5°	3107.8	3083.3	3121.3	3149.5	3172.3
10°	3014.5	2993.4	3041.8	3082.8	3112.4
12.5°	2906.2	2888.5	2948.5	3003.5	3042.1
15°	2729.4	2719.6	2792.8	2868.8	2918.0
17.5°	2540.3	2535.5	2619.5	2708.1	2771.2
20°	2411.3	2409.9	2502.0	2594.3	2667.5
22.5°	2281.2	2284.3	2381.1	2477.1	2560.4
25°	2085.9	2091.6	2199.7	2295.6	2396.9
27.5°	1905.4	1908.0	2019.7	2120.9	2229.0
30°	1782.2	1789.2	1898.8	2003.6	2116.2
32.5°	1659.0	1667.1	1774.4	1882.7	1997.6
35°	1474.1	1481.2	1580.7	1687.0	1806.7
37.5°	1283.5	1293.1	1381.4	1482.0	1599.7
40°	1160.3	1174.4	1252.4	1347.2	1462.6
42.5°	1041.7	1059.1	1131.5	1221.4	1325.6
45°	883.9	900.8	960.2	1032.9	1127.2
47.5°	748.0	767.4	813.1	875.7	956.2
50°	670.8	689.1	731.3	777.7	853.7
52.5°	602.9	621.2	658.8	694.5	759.2
55°	508.2	529.3	560.0	581.2	629.1
57.5°	430.4	450.7	475.1	484.6	513.6
60°	378.6	401.1	423.2	422.1	437.6
62.5°	331.4	350.5	372.6	357.3	358.2
65°	254.8	275.9	300.9	262.9	239.0
67.5°	205.9	210.4	236.1	183.3	154.9
70°	182.8	182.8	190.0	142.0	118.0
72.5°	160.9	160.9	154.3	115.5	90.4
75°	128.1	128.1	116.6	80.0	54.7
77.5°	98.8	97.6	89.3	59.7	39.7
80°	79.2	79.2	72.0	47.2	31.7
82.5°	61.9	61.9	55.9	36.8	23.6
85°	36.0	36.0	33.1	21.4	13.0
87.5°	13.2	14.9	15.4	11.9	10.8
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)