

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: P519070

Luminaire Tested: **SQ4-WB-050U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519070  
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-8  
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**

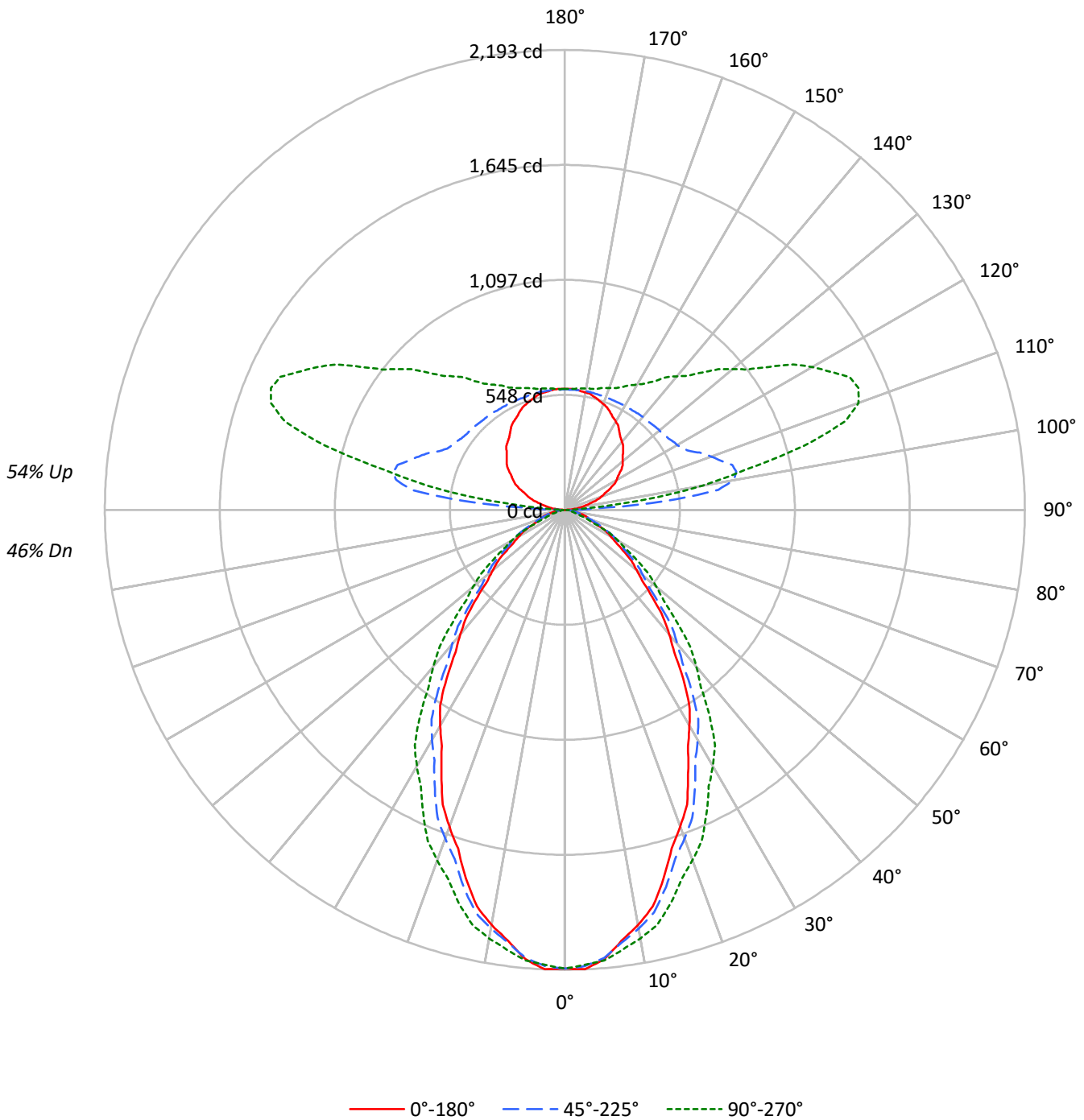
Lumens per Lamp: N/A  
Luminaire Lumens: 6949.7 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9719
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5935	6783
40°	4658	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3002	3373
60°	2329	2604	2692
65°	1855	2190	1739
70°	1644	1709	1061
75°	1522	1385	651
80°	1403	1275	561
85°	1270	1170	455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.6	2.9
10°-20°	521.8	7.5
20°-30°	675.9	9.7
30°-40°	661.9	9.5
40°-50°	506.6	7.3
50°-60°	337.6	4.9
60°-70°	184.2	2.7
70°-80°	76.8	1.1
80°-90°	24.0	0.3
90°-100°	276.5	4.0
100°-110°	751.0	10.8
110°-120°	772.2	11.1
120°-130°	617.4	8.9
130°-140°	485.1	7.0
140°-150°	372.0	5.4
150°-160°	267.5	3.8
160°-170°	163.6	2.4
170°-180°	55.1	0.8
0°-30°	1398.3	20.1
0°-40°	2060.2	29.6
0°-60°	2904.4	41.8
0°-90°	3189.4	45.9
90°-120°	1799.7	25.9
90°-150°	3274.1	47.1
90°-180°	3760.0	54.1
0°-180°	6949.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2152	2130	2144	2149	2156	200
15°	1820	1813	1862	1912	1945	508
25°	1391	1394	1466	1530	1598	640
35°	983	987	1054	1125	1204	611
45°	589	600	640	689	752	460
55°	339	353	373	388	419	307
65°	170	184	201	175	159	177
75°	85	85	78	53	36	91
85°	24	24	22	14	9	26
90°	2	7	13	17	17	4
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2192.6	2173.1	2178.0	2177.9	2171.8
5°	2151.7	2130.1	2144.0	2149.0	2156.5
7.5°	2071.8	2055.5	2080.9	2099.6	2114.8
10°	2009.7	1995.6	2027.9	2055.2	2074.9
12.5°	1937.5	1925.7	1965.7	2002.4	2028.1
15°	1819.6	1813.1	1861.9	1912.5	1945.4
17.5°	1693.5	1690.3	1746.3	1805.4	1847.5
20°	1607.5	1606.6	1668.0	1729.6	1778.4
22.5°	1520.8	1522.8	1587.4	1651.4	1707.0
25°	1390.6	1394.4	1466.5	1530.4	1597.9
27.5°	1270.3	1272.0	1346.5	1414.0	1486.0
30°	1188.1	1192.8	1265.9	1335.7	1410.8
32.5°	1106.0	1111.4	1182.9	1255.1	1331.7
35°	982.8	987.4	1053.8	1124.7	1204.4
37.5°	855.7	862.1	920.9	988.0	1066.4
40°	773.5	782.9	835.0	898.1	975.1
42.5°	694.5	706.1	754.3	814.3	883.7
45°	589.3	600.5	640.1	688.6	751.5
47.5°	498.7	511.6	542.0	583.8	637.4
50°	447.2	459.4	487.5	518.4	569.1
52.5°	401.9	414.1	439.2	463.0	506.2
55°	338.8	352.9	373.3	387.5	419.4
57.5°	287.0	300.5	316.7	323.1	342.4
60°	252.4	267.4	282.2	281.4	291.8
62.5°	220.9	233.7	248.4	238.2	238.8
65°	169.9	183.9	200.6	175.3	159.3
67.5°	137.2	140.2	157.4	122.2	103.3
70°	121.9	121.9	126.7	94.6	78.7
72.5°	107.3	107.3	102.9	77.0	60.3
75°	85.4	85.4	77.7	53.4	36.5
77.5°	65.8	65.1	59.5	39.8	26.5
80°	52.8	52.8	48.0	31.4	21.1
82.5°	41.3	41.3	37.2	24.6	15.7
85°	24.0	24.0	22.1	14.3	8.6
87.5°	8.8	9.9	10.3	7.9	7.2
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)