

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: P519123

Luminaire Tested: **SQ4-WB-050U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519123  
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-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

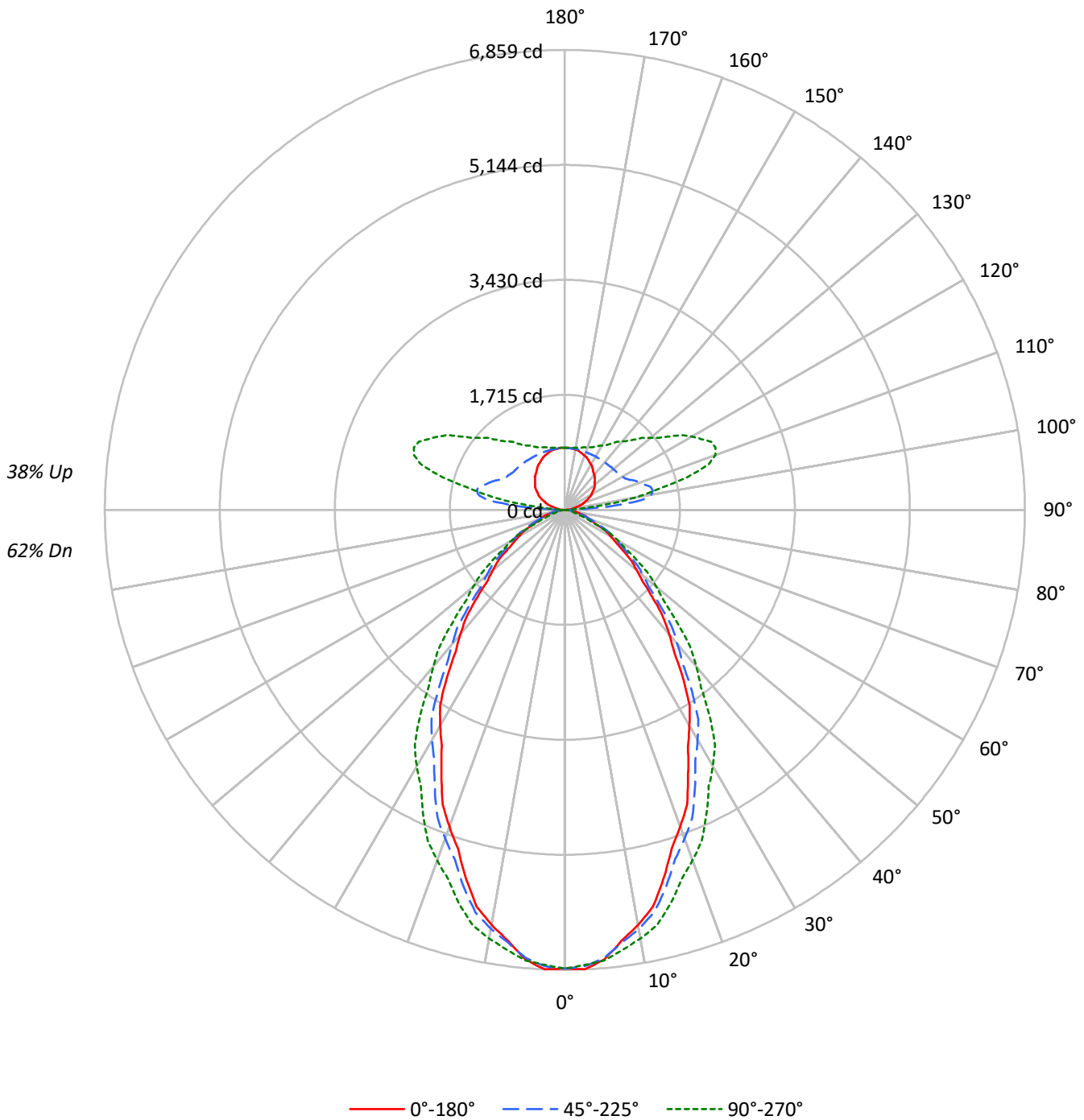
Lumens per Lamp: N/A  
Luminaire Lumens: 16010.0 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 134.4  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

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

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19376
20°	16458	17078	18207
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3429	3563	2214
75°	3175	2890	1356
80°	2924	2658	1171
85°	2650	2438	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	627.6	3.9
10°-20°	1632.4	10.2
20°-30°	2114.5	13.2
30°-40°	2070.6	12.9
40°-50°	1584.9	9.9
50°-60°	1056.1	6.6
60°-70°	576.3	3.6
70°-80°	240.1	1.5
80°-90°	71.6	0.4
90°-100°	443.8	2.8
100°-110°	1205.5	7.5
110°-120°	1239.5	7.7
120°-130°	991.0	6.2
130°-140°	778.7	4.9
140°-150°	597.1	3.7
150°-160°	429.4	2.7
160°-170°	262.6	1.6
170°-180°	88.5	0.6
0°-30°	4374.5	27.3
0°-40°	6445.1	40.3
0°-60°	9086.1	56.8
0°-90°	9974.1	62.3
90°-120°	2888.8	18.0
90°-150°	5255.5	32.8
90°-180°	6036.0	37.7
0°-180°	16010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6842	6842	6842	6842	6842	
5°	6731	6664	6707	6723	6746	626
15°	5692	5672	5824	5983	6086	1590
25°	4350	4362	4588	4788	4999	2001
35°	3074	3089	3297	3518	3768	1911
45°	1843	1879	2003	2154	2351	1438
55°	1060	1104	1168	1212	1312	961
65°	531	575	628	548	498	552
75°	267	267	243	167	114	285
85°	75	75	69	45	27	82
90°	3	12	21	27	27	8
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6842.3	6842.3	6842.3	6842.3	6842.3
2.5°	6859.1	6798.1	6813.5	6813.1	6794.3
5°	6731.2	6663.7	6707.2	6722.8	6746.2
7.5°	6481.4	6430.4	6509.7	6568.4	6615.9
10°	6286.9	6242.8	6343.9	6429.4	6491.0
12.5°	6061.1	6024.1	6149.4	6264.1	6344.5
15°	5692.4	5671.9	5824.5	5983.0	6085.7
17.5°	5297.9	5287.9	5463.0	5648.0	5779.5
20°	5028.9	5026.0	5218.1	5410.7	5563.3
22.5°	4757.5	4764.0	4965.9	5166.2	5339.9
25°	4350.4	4362.1	4587.6	4787.5	4998.9
27.5°	3973.9	3979.2	4212.3	4423.4	4648.8
30°	3716.9	3731.6	3960.1	4178.6	4413.4
32.5°	3459.9	3476.9	3700.7	3926.5	4166.0
35°	3074.4	3089.1	3296.6	3518.4	3767.9
37.5°	2676.9	2696.8	2881.0	3090.8	3336.2
40°	2419.9	2449.2	2612.0	2809.6	3050.4
42.5°	2172.5	2208.9	2359.8	2547.3	2764.5
45°	1843.4	1878.7	2002.6	2154.1	2350.8
47.5°	1560.0	1600.5	1695.7	1826.2	1994.1
50°	1399.1	1437.2	1525.2	1621.9	1780.4
52.5°	1257.4	1295.5	1373.9	1448.4	1583.4
55°	1059.8	1103.9	1167.9	1212.2	1312.0
57.5°	897.7	940.0	990.8	1010.8	1071.2
60°	789.6	836.6	882.7	880.4	912.7
62.5°	691.1	731.1	777.0	745.2	747.0
65°	531.4	575.4	627.5	548.3	498.4
67.5°	429.3	438.7	492.4	382.4	323.1
70°	381.3	381.3	396.3	296.1	246.2
72.5°	335.7	335.7	321.8	240.8	188.5
75°	267.2	267.2	243.2	166.9	114.1
77.5°	206.0	203.6	186.1	124.6	82.9
80°	165.1	165.1	150.1	98.3	66.1
82.5°	129.1	129.1	116.5	76.8	49.2
85°	75.1	75.1	69.1	44.6	27.0
87.5°	27.0	28.8	28.2	19.7	17.4
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)