

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: P519099

Luminaire Tested: **SQ4-WB-050U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519099  
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-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

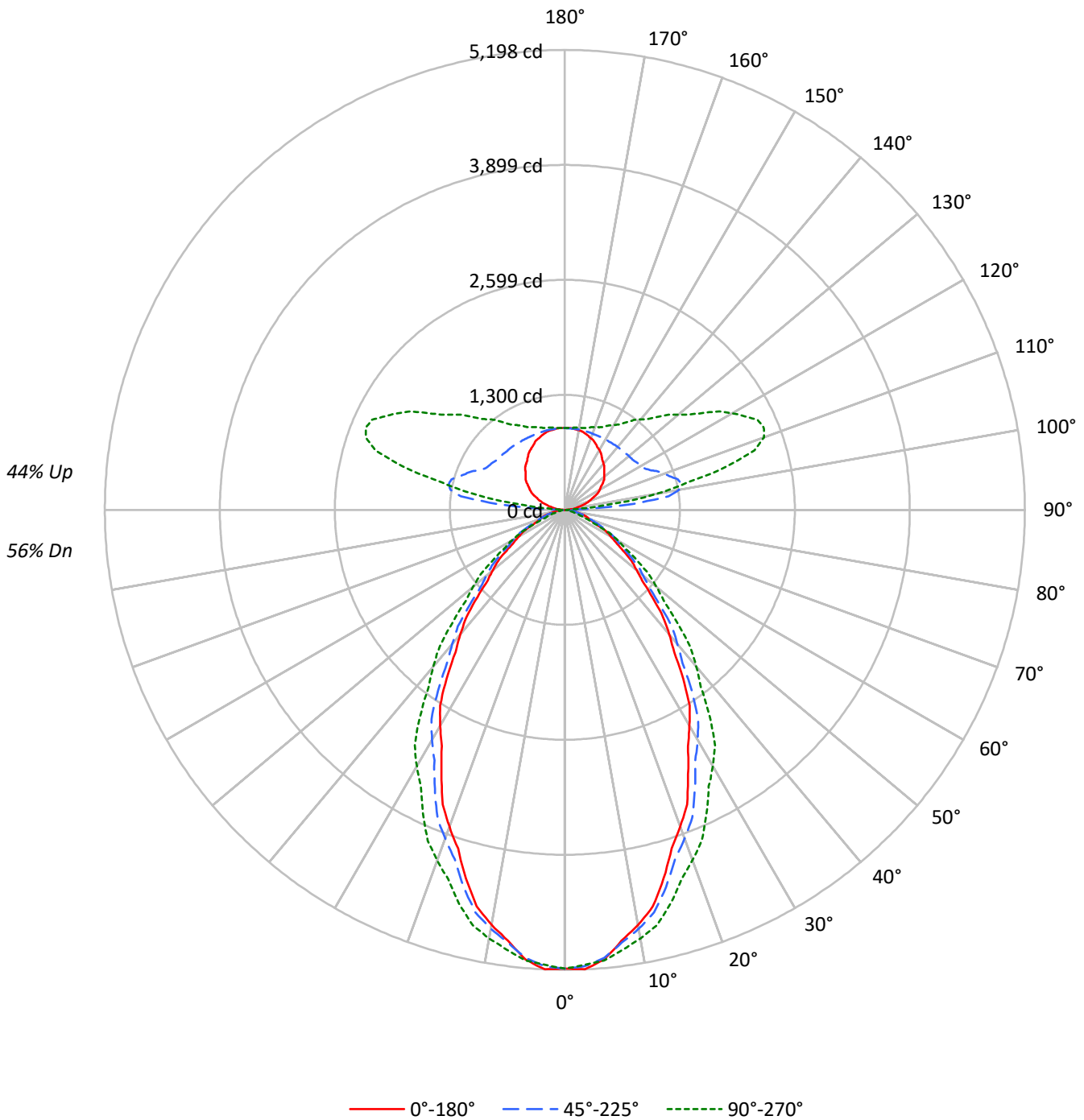
Lumens per Lamp: N/A  
Luminaire Lumens: 13595.0 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 105.6  
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49				49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43				43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38				38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34				34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31				31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28				28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25				25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23				23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21				21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20				20

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

	0°	45°	90°
0°	15946	15946	15946
5°	15747	15691	15782
10°	14878	15012	15361
15°	13734	14053	14683
20°	12472	12941	13797
25°	11187	11797	12854
30°	10002	10657	11877
35°	8747	9379	10720
40°	7362	7947	9280
45°	6076	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3681	4114	4254
65°	2930	3460	2749
70°	2598	2700	1678
75°	2406	2190	1028
80°	2216	2015	887
85°	2008	1845	723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	475.6	3.5
10°-20°	1237.0	9.1
20°-30°	1602.3	11.8
30°-40°	1569.0	11.5
40°-50°	1201.0	8.8
50°-60°	800.3	5.9
60°-70°	436.7	3.2
70°-80°	182.0	1.3
80°-90°	55.1	0.4
90°-100°	443.8	3.3
100°-110°	1205.5	8.9
110°-120°	1239.5	9.1
120°-130°	991.0	7.3
130°-140°	778.7	5.7
140°-150°	597.1	4.4
150°-160°	429.4	3.2
160°-170°	262.6	1.9
170°-180°	88.5	0.7
0°-30°	3314.9	24.4
0°-40°	4884.0	35.9
0°-60°	6885.3	50.6
0°-90°	7559.1	55.6
90°-120°	2888.8	21.2
90°-150°	5255.5	38.7
90°-180°	6036.0	44.4
0°-180°	13595.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5185	5185	5185	5185	5185	
5°	5101	5050	5083	5094	5112	475
15°	4314	4298	4414	4534	4612	1205
25°	3297	3306	3476	3628	3788	1516
35°	2330	2341	2498	2666	2855	1448
45°	1397	1424	1518	1632	1781	1089
55°	803	836	885	919	994	728
65°	403	436	476	416	378	419
75°	202	202	184	126	86	216
85°	57	57	52	34	20	62
90°	3	12	21	27	27	7
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°	5185.0	5185.0	5185.0	5185.0	5185.0
2.5°	5197.7	5151.5	5163.2	5162.8	5148.6
5°	5100.8	5049.7	5082.6	5094.4	5112.2
7.5°	4911.5	4872.8	4932.9	4977.4	5013.5
10°	4764.1	4730.7	4807.3	4872.1	4918.8
12.5°	4593.0	4565.0	4659.9	4746.8	4807.8
15°	4313.6	4298.1	4413.7	4533.8	4611.7
17.5°	4014.7	4007.1	4139.8	4279.9	4379.6
20°	3810.8	3808.6	3954.2	4100.1	4215.8
22.5°	3605.2	3610.1	3763.0	3914.8	4046.5
25°	3296.7	3305.5	3476.4	3627.9	3788.1
27.5°	3011.3	3015.4	3192.0	3352.0	3522.8
30°	2816.6	2827.7	3000.9	3166.5	3344.4
32.5°	2621.8	2634.8	2804.3	2975.4	3157.0
35°	2329.7	2340.8	2498.1	2666.2	2855.3
37.5°	2028.5	2043.6	2183.2	2342.1	2528.1
40°	1833.7	1856.0	1979.4	2129.1	2311.5
42.5°	1646.3	1673.9	1788.2	1930.3	2094.9
45°	1396.9	1423.6	1517.5	1632.4	1781.4
47.5°	1182.2	1212.9	1285.0	1383.9	1511.1
50°	1060.2	1089.1	1155.8	1229.0	1349.1
52.5°	952.8	981.7	1041.1	1097.6	1199.9
55°	803.1	836.5	885.0	918.6	994.2
57.5°	680.3	712.3	750.8	765.9	811.8
60°	598.4	633.9	668.9	667.2	691.6
62.5°	523.7	554.0	588.8	564.7	566.1
65°	402.7	436.1	475.5	415.5	377.7
67.5°	325.3	332.5	373.1	289.7	244.8
70°	288.9	288.9	300.3	224.4	186.6
72.5°	254.4	254.4	243.9	182.5	142.9
75°	202.5	202.5	184.3	126.5	86.5
77.5°	156.1	154.3	141.1	94.4	62.8
80°	125.1	125.1	113.8	74.5	50.1
82.5°	97.8	97.8	88.3	58.2	37.3
85°	56.9	56.9	52.3	33.8	20.5
87.5°	20.6	22.4	22.4	16.2	14.5
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)