

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: P519556

Luminaire Tested: **SQ4-WB-150U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519556  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

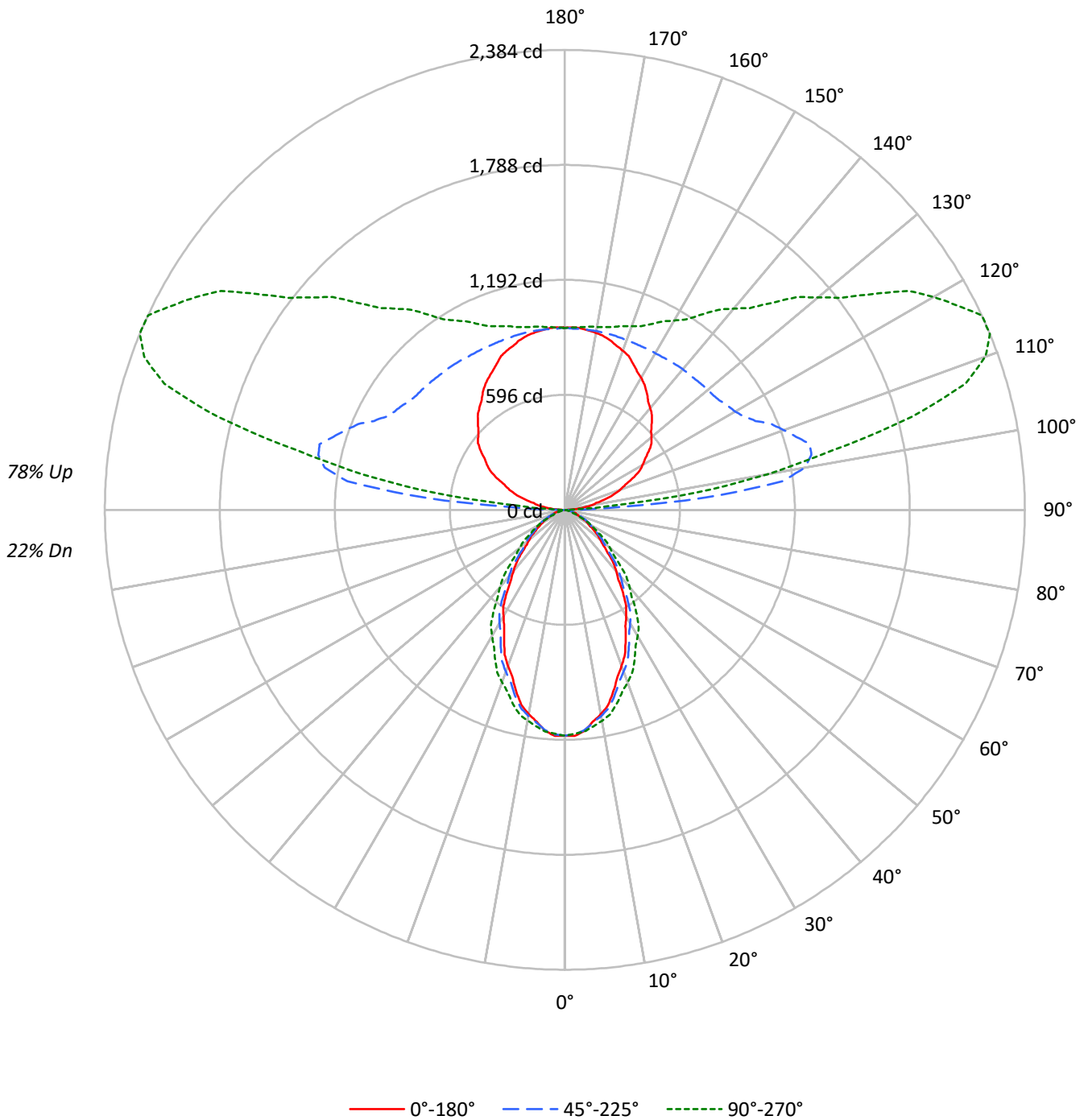
Lumens per Lamp: N/A  
Luminaire Lumens: 7791.8 lumens  
Efficiency: N/A  
Efficacy: 139.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

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

	0°	45°	90°
0°	10797	10797	10797
5°	10663	10625	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7987	8704
30°	6772	7216	8041
35°	5922	6350	7258
40°	4985	5380	6283
45°	4114	4469	5247
50°	3435	3745	4371
55°	2916	3214	3610
60°	2493	2786	2880
65°	1984	2342	1860
70°	1759	1829	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.3	1.4
10°-20°	279.2	3.6
20°-30°	361.6	4.6
30°-40°	354.1	4.5
40°-50°	271.1	3.5
50°-60°	180.6	2.3
60°-70°	98.6	1.3
70°-80°	41.1	0.5
80°-90°	13.6	0.2
90°-100°	438.6	5.6
100°-110°	1185.8	15.2
110°-120°	1246.8	16.0
120°-130°	1012.7	13.0
130°-140°	794.4	10.2
140°-150°	609.7	7.8
150°-160°	438.5	5.6
160°-170°	267.9	3.4
170°-180°	90.3	1.2
0°-30°	748.2	9.6
0°-40°	1102.3	14.1
0°-60°	1554.0	19.9
0°-90°	1707.2	21.9
90°-120°	2871.2	36.8
90°-150°	5287.9	67.9
90°-180°	6085.0	78.1
0°-180°	7791.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1151	1140	1147	1150	1154	107
15°	974	970	996	1023	1041	272
25°	744	746	785	819	855	342
35°	526	528	564	602	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	29	20	49
85°	13	13	12	8	5	14
90°	2	6	13	14	13	5
95°	68	239	729	378	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1170.3	1170.3	1170.3	1170.3	1170.3
2.5°	1173.1	1162.7	1165.3	1165.3	1162.0
5°	1151.3	1139.7	1147.2	1149.8	1153.8
7.5°	1108.5	1099.8	1113.4	1123.4	1131.5
10°	1075.3	1067.7	1085.0	1099.6	1110.2
12.5°	1036.7	1030.3	1051.7	1071.4	1085.1
15°	973.6	970.1	996.2	1023.3	1040.9
17.5°	906.1	904.4	934.4	966.0	988.5
20°	860.1	859.6	892.5	925.4	951.5
22.5°	813.7	814.8	849.3	883.6	913.3
25°	744.1	746.1	784.6	818.8	855.0
27.5°	679.7	680.6	720.4	756.5	795.1
30°	635.7	638.2	677.3	714.7	754.8
32.5°	591.8	594.7	632.9	671.6	712.5
35°	525.8	528.3	563.8	601.8	644.4
37.5°	457.8	461.3	492.8	528.6	570.6
40°	413.9	418.9	446.7	480.5	521.7
42.5°	371.6	377.8	403.6	435.7	472.8
45°	315.3	321.3	342.5	368.4	402.1
47.5°	266.8	273.7	290.0	312.3	341.1
50°	239.3	245.8	260.9	277.4	304.5
52.5°	215.1	221.6	235.0	247.7	270.8
55°	181.3	188.8	199.8	207.3	224.4
57.5°	153.5	160.8	169.5	172.9	183.2
60°	135.1	143.1	151.0	150.6	156.1
62.5°	118.2	125.0	132.9	127.5	127.8
65°	90.9	98.4	107.3	93.8	85.2
67.5°	73.4	75.0	84.2	65.4	55.3
70°	65.2	65.2	67.8	50.6	42.1
72.5°	57.4	57.4	55.0	41.2	32.2
75°	45.7	45.7	41.6	28.6	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.9	5.7	6.7	5.3	4.7
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.4	377.5	224.5
97.5°	109.3	274.0	1136.9	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.0
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.8	2207.0	2319.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.1	474.5	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.8
120°	465.3	544.7	1018.9	1892.6	2207.5
122.5°	492.9	570.8	1002.6	1794.3	2111.6
125°	531.3	608.8	983.3	1659.4	1949.4
127.5°	566.6	642.7	972.0	1549.3	1804.4
130°	586.1	664.6	967.1	1481.3	1711.7
132.5°	606.5	684.1	962.2	1419.9	1632.1
135°	636.9	712.4	956.9	1339.9	1516.7
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.7	755.3	950.8	1233.1	1361.2
142.5°	709.1	771.6	947.6	1195.4	1307.6
145°	740.6	796.2	943.7	1146.9	1234.3
147.5°	769.2	818.5	939.3	1102.9	1170.1
150°	790.3	834.0	937.6	1079.0	1132.7
152.5°	809.8	848.0	936.8	1056.9	1101.0
155°	836.0	868.8	935.6	1028.8	1062.6
157.5°	863.3	886.1	935.8	1009.2	1031.5
160°	878.7	897.6	936.6	996.9	1012.8
162.5°	890.9	906.6	937.4	987.1	999.0
165°	910.2	919.1	939.7	976.3	981.3
167.5°	923.4	929.6	939.9	967.1	969.5
170°	931.5	934.5	940.7	963.0	963.0
172.5°	938.0	938.6	940.7	958.1	957.3
175°	944.7	943.8	940.7	952.8	950.8
177.5°	947.0	944.6	940.5	948.6	946.2
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)