

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: P519396

Luminaire Tested: **SQ4-WB-100U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519396  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

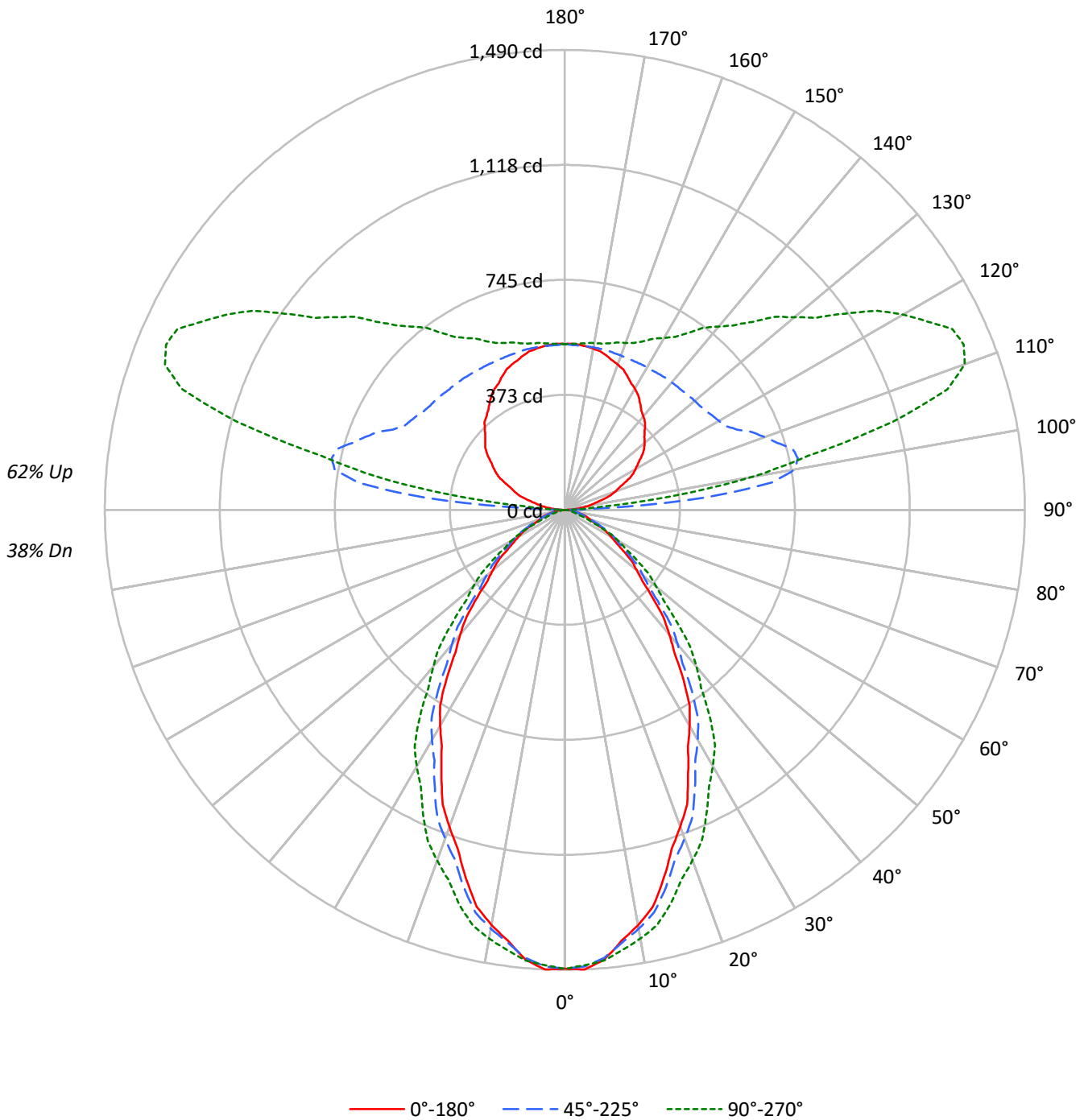
Lumens per Lamp: N/A  
Luminaire Lumens: 5657.4 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 49.1  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	13718	13718	13718
5°	13546	13498	13576
10°	12798	12915	13213
15°	11814	12089	12631
20°	10728	11132	11869
25°	9623	10147	11058
30°	8604	9167	10217
35°	7524	8068	9221
40°	6333	6836	7983
45°	5227	5677	6665
50°	4363	4757	5553
55°	3704	4082	4586
60°	3166	3539	3659
65°	2521	2976	2364
70°	2236	2323	1443
75°	2071	1882	884
80°	1907	1732	765
85°	1725	1588	625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.4	2.4
10°-20°	354.7	6.3
20°-30°	459.5	8.1
30°-40°	449.9	8.0
40°-50°	344.4	6.1
50°-60°	229.5	4.1
60°-70°	125.2	2.2
70°-80°	52.2	0.9
80°-90°	15.9	0.3
90°-100°	251.5	4.4
100°-110°	694.4	12.3
110°-120°	716.1	12.7
120°-130°	575.5	10.2
130°-140°	452.3	8.0
140°-150°	346.9	6.1
150°-160°	249.3	4.4
160°-170°	152.5	2.7
170°-180°	51.4	0.9
0°-30°	950.5	16.8
0°-40°	1400.4	24.8
0°-60°	1974.3	34.9
0°-90°	2167.6	38.3
90°-120°	1662.0	29.4
90°-150°	3036.6	53.7
90°-180°	3490.0	61.7
0°-180°	5657.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1463	1448	1457	1461	1466	136
15°	1237	1232	1266	1300	1322	345
25°	945	948	997	1040	1086	435
35°	668	671	716	764	819	415
45°	401	408	435	468	511	312
55°	230	240	254	263	285	209
65°	116	125	136	119	108	120
75°	58	58	53	36	25	62
85°	16	16	15	10	6	18
90°	2	3	7	8	9	3
95°	37	136	456	188	122	40
105°	124	191	764	1166	1098	132
115°	222	268	615	1218	1385	218
125°	304	346	558	944	1108	271
135°	366	406	542	764	862	283
145°	424	454	535	651	700	266
155°	479	495	531	584	602	221
165°	518	525	534	554	559	146
175°	537	538	534	542	540	51
180°	537	537	537	537	537	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1486.8	1486.8	1486.8	1486.8	1486.8
2.5°	1490.4	1477.2	1480.5	1480.4	1476.3
5°	1462.6	1448.0	1457.4	1460.8	1465.9
7.5°	1408.4	1397.3	1414.5	1427.3	1437.6
10°	1366.1	1356.5	1378.5	1397.1	1410.4
12.5°	1317.0	1309.0	1336.2	1361.1	1378.6
15°	1236.9	1232.4	1265.6	1300.0	1322.4
17.5°	1151.2	1149.0	1187.1	1227.3	1255.8
20°	1092.7	1092.1	1133.8	1175.7	1208.9
22.5°	1033.8	1035.2	1079.0	1122.6	1160.3
25°	945.3	947.9	996.8	1040.3	1086.2
27.5°	863.5	864.6	915.3	961.2	1010.1
30°	807.6	810.8	860.5	908.0	959.0
32.5°	751.8	755.5	804.1	853.2	905.2
35°	668.0	671.2	716.3	764.5	818.7
37.5°	581.7	586.0	626.0	671.6	724.9
40°	525.8	532.2	567.6	610.5	662.8
42.5°	472.1	480.0	512.8	553.5	600.7
45°	400.6	408.2	435.1	468.1	510.8
47.5°	339.0	347.8	368.5	396.8	433.3
50°	304.0	312.3	331.4	352.4	386.9
52.5°	273.2	281.5	298.5	314.7	344.1
55°	230.3	239.9	253.8	263.4	285.1
57.5°	195.1	204.2	215.3	219.6	232.8
60°	171.6	181.8	191.8	191.3	198.3
62.5°	150.2	158.9	168.8	161.9	162.3
65°	115.5	125.0	136.3	119.1	108.3
67.5°	93.3	95.3	107.0	83.1	70.2
70°	82.9	82.9	86.1	64.3	53.5
72.5°	72.9	72.9	69.9	52.3	41.0
75°	58.1	58.1	52.8	36.3	24.8
77.5°	44.8	44.2	40.4	27.1	18.0
80°	35.9	35.9	32.6	21.4	14.4
82.5°	28.1	28.1	25.3	16.7	10.7
85°	16.3	16.3	15.0	9.7	5.9
87.5°	6.1	6.4	6.6	4.7	4.3
90°	1.7	3.4	6.9	7.8	8.6
92.5°	15.5	64.2	114.8	41.9	32.7
95°	37.0	136.1	456.3	187.6	122.0
97.5°	61.2	152.4	676.0	520.4	376.9
100°	79.1	162.2	757.1	762.4	619.6
102.5°	96.2	173.4	772.9	942.0	806.6
105°	123.7	191.0	764.0	1166.3	1098.2
107.5°	153.0	212.8	721.3	1274.5	1299.3
110°	173.6	227.4	688.3	1297.7	1378.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	192.2	243.9	657.4	1279.4	1398.3
115°	221.7	267.9	615.3	1218.1	1385.3
117.5°	247.5	293.5	587.6	1131.8	1322.0
120°	264.7	310.1	576.6	1073.4	1265.0
122.5°	281.2	324.5	567.7	1018.8	1200.3
125°	304.2	346.2	557.7	943.9	1107.7
127.5°	323.8	365.8	551.9	880.4	1021.8
130°	336.9	378.9	549.1	841.6	970.2
132.5°	349.2	389.2	546.4	809.1	925.5
135°	366.1	405.6	542.2	764.5	861.9
137.5°	385.0	421.0	540.2	727.0	810.2
140°	395.3	430.6	538.8	702.0	775.1
142.5°	407.0	439.6	537.4	679.8	744.2
145°	424.5	453.9	535.4	650.8	700.4
147.5°	441.4	467.1	533.5	626.3	664.8
150°	453.7	474.7	532.8	611.7	642.8
152.5°	463.4	483.0	532.1	599.2	624.9
155°	478.7	494.6	531.1	583.9	602.4
157.5°	492.8	505.0	531.2	572.8	585.4
160°	501.0	511.9	531.9	566.5	575.8
162.5°	507.9	517.5	532.6	561.0	568.2
165°	518.2	524.9	533.7	554.4	558.6
167.5°	526.1	530.1	534.5	550.4	551.7
170°	530.2	533.6	534.5	548.3	548.3
172.5°	533.7	535.7	534.5	545.5	544.8
175°	537.1	537.9	534.5	542.2	540.5
177.5°	538.5	537.8	534.3	539.1	537.8
180°	537.1	537.1	537.1	537.1	537.1

(END OF REPORT)