

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: P564954

Luminaire Tested: **SQ4-PW1-100U-100D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564954  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

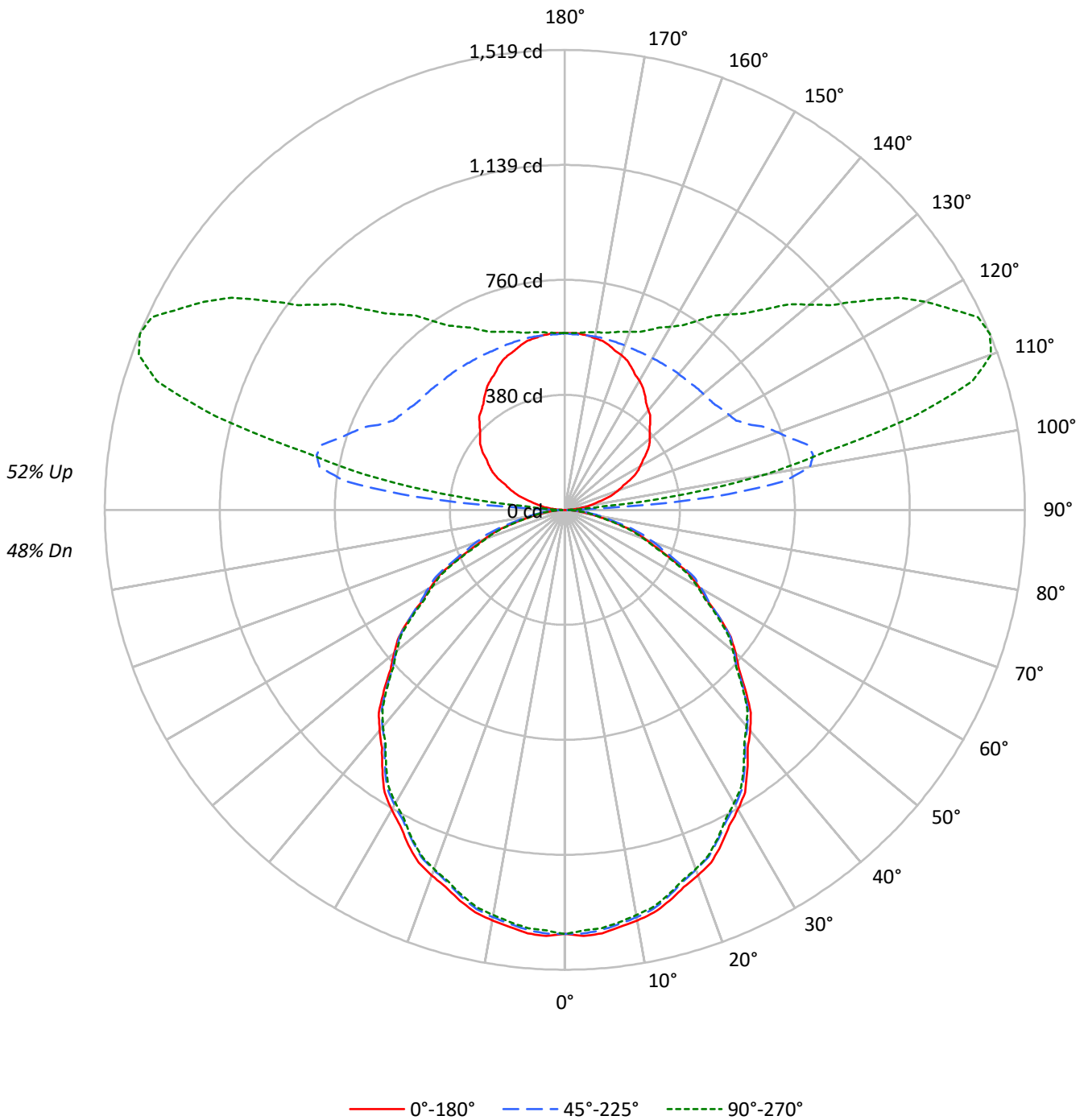
Lumens per Lamp: N/A  
Luminaire Lumens: 7356.1 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 57.9  
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46				41	
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39				35	
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33				29	
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29				25	
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14				12	

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

	0°	45°	90°
0°	12924	12924	12924
5°	13008	12905	12847
10°	12903	12799	12730
15°	12767	12625	12579
20°	12615	12420	12397
25°	12438	12212	12174
30°	12175	11992	11913
35°	11830	11663	11593
40°	11460	11282	11237
45°	11015	10870	10822
50°	10558	10469	10399
55°	10065	10065	9905
60°	9451	9634	9291
65°	8649	9080	8433
70°	7623	8357	7424
75°	6513	7479	6335
80°	5048	6296	5117
85°	3271	4838	4308



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.9	1.8
10°-20°	372.4	5.1
20°-30°	552.4	7.5
30°-40°	646.4	8.8
40°-50°	643.5	8.7
50°-60°	555.7	7.6
60°-70°	400.0	5.4
70°-80°	209.7	2.9
80°-90°	53.2	0.7
90°-100°	273.2	3.7
100°-110°	754.3	10.3
110°-120°	777.9	10.6
120°-130°	625.1	8.5
130°-140°	491.3	6.7
140°-150°	376.8	5.1
150°-160°	270.8	3.7
160°-170°	165.6	2.3
170°-180°	55.8	0.8
0°-30°	1056.7	14.4
0°-40°	1703.1	23.2
0°-60°	2902.2	39.5
0°-90°	3565.2	48.5
90°-120°	1805.5	24.5
90°-150°	3298.7	44.8
90°-180°	3791.0	51.5
0°-180°	7356.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1404	1389	1393	1390	1387	133
15°	1337	1320	1322	1319	1317	377
25°	1222	1201	1200	1192	1196	562
35°	1050	1036	1036	1026	1029	657
45°	844	837	833	831	829	651
55°	626	624	626	617	616	558
65°	396	408	416	400	386	393
75°	183	200	210	196	178	196
85°	31	40	46	43	41	41
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1400.8	1400.8	1400.8	1400.8	1400.8
2.5°	1408.7	1397.1	1400.8	1397.7	1390.9
5°	1404.5	1388.8	1393.4	1389.6	1387.2
7.5°	1390.2	1375.7	1379.1	1375.1	1373.6
10°	1377.3	1362.8	1366.2	1361.2	1358.8
12.5°	1362.5	1347.1	1350.4	1345.5	1344.0
15°	1336.6	1319.7	1321.8	1319.3	1316.9
17.5°	1306.5	1289.4	1289.7	1285.7	1285.3
20°	1284.8	1266.7	1265.0	1260.1	1262.6
22.5°	1261.1	1242.0	1240.3	1233.5	1236.9
25°	1221.8	1201.3	1199.6	1192.3	1195.9
27.5°	1176.4	1156.1	1156.2	1145.9	1149.7
30°	1142.8	1123.5	1125.6	1113.3	1118.2
32.5°	1107.3	1089.9	1091.0	1078.8	1083.6
35°	1050.3	1035.8	1035.5	1025.7	1029.3
37.5°	992.0	979.2	977.2	971.6	972.5
40°	951.5	940.7	936.7	933.0	933.0
42.5°	909.1	899.2	895.3	892.5	891.6
45°	844.2	836.9	833.1	830.6	829.4
47.5°	780.0	773.2	769.9	768.1	766.9
50°	735.6	730.7	729.4	725.7	724.5
52.5°	691.1	688.2	686.9	682.2	681.0
55°	625.7	624.5	625.7	617.1	615.8
57.5°	557.6	559.5	563.5	551.9	549.0
60°	512.2	517.0	522.1	508.4	503.5
62.5°	465.8	473.5	480.6	464.9	458.1
65°	396.2	408.2	415.9	399.6	386.3
67.5°	329.0	344.0	353.2	335.6	320.6
70°	282.6	299.5	309.8	292.1	275.2
72.5°	242.1	261.0	269.3	252.6	235.7
75°	182.7	199.6	209.8	195.8	177.7
77.5°	129.6	145.5	154.0	141.8	126.9
80°	95.0	111.9	118.5	108.3	96.3
82.5°	67.4	81.4	85.9	79.8	71.6
85°	30.9	40.5	45.7	43.1	40.7
87.5°	8.3	15.4	20.3	20.5	21.6
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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CATALOG NUMBER: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)