

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: P519840

Luminaire Tested: **SQ4-F-025U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-025U-100D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

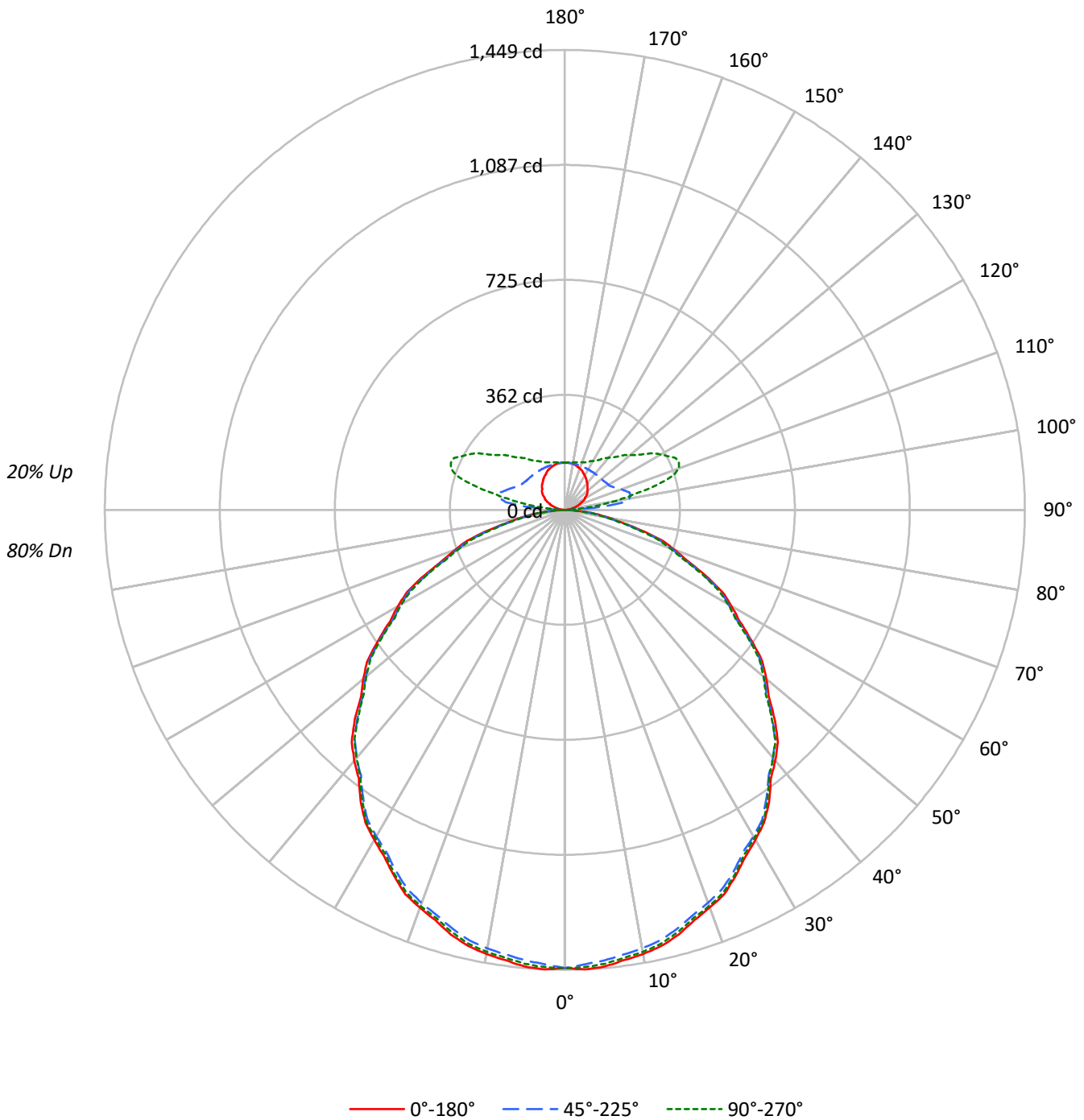
Lumens per Lamp: N/A  
Luminaire Lumens: 4904.1 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.7  
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	50	30	10	0	
RCR																						
0	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80				
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68				
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56				
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48				
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41				
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35				
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31				
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27				
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24				
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22				
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20				

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

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13050	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12719
35°	12633	12476	12544
40°	12422	12280	12291
45°	12204	12037	11997
50°	11889	11747	11718
55°	11540	11411	11332
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9463
75°	8830	8548	8370
80°	7263	7003	6684
85°	4298	4721	4827



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.3	2.8
10°-20°	388.0	7.9
20°-30°	582.7	11.9
30°-40°	695.4	14.2
40°-50°	712.8	14.5
50°-60°	634.7	12.9
60°-70°	473.1	9.6
70°-80°	256.2	5.2
80°-90°	59.1	1.2
90°-100°	72.6	1.5
100°-110°	191.0	3.9
110°-120°	198.0	4.0
120°-130°	158.8	3.2
130°-140°	124.6	2.5
140°-150°	95.6	2.0
150°-160°	68.9	1.4
160°-170°	42.1	0.9
170°-180°	14.2	0.3
0°-30°	1106.9	22.6
0°-40°	1802.3	36.8
0°-60°	3149.8	64.2
0°-90°	3938.2	80.3
90°-120°	461.6	9.4
90°-150°	840.7	17.1
90°-180°	966.0	19.7
0°-180°	4904.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1445	1442	1425	1438	1436	137
15°	1385	1380	1366	1377	1377	390
25°	1272	1269	1257	1264	1267	586
35°	1122	1117	1108	1110	1114	700
45°	935	930	922	918	920	720
55°	717	718	709	702	704	642
65°	488	486	477	472	473	482
75°	248	245	240	235	235	264
85°	41	44	45	46	46	57
90°	1	3	8	4	4	2
95°	10	38	125	64	44	11
105°	34	52	211	320	299	36
115°	61	74	169	337	385	60
125°	85	95	154	260	307	75
135°	101	112	149	210	238	78
145°	118	125	147	179	193	74
155°	133	136	147	162	166	61
165°	143	145	147	153	155	40
175°	149	149	148	150	150	14
180°	149	149	149	149	149	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1443.6	1443.6	1443.6	1443.6	1443.6
2.5°	1449.2	1446.1	1433.3	1443.6	1442.0
5°	1444.6	1441.7	1424.8	1437.7	1435.7
7.5°	1431.1	1428.3	1413.3	1425.2	1423.4
10°	1420.8	1418.0	1403.0	1414.9	1413.9
12.5°	1407.4	1404.5	1389.5	1401.4	1400.4
15°	1385.2	1380.3	1366.3	1377.2	1377.2
17.5°	1355.8	1352.2	1339.2	1348.3	1348.5
20°	1333.6	1330.8	1317.8	1327.7	1328.7
22.5°	1311.5	1308.6	1294.0	1303.1	1304.9
25°	1272.2	1269.3	1257.4	1264.4	1267.3
27.5°	1231.8	1227.5	1215.7	1221.9	1224.1
30°	1200.9	1198.9	1188.0	1191.1	1193.9
32.5°	1168.4	1166.4	1157.1	1158.6	1163.8
35°	1121.6	1116.8	1107.7	1109.8	1113.7
37.5°	1066.3	1064.0	1055.2	1054.1	1057.8
40°	1031.4	1027.6	1019.6	1017.7	1020.5
42.5°	993.4	989.5	979.9	978.0	981.7
45°	935.3	930.5	922.5	917.5	919.5
47.5°	870.3	870.3	862.0	856.4	859.2
50°	828.3	828.3	818.4	813.6	816.4
52.5°	784.7	785.5	774.8	772.2	771.3
55°	717.4	718.3	709.4	702.5	704.5
57.5°	652.4	650.2	639.9	635.3	636.3
60°	606.4	603.5	595.5	588.6	593.5
62.5°	559.6	558.2	550.3	542.6	542.0
65°	487.5	485.5	476.6	471.6	472.6
67.5°	415.7	413.5	405.2	398.2	400.7
70°	366.6	366.6	357.7	353.6	350.8
72.5°	321.4	317.6	310.9	305.4	303.2
75°	247.7	244.8	239.8	234.8	234.8
77.5°	180.3	177.9	174.6	171.2	170.2
80°	136.7	135.7	131.8	130.7	125.8
82.5°	96.3	96.1	93.7	91.2	91.0
85°	40.6	44.5	44.6	45.6	45.6
87.5°	7.3	12.4	12.7	10.3	10.3
90°	1.0	2.9	7.6	3.8	3.8
92.5°	4.0	19.3	42.8	18.9	12.2
95°	9.6	37.6	125.1	64.5	44.0
97.5°	16.6	41.3	187.3	148.9	109.6
100°	22.0	44.4	206.4	209.1	162.4
102.5°	26.6	47.5	211.7	260.5	220.5
105°	34.4	52.1	211.1	320.5	299.0
107.5°	42.4	58.9	199.1	351.7	356.9
110°	47.8	62.7	189.2	359.7	382.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	67.3	180.0	354.6	389.0
115°	61.2	74.2	169.1	337.3	385.0
117.5°	69.0	81.0	161.6	313.4	366.3
120°	73.6	84.8	158.6	297.3	348.7
122.5°	78.2	89.4	156.3	281.2	331.9
125°	85.0	95.3	153.8	259.9	306.6
127.5°	90.5	101.0	151.7	242.8	282.2
130°	93.6	104.9	150.9	232.0	268.4
132.5°	96.6	107.9	150.2	222.7	255.4
135°	101.2	111.5	149.0	209.8	237.9
137.5°	106.0	116.1	148.8	200.2	223.2
140°	109.8	119.2	148.1	192.5	214.0
142.5°	112.9	121.5	148.1	187.1	205.6
145°	117.5	124.9	147.1	178.9	193.0
147.5°	122.1	129.3	147.1	172.2	183.8
150°	125.1	131.7	147.1	168.3	177.7
152.5°	128.2	133.2	147.1	165.3	172.3
155°	132.8	136.5	147.1	161.5	166.2
157.5°	136.2	139.7	147.1	158.3	161.6
160°	138.5	141.3	147.1	156.7	158.6
162.5°	140.8	142.9	147.1	155.1	157.0
165°	143.3	145.2	147.1	152.8	154.8
167.5°	145.6	146.5	148.1	151.9	152.7
170°	147.1	148.1	148.1	151.9	151.9
172.5°	147.9	148.1	148.1	151.1	150.4
175°	149.0	149.0	148.1	150.0	150.0
177.5°	149.0	149.0	148.3	149.8	149.0
180°	149.0	149.0	149.0	149.0	149.0

(END OF REPORT)