

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: P520177

Luminaire Tested: **SQ4-F-100U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520177  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-050D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

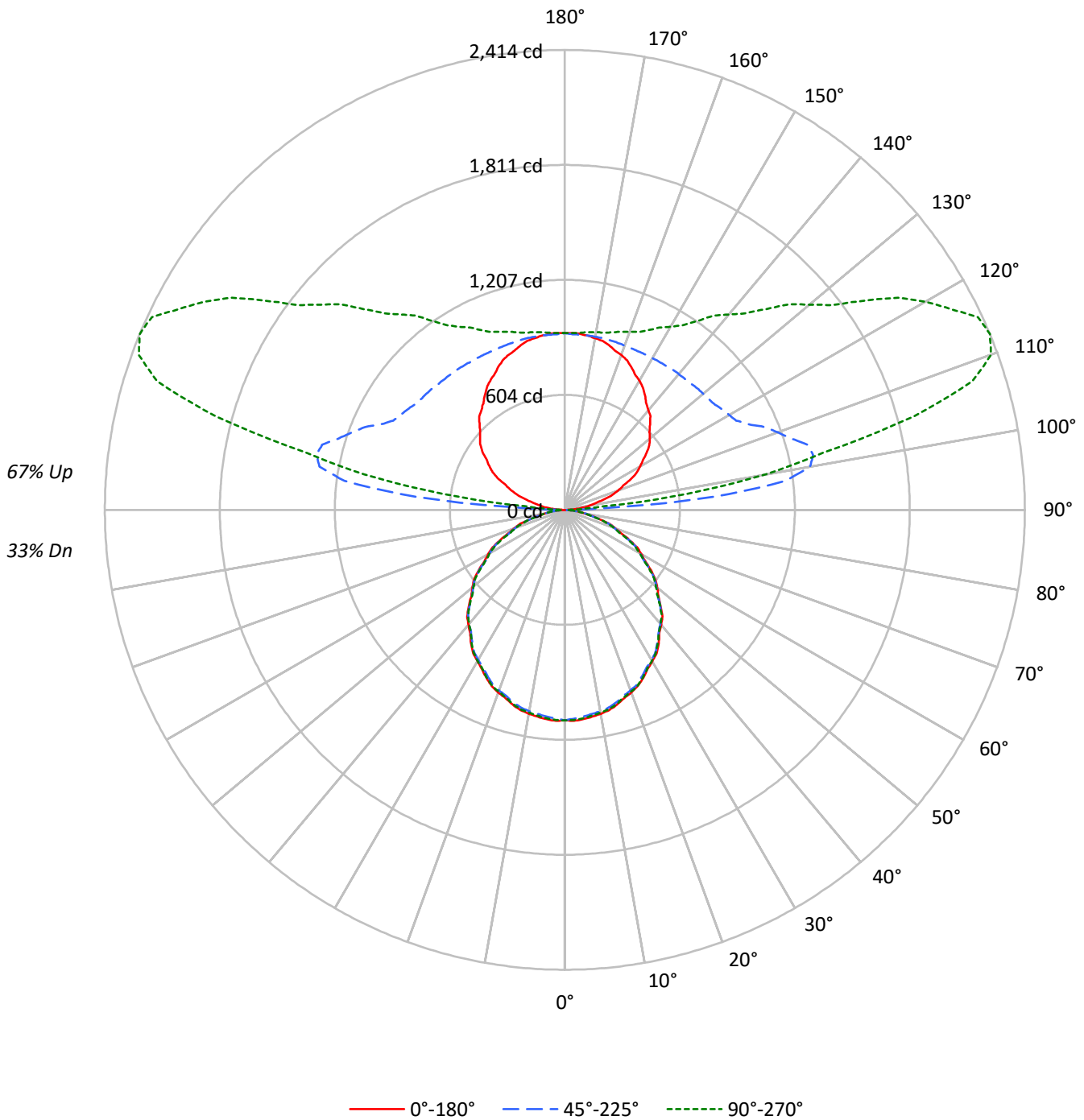
Lumens per Lamp: N/A  
Luminaire Lumens: 9041.9 lumens  
Efficiency: N/A  
Efficacy: 141.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33				
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28				
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23				
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20				
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17				
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15				
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13				
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11				
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10				
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9				
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8				

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

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6786
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6602	6651
25°	6605	6525	6585
30°	6513	6460	6503
35°	6442	6364	6397
40°	6318	6259	6271
45°	6188	6137	6137
50°	6057	6001	5973
55°	5916	5837	5805
60°	5696	5605	5568
65°	5424	5317	5253
70°	5053	4947	4841
75°	4534	4394	4287
80°	3666	3616	3510
85°	2195	2505	2611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	1.2
10°-20°	296.9	3.3
20°-30°	445.9	4.9
30°-40°	532.3	5.9
40°-50°	545.4	6.0
50°-60°	486.4	5.4
60°-70°	362.3	4.0
70°-80°	196.6	2.2
80°-90°	47.5	0.5
90°-100°	434.2	4.8
100°-110°	1198.7	13.3
110°-120°	1236.3	13.7
120°-130°	993.5	11.0
130°-140°	780.8	8.6
140°-150°	598.8	6.6
150°-160°	430.3	4.8
160°-170°	263.2	2.9
170°-180°	88.7	1.0
0°-30°	847.0	9.4
0°-40°	1379.3	15.3
0°-60°	2411.1	26.7
0°-90°	3017.5	33.4
90°-120°	2869.2	31.7
90°-150°	5242.2	58.0
90°-180°	6024.0	66.6
0°-180°	9041.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1103	1102	1090	1100	1099	105
15°	1059	1056	1046	1055	1055	298
25°	973	970	961	967	970	448
35°	858	855	848	848	852	535
45°	711	713	706	704	706	549
55°	552	552	544	540	541	491
65°	373	371	365	361	361	369
75°	191	189	185	182	180	202
85°	31	34	36	37	37	44
90°	3	6	12	13	15	5
95°	64	235	788	324	211	68
105°	214	330	1319	2014	1896	227
115°	383	463	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.9	1104.9	1104.9	1104.9	1104.9
2.5°	1108.4	1106.2	1096.6	1104.9	1103.7
5°	1103.4	1101.9	1090.1	1100.4	1099.0
7.5°	1095.4	1092.6	1080.9	1091.0	1089.5
10°	1087.1	1084.3	1073.8	1082.7	1081.2
12.5°	1076.5	1074.7	1063.2	1072.0	1071.7
15°	1059.0	1056.2	1045.7	1054.6	1054.6
17.5°	1036.0	1034.2	1024.1	1032.7	1031.5
20°	1020.6	1017.7	1008.7	1016.1	1016.1
22.5°	1001.6	999.9	991.0	997.2	998.4
25°	973.2	970.4	961.4	967.4	970.3
27.5°	941.9	939.6	932.1	936.0	938.0
30°	917.0	917.0	909.6	911.2	915.6
32.5°	894.6	894.6	886.0	887.5	889.5
35°	857.9	855.0	847.5	847.6	852.0
37.5°	815.3	813.8	809.1	808.2	809.4
40°	786.9	785.4	779.5	781.0	781.0
42.5°	758.5	757.0	751.1	749.1	751.4
45°	711.4	712.9	705.5	704.0	705.5
47.5°	665.0	665.0	659.1	655.0	657.3
50°	633.0	633.0	627.1	624.2	624.2
52.5°	599.9	601.1	594.0	589.9	591.0
55°	551.7	551.7	544.3	539.9	541.3
57.5°	498.5	498.5	491.1	486.7	489.3
60°	463.0	463.0	455.6	451.1	452.6
62.5°	427.5	427.5	420.1	415.6	415.9
65°	372.7	371.3	365.3	360.9	360.9
67.5°	320.1	316.3	311.8	305.9	305.9
70°	281.0	279.5	275.1	269.2	269.2
72.5°	245.5	243.0	238.4	233.7	233.7
75°	190.8	189.3	184.9	181.9	180.4
77.5°	136.7	135.5	135.2	131.0	132.2
80°	103.5	103.5	102.1	99.1	99.1
82.5°	74.0	75.1	72.5	71.9	70.7
85°	31.1	33.9	35.5	37.0	37.0
87.5°	6.5	10.6	10.6	12.1	12.4
90°	3.0	5.8	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	234.9	787.7	323.8	210.7
97.5°	105.6	263.1	1167.0	898.4	650.7
100°	136.5	280.0	1307.0	1316.3	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.7	329.7	1318.8	2013.5	1895.9
107.5°	264.0	367.4	1245.2	2200.1	2243.1
110°	299.6	392.5	1188.3	2240.3	2379.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.6	1062.2	2102.8	2391.4
117.5°	427.2	506.8	1014.4	1953.8	2282.2
120°	456.9	535.3	995.5	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.8	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.6	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.7	726.7	932.5	1255.0	1398.7
140°	682.5	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.8	927.8	1173.6	1284.7
145°	732.8	783.7	924.2	1123.5	1209.0
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.8	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.6	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.7	893.3	919.5	968.4	980.9
165°	894.6	906.1	921.3	957.1	964.3
167.5°	908.2	915.2	922.7	950.1	952.4
170°	915.3	921.2	922.7	946.5	946.5
172.5°	921.3	924.7	922.7	941.7	940.5
175°	927.2	928.7	922.7	936.0	933.1
177.5°	929.6	928.4	922.4	930.8	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)