

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: P520224

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520224
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

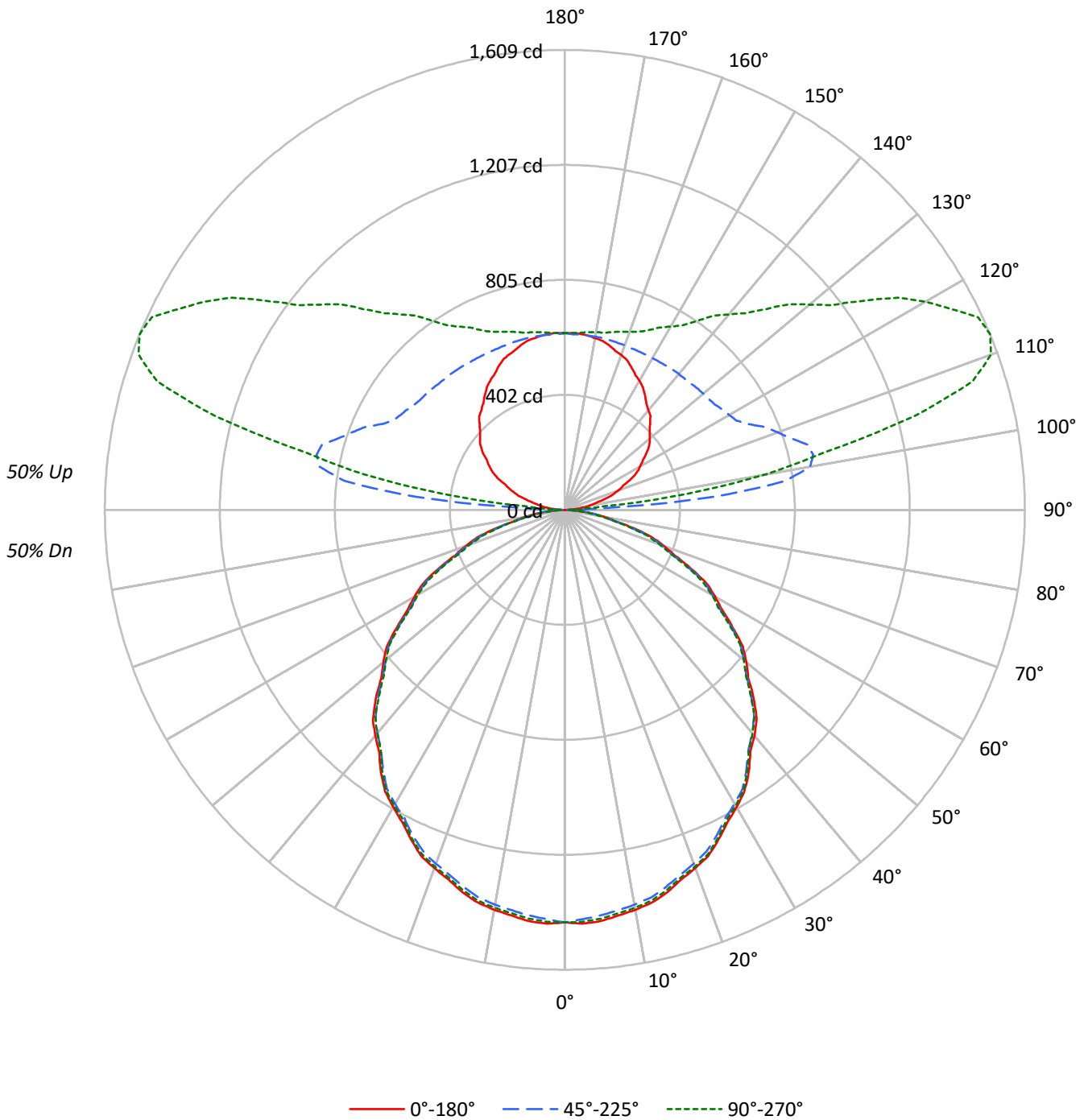
Lumens per Lamp: N/A
Luminaire Lumens: 7955.0 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

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	1.7
10°-20°	388.0	4.9
20°-30°	582.7	7.3
30°-40°	695.4	8.7
40°-50°	712.8	9.0
50°-60°	634.7	8.0
60°-70°	473.1	5.9
70°-80°	256.2	3.2
80°-90°	59.6	0.7
90°-100°	289.5	3.6
100°-110°	799.1	10.0
110°-120°	824.2	10.4
120°-130°	662.3	8.3
130°-140°	520.5	6.5
140°-150°	399.2	5.0
150°-160°	286.9	3.6
160°-170°	175.5	2.2
170°-180°	59.2	0.7
0°-30°	1106.9	13.9
0°-40°	1802.3	22.7
0°-60°	3149.8	39.6
0°-90°	3938.7	49.5
90°-120°	1912.8	24.0
90°-150°	3494.8	43.9
90°-180°	4016.0	50.5
0°-180°	7955.0	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°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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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°	7.5	12.6	12.7	11.3	11.5
90°	2.0	4.0	7.9	8.9	9.9
92.5°	17.8	73.9	132.2	48.2	37.6
95°	42.5	156.6	525.2	215.8	140.5
97.5°	70.4	175.5	777.9	599.0	433.8
100°	91.0	186.8	871.3	877.4	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1263.9
107.5°	176.1	244.9	830.2	1466.8	1495.4
110°	199.8	261.6	792.2	1493.5	1586.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.2	280.7	756.6	1472.4	1609.4
115°	255.1	308.3	708.2	1401.8	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.7	1235.3	1455.8
122.5°	323.6	373.5	653.4	1172.6	1381.4
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.6	421.0	635.2	1013.3	1176.0
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	447.9	628.8	931.2	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.4	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.6	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.3	613.2	704.0	739.7
152.5°	533.3	555.9	612.4	689.6	719.3
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.3	611.4	659.2	673.8
160°	576.6	589.2	612.2	652.0	662.7
162.5°	584.5	595.5	613.0	645.7	654.0
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	635.0
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.9	627.1
175°	618.2	619.1	615.2	624.0	622.1
177.5°	619.7	619.0	615.0	620.4	619.0
180°	618.2	618.2	618.2	618.2	618.2

(END OF REPORT)