

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: P520200

Luminaire Tested: **SQ4-F-100U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520200
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

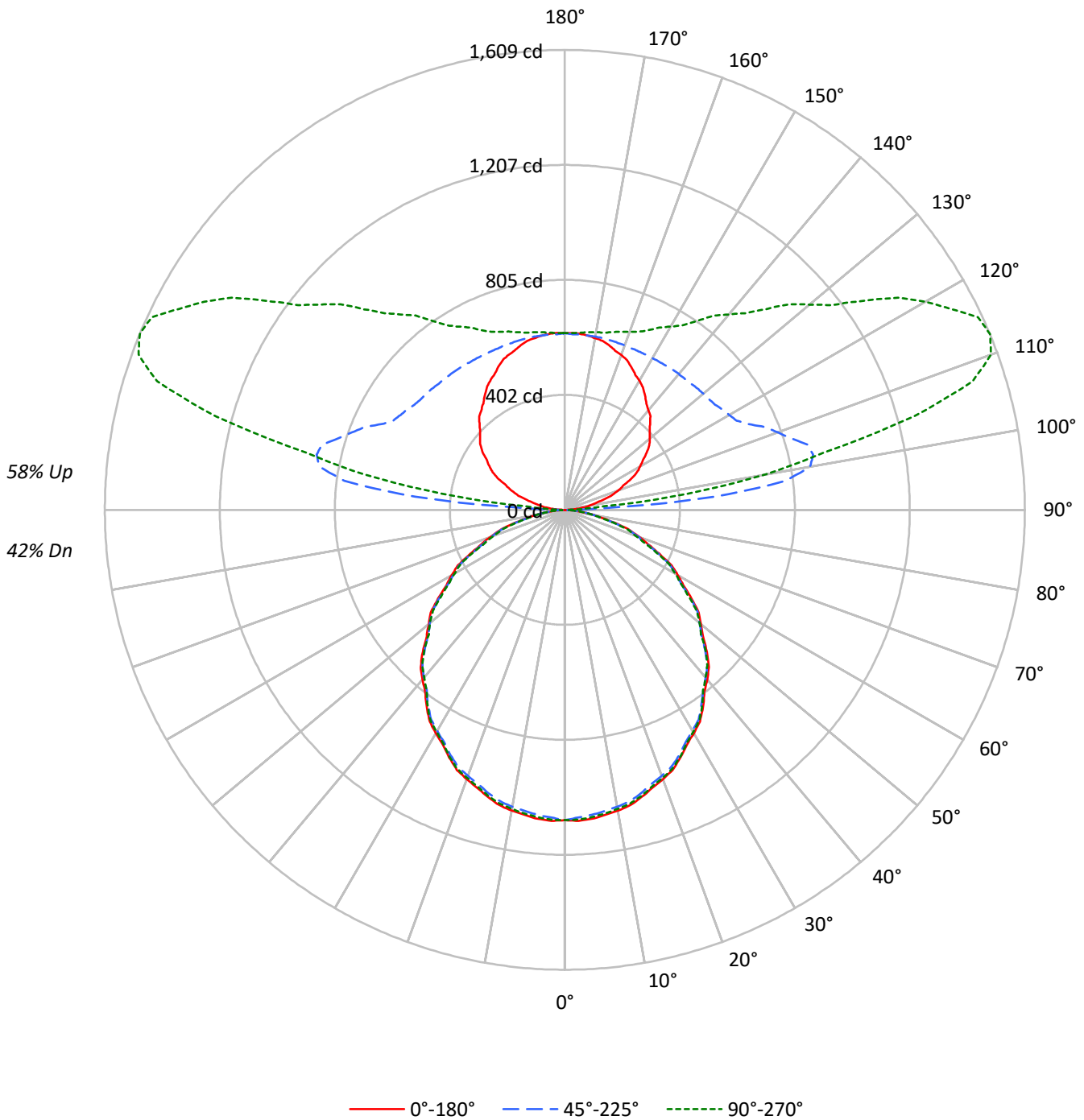
Lumens per Lamp: N/A
Luminaire Lumens: 6980.7 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9936	9813	9897
20°	9846	9729	9807
25°	9737	9637	9708
30°	9614	9508	9562
35°	9488	9388	9432
40°	9328	9233	9221
45°	9167	9053	9077
50°	8912	8842	8842
55°	8705	8594	8516
60°	8425	8280	8208
65°	7971	7820	7713
70°	7486	7300	7113
75°	6734	6491	6349
80°	5388	5281	5228
85°	3229	3642	3747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	1.5
10°-20°	291.7	4.2
20°-30°	438.2	6.3
30°-40°	522.9	7.5
40°-50°	536.2	7.7
50°-60°	477.8	6.8
60°-70°	356.3	5.1
70°-80°	193.2	2.8
80°-90°	45.7	0.7
90°-100°	289.5	4.1
100°-110°	799.1	11.4
110°-120°	824.2	11.8
120°-130°	662.3	9.5
130°-140°	520.5	7.5
140°-150°	399.2	5.7
150°-160°	286.9	4.1
160°-170°	175.5	2.5
170°-180°	59.2	0.8
0°-30°	832.3	11.9
0°-40°	1355.2	19.4
0°-60°	2369.2	33.9
0°-90°	2964.4	42.5
90°-120°	1912.8	27.4
90°-150°	3494.8	50.1
90°-180°	4016.0	57.5
0°-180°	6980.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1085	1084	1072	1080	1080	103
15°	1040	1038	1027	1035	1036	293
25°	956	956	947	952	954	441
35°	842	840	834	834	837	526
45°	703	700	694	694	696	541
55°	541	540	534	529	529	483
65°	365	365	358	354	353	363
75°	189	185	182	179	178	198
85°	30	32	34	34	35	42
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°	1085.4	1085.4	1085.4	1085.4	1085.4
2.5°	1089.4	1087.1	1077.5	1085.4	1084.6
5°	1085.4	1083.5	1071.6	1080.5	1079.5
7.5°	1076.6	1074.5	1062.8	1071.6	1071.4
10°	1068.7	1065.8	1054.9	1063.8	1062.8
12.5°	1058.5	1055.6	1044.7	1053.5	1052.6
15°	1040.2	1038.2	1027.4	1035.2	1036.2
17.5°	1019.3	1015.6	1005.9	1013.6	1014.6
20°	1002.8	999.9	990.9	997.8	998.8
22.5°	985.4	982.6	973.6	980.5	981.5
25°	956.5	955.5	946.7	951.6	953.6
27.5°	925.2	922.6	915.4	919.1	921.1
30°	902.4	900.4	892.5	895.5	897.5
32.5°	878.8	877.6	870.5	872.0	874.6
35°	842.4	840.4	833.5	833.6	837.4
37.5°	802.0	799.8	794.1	793.2	794.7
40°	774.5	771.6	766.6	765.6	765.6
42.5°	746.1	744.0	737.5	735.8	738.0
45°	702.6	699.8	693.8	693.8	695.7
47.5°	655.6	654.4	647.5	644.4	645.2
50°	620.9	622.9	616.0	612.2	616.0
52.5°	591.0	589.8	583.7	579.8	581.4
55°	541.2	540.2	534.3	529.4	529.4
57.5°	491.2	488.8	482.6	478.9	481.8
60°	456.6	455.6	448.7	441.9	444.8
62.5°	422.0	420.2	413.3	408.8	410.9
65°	365.1	365.1	358.2	354.3	353.3
67.5°	315.3	310.7	306.8	302.1	300.7
70°	277.5	273.7	270.6	266.6	263.7
72.5°	240.5	238.2	233.6	229.7	229.1
75°	188.9	185.1	182.1	179.1	178.1
77.5°	134.4	133.6	130.9	129.3	129.9
80°	101.4	101.4	99.4	99.4	98.4
82.5°	71.4	72.2	71.8	70.3	70.1
85°	30.5	32.5	34.4	34.4	35.4
87.5°	5.9	10.1	10.2	10.4	10.6
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)