

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: P519856

Luminaire Tested: **SQ4-F-025U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519856
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-940-1D-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

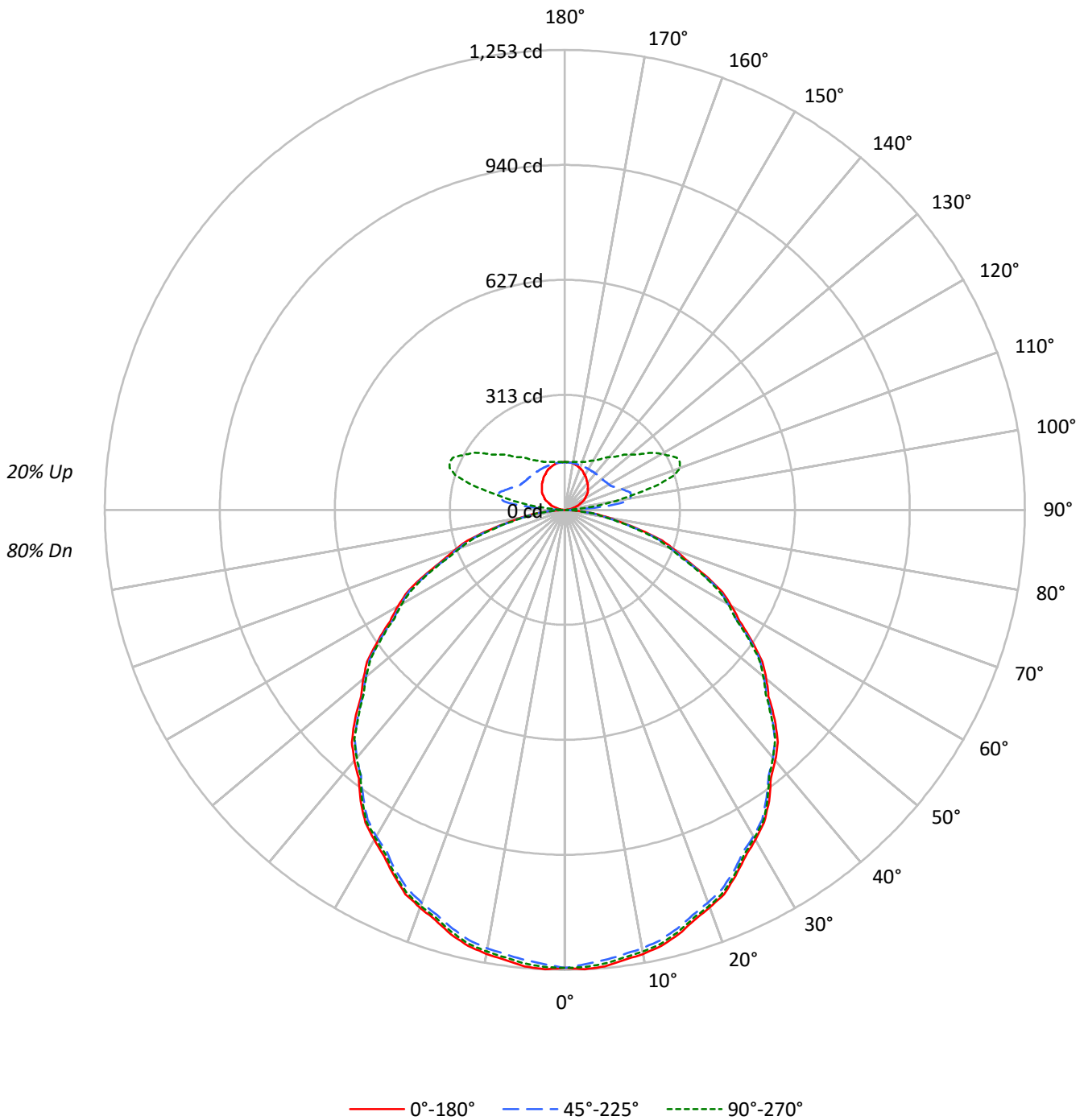
Lumens per Lamp: N/A
Luminaire Lumens: 4248.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	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	82	81	79	76	74	72	71	67
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56
3	87	77	69	63	83	74	66	61	68	62	57	63	58	54	58	54	50	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	69	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	37	33	41	35	31	38	33	29	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	27	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°	11513	11513	11513
5°	11566	11407	11494
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10995
35°	10921	10786	10844
40°	10738	10616	10625
45°	10550	10404	10370
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9466
65°	9200	8994	8920
70°	8551	8341	8179
75°	7632	7390	7236
80°	6280	6052	5781
85°	3716	4076	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	2.8
10°-20°	335.4	7.9
20°-30°	503.7	11.9
30°-40°	601.1	14.2
40°-50°	616.2	14.5
50°-60°	548.7	12.9
60°-70°	409.0	9.6
70°-80°	221.5	5.2
80°-90°	51.1	1.2
90°-100°	63.4	1.5
100°-110°	166.7	3.9
110°-120°	172.9	4.1
120°-130°	138.7	3.3
130°-140°	108.8	2.6
140°-150°	83.5	2.0
150°-160°	60.2	1.4
160°-170°	36.8	0.9
170°-180°	12.4	0.3
0°-30°	956.9	22.5
0°-40°	1558.1	36.7
0°-60°	2722.9	64.1
0°-90°	3404.5	80.1
90°-120°	403.0	9.5
90°-150°	734.1	17.3
90°-180°	843.0	19.8
0°-180°	4248.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1249	1246	1232	1243	1241	118
15°	1197	1193	1181	1191	1191	337
25°	1100	1097	1087	1093	1096	507
35°	970	966	958	959	963	605
45°	809	804	797	793	795	622
55°	620	621	613	607	609	555
65°	421	420	412	408	409	417
75°	214	212	207	203	203	228
85°	35	38	38	39	39	49
90°	1	2	7	3	3	2
95°	8	33	109	56	38	9
105°	30	46	184	280	261	32
115°	53	65	148	295	336	53
125°	74	83	134	227	268	66
135°	88	97	130	183	208	68
145°	103	109	128	156	168	64
155°	116	119	128	141	145	53
165°	125	127	128	134	135	35
175°	130	130	129	131	131	12
180°	130	130	130	130	130	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.9	1247.9	1247.9	1247.9	1247.9
2.5°	1252.8	1250.1	1239.1	1247.9	1246.7
5°	1248.8	1246.4	1231.7	1242.8	1241.1
7.5°	1237.2	1234.7	1221.8	1232.0	1230.5
10°	1228.3	1225.7	1212.9	1223.2	1222.3
12.5°	1216.6	1214.2	1201.2	1211.5	1210.7
15°	1197.4	1193.2	1181.2	1190.6	1190.6
17.5°	1172.1	1168.9	1157.7	1165.6	1165.8
20°	1152.9	1150.4	1139.2	1147.8	1148.7
22.5°	1133.7	1131.2	1118.6	1126.6	1128.1
25°	1099.8	1097.3	1086.9	1093.0	1095.6
27.5°	1064.8	1061.2	1051.0	1056.3	1058.2
30°	1038.2	1036.5	1027.0	1029.7	1032.1
32.5°	1010.0	1008.4	1000.2	1001.6	1006.1
35°	969.6	965.5	957.6	959.4	962.8
37.5°	921.9	919.8	912.3	911.3	914.4
40°	891.6	888.3	881.4	879.8	882.2
42.5°	858.7	855.4	847.2	845.5	848.6
45°	808.6	804.3	797.4	793.2	794.8
47.5°	752.4	752.4	745.2	740.2	742.8
50°	716.1	716.1	707.5	703.3	705.8
52.5°	678.4	679.0	669.8	667.6	666.7
55°	620.2	620.9	613.3	607.4	609.0
57.5°	564.0	562.1	553.2	549.2	550.1
60°	524.2	521.7	514.8	508.9	513.0
62.5°	483.8	482.6	475.7	469.1	468.6
65°	421.4	419.7	412.0	407.7	408.6
67.5°	359.4	357.4	350.4	344.2	346.4
70°	317.0	317.0	309.2	305.8	303.2
72.5°	277.8	274.6	268.8	264.0	262.1
75°	214.1	211.6	207.3	203.0	203.0
77.5°	155.9	153.7	150.9	148.0	147.1
80°	118.2	117.4	113.9	113.0	108.8
82.5°	83.2	83.1	81.0	78.8	78.7
85°	35.1	38.4	38.5	39.4	39.4
87.5°	6.3	10.7	11.0	8.9	8.9
90°	0.9	2.5	6.7	3.3	3.3
92.5°	3.5	16.9	37.4	16.5	10.7
95°	8.3	32.8	109.3	56.3	38.3
97.5°	14.5	36.0	163.5	130.0	95.8
100°	19.2	38.7	180.2	182.6	141.8
102.5°	23.2	41.5	184.9	227.4	192.5
105°	30.0	45.5	184.4	279.9	261.0
107.5°	37.0	51.4	173.9	307.0	311.6
110°	41.7	54.8	165.2	314.1	333.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.4	58.8	157.1	309.6	339.6
115°	53.4	64.8	147.7	294.6	336.2
117.5°	60.2	70.6	141.2	273.7	319.8
120°	64.2	74.0	138.5	259.6	304.4
122.5°	68.2	78.0	136.5	245.6	289.8
125°	74.3	83.3	134.3	227.0	267.7
127.5°	79.0	88.2	132.5	212.0	246.4
130°	81.7	91.6	131.8	202.5	234.4
132.5°	84.4	94.2	131.1	194.5	223.0
135°	88.4	97.4	130.1	183.2	207.7
137.5°	92.6	101.4	130.0	174.8	194.9
140°	96.0	104.1	129.3	168.1	186.9
142.5°	98.5	106.1	129.3	163.4	179.5
145°	102.6	109.2	128.5	156.3	168.5
147.5°	106.6	113.0	128.5	150.4	160.5
150°	109.3	115.0	128.5	147.0	155.1
152.5°	111.9	116.3	128.5	144.2	150.5
155°	115.9	119.2	128.5	141.1	145.1
157.5°	118.9	122.1	128.5	138.2	141.2
160°	120.9	123.4	128.5	136.9	138.5
162.5°	122.9	124.7	128.5	135.5	137.2
165°	125.1	126.7	128.5	133.5	135.2
167.5°	127.1	127.9	129.3	132.7	133.3
170°	128.5	129.2	129.3	132.7	132.7
172.5°	129.1	129.3	129.3	131.9	131.3
175°	130.1	130.1	129.3	131.0	131.0
177.5°	130.1	130.1	129.4	130.8	130.1
180°	130.1	130.1	130.1	130.1	130.1

(END OF REPORT)