

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: P519400

Luminaire Tested: **SQ4-WB-100U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519400
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

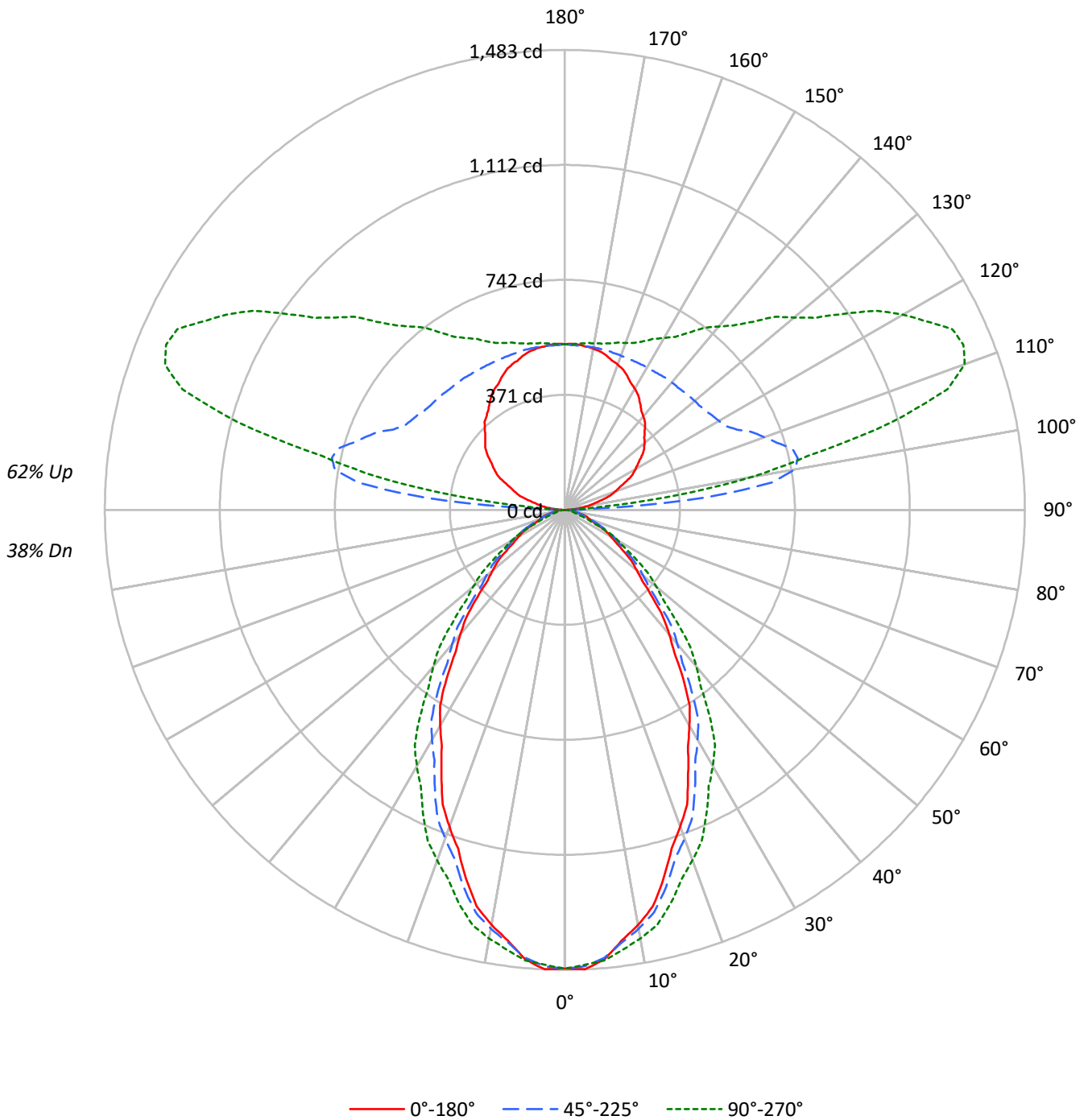
Lumens per Lamp: N/A
Luminaire Lumens: 5628.6 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13647	13647	13647
5°	13477	13429	13508
10°	12733	12849	13147
15°	11754	12027	12567
20°	10674	11076	11808
25°	9574	10097	11002
30°	8560	9120	10165
35°	7485	8027	9175
40°	6300	6801	7943
45°	5200	5648	6631
50°	4342	4732	5525
55°	3685	4062	4562
60°	3150	3521	3641
65°	2508	2962	2351
70°	2223	2312	1435
75°	2060	1875	880
80°	1897	1727	760
85°	1715	1577	614



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.7	2.4
10°-20°	352.9	6.3
20°-30°	457.1	8.1
30°-40°	447.6	8.0
40°-50°	342.6	6.1
50°-60°	228.3	4.1
60°-70°	124.6	2.2
70°-80°	51.9	0.9
80°-90°	15.8	0.3
90°-100°	250.2	4.4
100°-110°	690.9	12.3
110°-120°	712.5	12.7
120°-130°	572.6	10.2
130°-140°	450.0	8.0
140°-150°	345.1	6.1
150°-160°	248.0	4.4
160°-170°	151.7	2.7
170°-180°	51.1	0.9
0°-30°	945.7	16.8
0°-40°	1393.3	24.8
0°-60°	1964.3	34.9
0°-90°	2156.6	38.3
90°-120°	1653.6	29.4
90°-150°	3021.2	53.7
90°-180°	3472.0	61.7
0°-180°	5628.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1455	1441	1450	1453	1458	135
15°	1231	1226	1259	1293	1316	344
25°	940	943	992	1035	1081	433
35°	665	668	713	761	815	413
45°	398	406	433	466	508	311
55°	229	239	252	262	284	208
65°	115	124	136	118	108	119
75°	58	58	53	36	25	62
85°	16	16	15	10	6	18
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1479.2	1479.2	1479.2	1479.2	1479.2
2.5°	1482.9	1469.7	1473.0	1472.9	1468.8
5°	1455.2	1440.6	1450.0	1453.4	1458.5
7.5°	1401.2	1390.2	1407.3	1420.0	1430.3
10°	1359.1	1349.6	1371.5	1390.0	1403.3
12.5°	1310.3	1302.3	1329.4	1354.2	1371.6
15°	1230.6	1226.2	1259.2	1293.4	1315.7
17.5°	1145.3	1143.2	1181.0	1221.0	1249.5
20°	1087.2	1086.6	1128.1	1169.7	1202.7
22.5°	1028.5	1029.9	1073.6	1116.9	1154.4
25°	940.5	943.0	991.8	1035.0	1080.7
27.5°	859.1	860.2	910.6	956.3	1005.0
30°	803.5	806.7	856.1	903.4	954.1
32.5°	748.0	751.7	800.0	848.9	900.6
35°	664.6	667.8	712.7	760.6	814.6
37.5°	578.7	583.0	622.8	668.2	721.2
40°	523.1	529.5	564.7	607.4	659.5
42.5°	469.7	477.5	510.2	550.7	597.7
45°	398.5	406.1	432.9	465.7	508.2
47.5°	337.3	346.0	366.6	394.8	431.1
50°	302.5	310.7	329.7	350.6	384.9
52.5°	271.8	280.1	297.0	313.1	342.3
55°	229.1	238.6	252.5	262.1	283.6
57.5°	194.1	203.2	214.2	218.5	231.6
60°	170.7	180.9	190.8	190.3	197.3
62.5°	149.4	158.0	168.0	161.1	161.5
65°	114.9	124.4	135.7	118.5	107.7
67.5°	92.8	94.8	106.4	82.7	69.8
70°	82.4	82.4	85.7	64.0	53.2
72.5°	72.6	72.6	69.6	52.1	40.8
75°	57.8	57.8	52.6	36.1	24.7
77.5°	44.5	44.0	40.2	26.9	17.9
80°	35.7	35.7	32.5	21.3	14.3
82.5°	27.9	27.9	25.2	16.6	10.6
85°	16.2	16.2	14.9	9.6	5.8
87.5°	6.1	6.4	6.6	4.6	4.3
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)