

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: P520240

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520240
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-940-1D-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

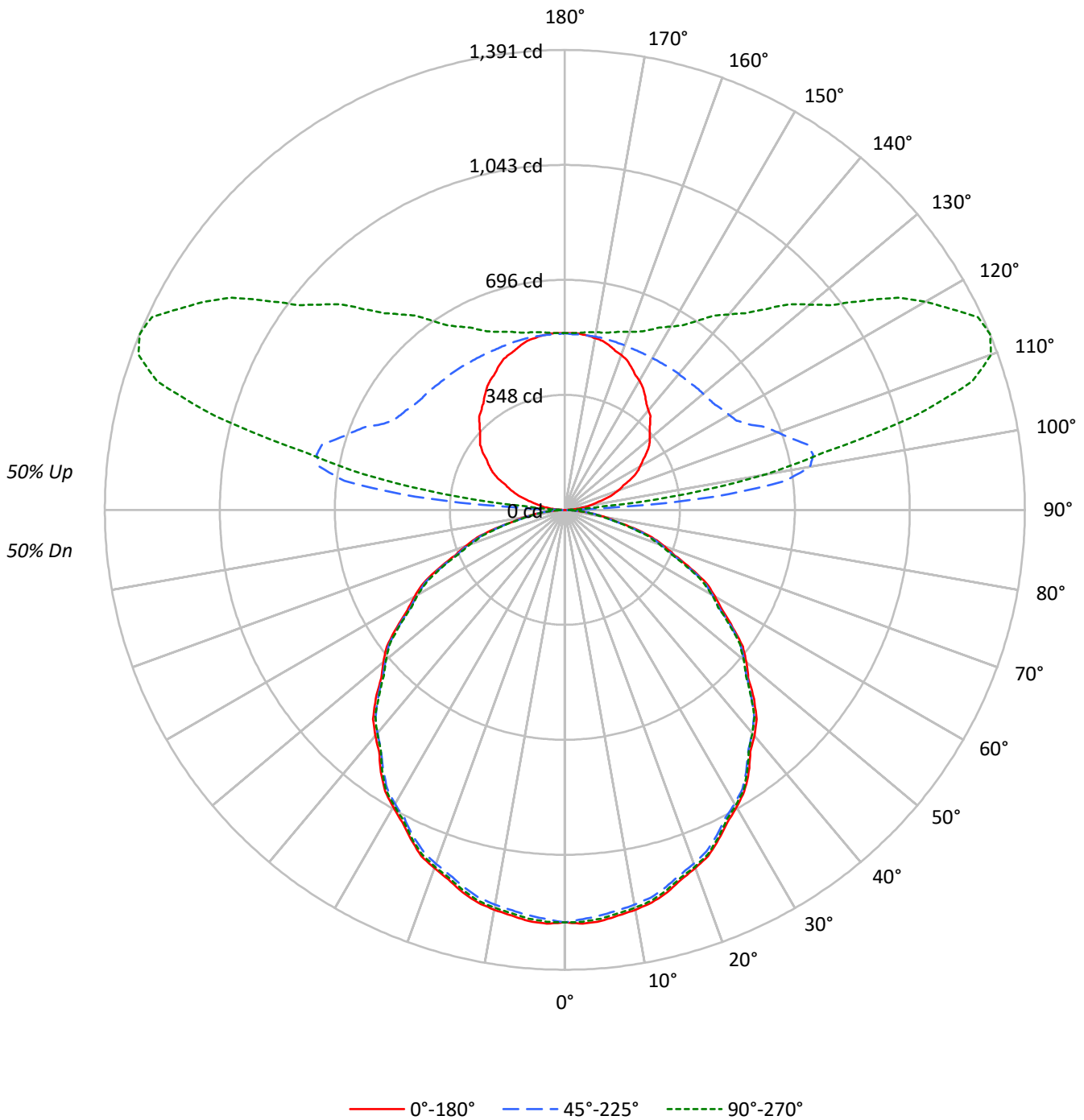
Lumens per Lamp: N/A
Luminaire Lumens: 6877.0 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	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	1.7
10°-20°	335.4	4.9
20°-30°	503.7	7.3
30°-40°	601.1	8.7
40°-50°	616.2	9.0
50°-60°	548.7	8.0
60°-70°	409.0	5.9
70°-80°	221.5	3.2
80°-90°	51.5	0.7
90°-100°	250.2	3.6
100°-110°	690.9	10.0
110°-120°	712.5	10.4
120°-130°	572.6	8.3
130°-140°	450.0	6.5
140°-150°	345.1	5.0
150°-160°	248.0	3.6
160°-170°	151.7	2.2
170°-180°	51.1	0.7
0°-30°	956.9	13.9
0°-40°	1558.1	22.7
0°-60°	2722.9	39.6
0°-90°	3404.9	49.5
90°-120°	1653.6	24.0
90°-150°	3021.2	43.9
90°-180°	3472.0	50.5
0°-180°	6877.0	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°	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	647	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	539	538	51
180°	534	534	534	534	534	

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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°	6.5	10.9	11.0	9.8	9.9
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.3	41.6	32.4
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.8	151.6	672.6	517.8	375.0
100°	78.6	161.4	753.3	758.5	616.5
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.2	190.0	760.1	1160.4	1092.7
107.5°	152.1	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	1272.8	1391.2
115°	220.6	266.6	612.1	1211.9	1378.3
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.4	573.6	1068.0	1258.6
122.5°	279.8	322.9	564.8	1013.7	1194.3
125°	302.7	344.4	554.9	939.1	1102.1
127.5°	322.2	363.9	549.1	876.0	1016.6
130°	335.1	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	804.9	920.9
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	437.3	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.4	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.5	472.4	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.3	581.0	599.4
157.5°	490.3	502.4	528.5	569.9	582.5
160°	498.5	509.3	529.2	563.7	572.9
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	527.5	531.8	547.5	548.9
170°	527.6	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	539.4	537.7
177.5°	535.8	535.1	531.6	536.4	535.1
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)