

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: P520048

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520048
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

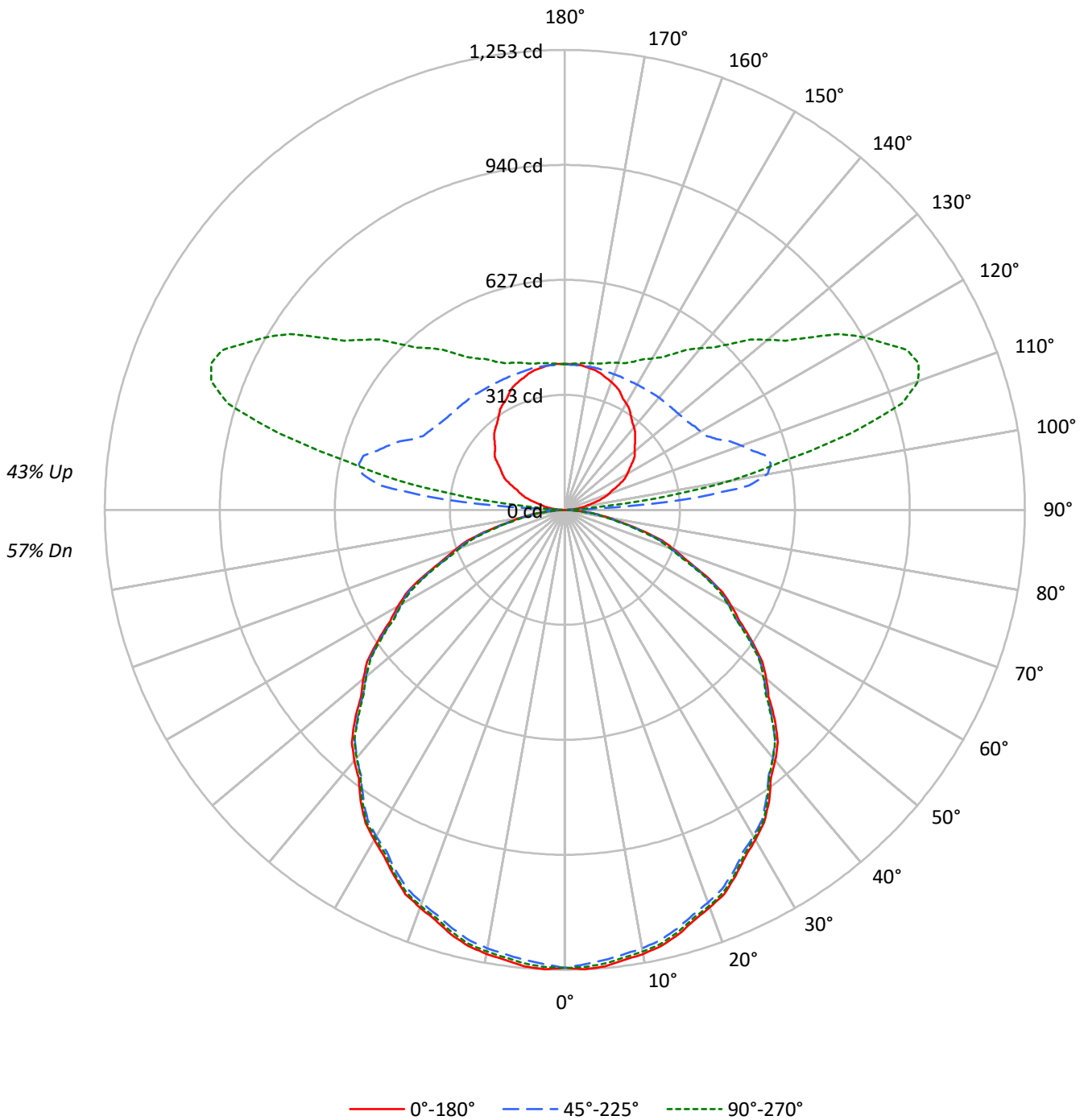
Lumens per Lamp: N/A
Luminaire Lumens: 5992.9 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

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	2.0
10°-20°	335.4	5.6
20°-30°	503.7	8.4
30°-40°	601.1	10.0
40°-50°	616.2	10.3
50°-60°	548.7	9.2
60°-70°	409.0	6.8
70°-80°	221.5	3.7
80°-90°	51.4	0.9
90°-100°	187.4	3.1
100°-110°	515.5	8.6
110°-120°	532.1	8.9
120°-130°	426.3	7.1
130°-140°	334.8	5.6
140°-150°	256.6	4.3
150°-160°	184.5	3.1
160°-170°	112.8	1.9
170°-180°	38.0	0.6
0°-30°	956.9	16.0
0°-40°	1558.1	26.0
0°-60°	2722.9	45.4
0°-90°	3404.9	56.8
90°-120°	1235.0	20.6
90°-150°	2252.8	37.6
90°-180°	2588.0	43.2
0°-180°	5992.9	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	3	6	8	8	3
95°	28	102	331	142	90	29
105°	92	142	568	865	807	97
115°	163	199	456	907	1030	161
125°	225	256	413	699	819	201
135°	271	301	402	566	640	209
145°	314	335	396	482	519	197
155°	355	367	393	433	445	163
165°	384	389	395	411	413	108
175°	397	398	396	401	400	38
180°	397	397	397	397	397	

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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	10.9	10.8	9.8	9.8
90°	0.9	3.3	5.9	7.6	7.6
92.5°	11.6	49.9	86.4	33.2	27.2
95°	27.9	102.3	331.4	141.7	90.5
97.5°	45.5	113.4	505.6	389.6	274.9
100°	58.3	120.3	560.4	565.6	461.5
102.5°	70.5	128.5	574.6	701.8	606.2
105°	92.1	141.7	568.0	865.0	807.2
107.5°	112.8	158.1	535.7	945.1	962.3
110°	127.6	168.9	511.4	964.9	1024.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.1	181.1	487.0	952.1	1042.7
115°	163.2	198.7	455.6	907.2	1029.6
117.5°	184.1	216.8	435.7	844.2	982.5
120°	197.0	228.4	426.9	797.0	940.0
122.5°	208.4	239.8	420.8	755.5	891.3
125°	224.9	256.3	413.4	699.3	819.1
127.5°	240.4	270.4	408.5	652.2	757.4
130°	248.5	279.1	405.7	624.3	720.2
132.5°	257.9	288.5	403.7	599.8	686.3
135°	271.3	301.1	401.5	565.5	639.9
137.5°	283.9	311.4	399.7	537.8	599.1
140°	293.3	319.0	399.0	519.4	574.7
142.5°	301.5	325.0	397.6	502.9	550.4
145°	313.6	335.1	395.6	481.8	519.0
147.5°	326.6	345.1	394.6	463.0	492.8
150°	334.7	351.2	393.9	452.8	475.9
152.5°	342.1	357.4	393.2	443.9	463.0
155°	355.1	366.6	393.0	433.0	445.4
157.5°	364.3	373.7	393.0	424.2	432.8
160°	371.1	378.5	393.0	419.4	426.0
162.5°	376.5	382.6	393.7	415.3	420.6
165°	383.7	388.7	394.8	410.8	413.4
167.5°	388.8	392.6	395.6	407.1	407.8
170°	392.2	394.7	395.6	405.7	405.7
172.5°	394.9	396.0	395.6	403.7	403.0
175°	397.3	398.1	395.6	400.6	399.9
177.5°	398.0	398.0	395.3	399.3	398.0
180°	397.3	397.3	397.3	397.3	397.3

(END OF REPORT)