

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: P519948

Luminaire Tested: **SQ4-F-050U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519948
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

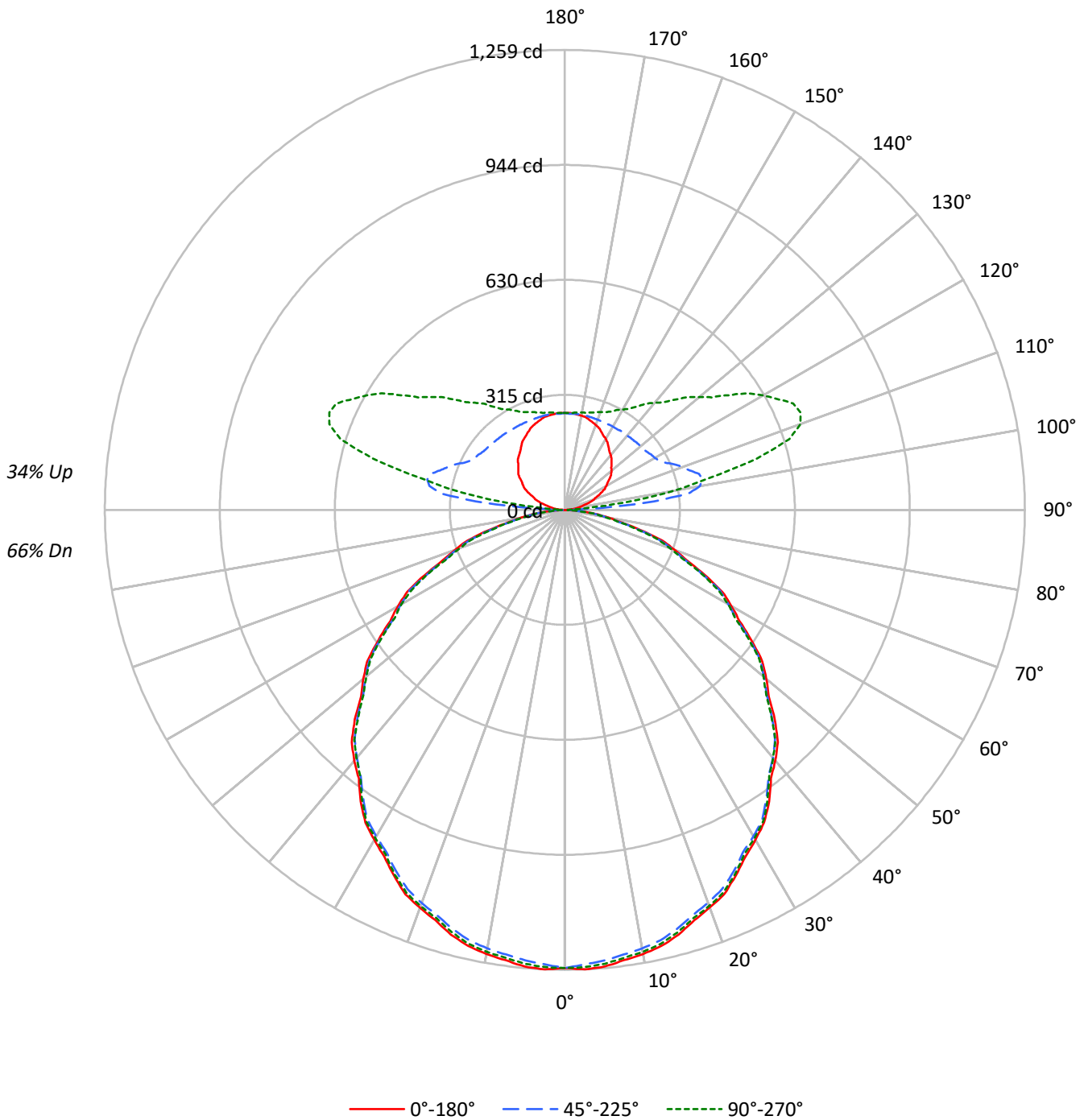
Lumens per Lamp: N/A
Luminaire Lumens: 5153.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11254	11122	11209
30°	11116	10997	11052
35°	10977	10841	10898
40°	10794	10670	10681
45°	10604	10458	10424
50°	10330	10207	10182
55°	10026	9915	9846
60°	9723	9547	9516
65°	9248	9040	8966
70°	8592	8384	8222
75°	7671	7429	7272
80°	6312	6084	5807
85°	3737	4097	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	2.3
10°-20°	337.1	6.5
20°-30°	506.3	9.8
30°-40°	604.2	11.7
40°-50°	619.3	12.0
50°-60°	551.5	10.7
60°-70°	411.1	8.0
70°-80°	222.6	4.3
80°-90°	51.7	1.0
90°-100°	127.3	2.5
100°-110°	345.7	6.7
110°-120°	355.4	6.9
120°-130°	284.2	5.5
130°-140°	223.3	4.3
140°-150°	171.2	3.3
150°-160°	123.1	2.4
160°-170°	75.3	1.5
170°-180°	25.4	0.5
0°-30°	961.8	18.7
0°-40°	1566.0	30.4
0°-60°	2736.8	53.1
0°-90°	3422.2	66.4
90°-120°	828.4	16.1
90°-150°	1507.0	29.2
90°-180°	1731.0	33.6
0°-180°	5153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1255	1253	1238	1249	1247	119
15°	1204	1199	1187	1197	1197	339
25°	1106	1103	1092	1099	1101	509
35°	975	970	962	964	968	608
45°	813	808	802	797	799	625
55°	623	624	616	610	612	558
65°	424	422	414	410	411	419
75°	215	213	208	204	204	229
85°	35	39	39	40	40	49
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.4	1254.4	1254.4	1254.4	1254.4
2.5°	1259.1	1256.5	1245.4	1254.3	1253.0
5°	1255.2	1252.7	1238.0	1249.1	1247.4
7.5°	1243.5	1241.0	1228.0	1238.3	1236.8
10°	1234.6	1232.0	1219.1	1229.4	1228.5
12.5°	1222.9	1220.3	1207.3	1217.6	1216.8
15°	1203.6	1199.4	1187.2	1196.7	1196.7
17.5°	1178.1	1174.9	1163.6	1171.5	1171.7
20°	1158.8	1156.3	1145.0	1153.6	1154.5
22.5°	1139.5	1137.0	1124.4	1132.3	1133.8
25°	1105.5	1102.9	1092.5	1098.6	1101.1
27.5°	1070.3	1066.6	1056.3	1061.8	1063.5
30°	1043.4	1041.8	1032.2	1034.9	1037.4
32.5°	1015.2	1013.5	1005.4	1006.7	1011.2
35°	974.6	970.3	962.5	964.3	967.6
37.5°	926.5	924.5	916.9	915.9	919.1
40°	896.2	892.8	885.9	884.2	886.8
42.5°	863.2	859.8	851.4	849.8	853.0
45°	812.7	808.5	801.5	797.2	798.9
47.5°	756.2	756.2	749.0	744.1	746.6
50°	719.7	719.7	711.1	706.9	709.4
52.5°	681.9	682.5	673.3	671.0	670.1
55°	623.3	624.1	616.4	610.4	612.1
57.5°	566.8	565.0	556.0	552.1	552.9
60°	526.9	524.3	517.4	511.5	515.7
62.5°	486.3	485.1	478.2	471.4	470.9
65°	423.6	421.9	414.1	409.8	410.7
67.5°	361.3	359.2	352.1	346.0	348.2
70°	318.5	318.5	310.8	307.3	304.8
72.5°	279.3	275.9	270.2	265.3	263.5
75°	215.2	212.7	208.4	204.0	204.0
77.5°	156.6	154.5	151.7	148.7	147.9
80°	118.8	118.0	114.5	113.5	109.3
82.5°	83.7	83.5	81.4	79.2	79.1
85°	35.3	38.6	38.7	39.6	39.6
87.5°	6.3	10.9	10.8	9.8	9.8
90°	0.9	3.3	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.7	69.6	221.6	96.5	64.8
97.5°	31.0	76.8	339.7	264.4	185.7
100°	39.3	81.7	375.8	381.0	307.7
102.5°	47.4	86.5	385.4	471.2	406.5
105°	61.3	95.6	380.2	578.9	544.6
107.5°	75.9	106.0	358.2	634.4	643.8
110°	86.1	113.6	341.8	645.3	686.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.3	697.7
115°	109.1	132.5	304.3	605.4	689.5
117.5°	122.4	144.7	290.9	561.6	656.5
120°	131.3	152.9	284.7	532.2	626.5
122.5°	138.8	160.4	280.5	502.9	593.8
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.0	180.8	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.8
132.5°	172.3	192.3	269.7	399.9	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.6	265.9	346.0	382.7
142.5°	200.7	216.8	265.2	336.4	367.0
145°	208.8	223.8	264.3	321.1	345.2
147.5°	218.0	230.9	263.4	309.0	327.9
150°	224.1	235.0	263.4	302.0	317.1
152.5°	228.9	238.5	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.5	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.7	263.2	276.9	280.5
165°	255.7	259.1	263.4	274.5	275.3
167.5°	260.3	262.0	264.3	271.5	272.2
170°	261.7	263.4	264.3	270.1	270.1
172.5°	263.0	264.1	264.3	268.9	268.9
175°	265.0	265.9	264.3	267.6	266.8
177.5°	265.7	265.7	263.7	266.4	265.0
180°	265.0	265.0	265.0	265.0	265.0

(END OF REPORT)