

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: P520193

Luminaire Tested: **SQ4-F-100U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520193
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

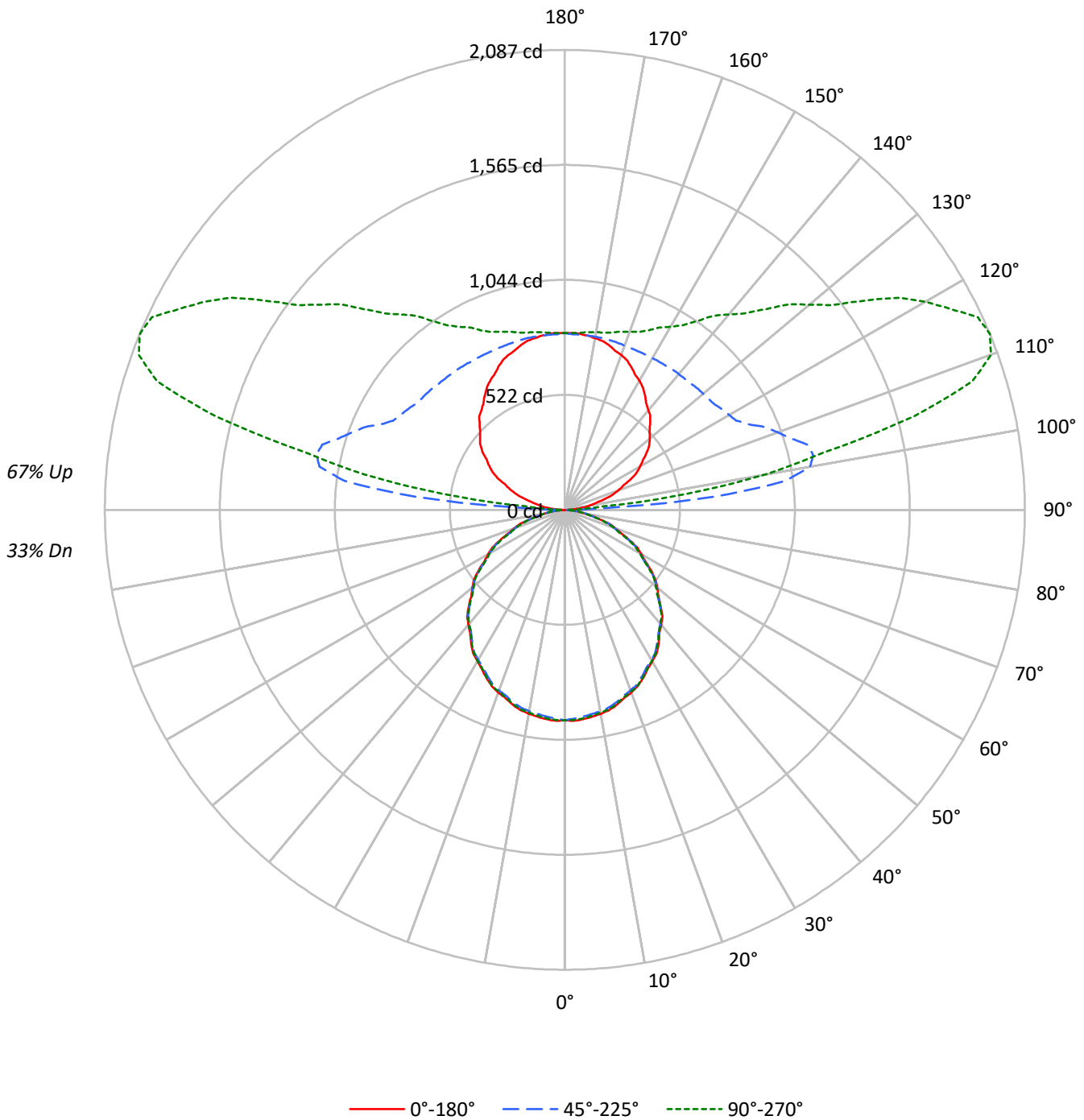
Lumens per Lamp: N/A
Luminaire Lumens: 7816.6 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5890	5819	5866
10°	5870	5798	5838
15°	5830	5756	5806
20°	5774	5708	5750
25°	5710	5640	5692
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5187	5163
55°	5115	5045	5019
60°	4923	4844	4814
65°	4689	4596	4541
70°	4370	4277	4185
75°	3921	3798	3707
80°	3170	3128	3036
85°	1891	2167	2251



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	1.2
10°-20°	256.6	3.3
20°-30°	385.5	4.9
30°-40°	460.1	5.9
40°-50°	471.5	6.0
50°-60°	420.5	5.4
60°-70°	313.2	4.0
70°-80°	170.0	2.2
80°-90°	41.0	0.5
90°-100°	375.4	4.8
100°-110°	1036.3	13.3
110°-120°	1068.7	13.7
120°-130°	858.8	11.0
130°-140°	674.9	8.6
140°-150°	517.6	6.6
150°-160°	372.0	4.8
160°-170°	227.5	2.9
170°-180°	76.7	1.0
0°-30°	732.2	9.4
0°-40°	1192.4	15.3
0°-60°	2084.4	26.7
0°-90°	2608.6	33.4
90°-120°	2480.4	31.7
90°-150°	4531.8	58.0
90°-180°	5208.0	66.6
0°-180°	7816.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	954	953	942	951	950	91
15°	916	913	904	912	912	258
25°	841	839	831	836	839	387
35°	742	739	733	733	736	463
45°	615	616	610	609	610	475
55°	477	477	470	467	468	425
65°	322	321	316	312	312	319
75°	165	164	160	157	156	174
85°	27	29	31	32	32	38
90°	3	5	10	12	13	5
95°	55	203	681	280	182	59
105°	185	285	1140	1740	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1408	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.1	955.1	955.1	955.1	955.1
2.5°	958.2	956.2	948.0	955.1	954.1
5°	953.9	952.6	942.4	951.2	950.1
7.5°	947.0	944.4	934.4	943.1	941.9
10°	939.8	937.3	928.3	936.0	934.7
12.5°	930.6	929.1	919.1	926.8	926.5
15°	915.6	913.0	904.0	911.7	911.7
17.5°	895.5	894.1	885.3	892.7	891.7
20°	882.2	879.8	872.1	878.4	878.4
22.5°	865.9	864.4	856.7	862.1	863.1
25°	841.3	838.8	831.1	836.3	838.7
27.5°	814.3	812.2	805.8	809.2	810.9
30°	792.8	792.8	786.4	787.8	791.5
32.5°	773.4	773.4	765.9	767.3	768.9
35°	741.6	739.1	732.6	732.7	736.5
37.5°	704.8	703.6	699.4	698.7	699.7
40°	680.3	679.0	673.9	675.2	675.2
42.5°	655.7	654.4	649.3	647.5	649.5
45°	615.0	616.3	609.9	608.7	609.9
47.5°	574.9	574.9	569.7	566.2	568.3
50°	547.3	547.3	542.1	539.6	539.6
52.5°	518.6	519.7	513.5	510.0	511.0
55°	477.0	477.0	470.5	466.7	468.0
57.5°	430.9	430.9	424.5	420.8	423.0
60°	400.2	400.2	393.8	390.0	391.3
62.5°	369.6	369.6	363.2	359.3	359.5
65°	322.2	321.0	315.8	312.0	312.0
67.5°	276.7	273.4	269.5	264.5	264.5
70°	243.0	241.7	237.8	232.7	232.7
72.5°	212.3	210.0	206.1	202.0	202.0
75°	165.0	163.7	159.8	157.3	156.0
77.5°	118.1	117.1	116.8	113.3	114.3
80°	89.5	89.5	88.3	85.7	85.7
82.5°	63.9	65.0	62.6	62.1	61.1
85°	26.8	29.4	30.7	31.9	31.9
87.5°	5.6	9.2	9.2	10.5	10.7
90°	2.6	5.0	10.3	11.6	12.9
92.5°	23.0	95.9	171.3	62.5	48.8
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.6	562.5
100°	118.0	242.2	1129.9	1137.8	924.6
102.5°	143.6	258.8	1153.4	1405.9	1203.8
105°	184.7	285.0	1140.1	1740.5	1639.0
107.5°	228.3	317.5	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.9
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.0	876.9	1689.1	1973.0
120°	395.0	462.8	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.5	1653.1
127.5°	483.2	545.9	823.6	1314.0	1524.9
130°	502.7	565.4	819.5	1256.0	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.3	1140.9	1286.3
137.5°	574.5	628.3	806.2	1085.0	1209.1
140°	590.0	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.5	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.0	796.1	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.2
152.5°	691.5	720.8	794.1	894.3	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.9	854.8	873.6
160°	747.7	764.0	793.8	845.5	859.2
162.5°	757.9	772.3	794.8	837.2	848.0
165°	773.4	783.4	796.4	827.4	833.6
167.5°	785.1	791.2	797.7	821.3	823.3
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.6	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.6	801.6	801.6	801.6	801.6

(END OF REPORT)