

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: P520189

Luminaire Tested: **SQ4-F-100U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520189
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-935-1D-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

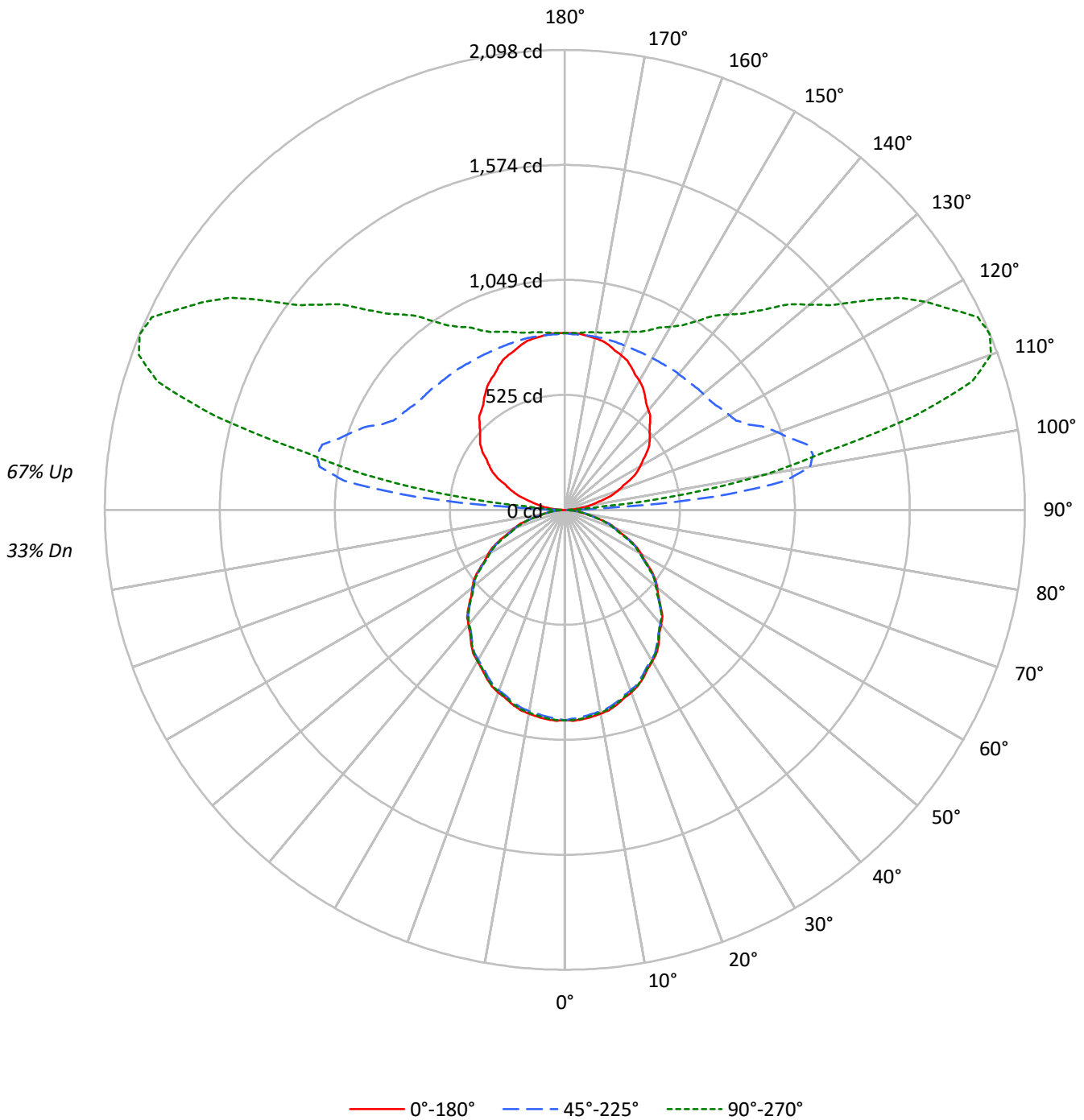
Lumens per Lamp: N/A
Luminaire Lumens: 7856.4 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5867
15°	5860	5786	5835
20°	5805	5737	5779
25°	5739	5670	5722
30°	5659	5614	5651
35°	5597	5529	5558
40°	5490	5438	5449
45°	5377	5332	5332
50°	5263	5214	5189
55°	5140	5071	5043
60°	4948	4869	4837
65°	4713	4619	4564
70°	4390	4298	4206
75°	3940	3817	3726
80°	3184	3138	3050
85°	1905	2181	2265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.2
10°-20°	257.9	3.3
20°-30°	387.4	4.9
30°-40°	462.5	5.9
40°-50°	473.9	6.0
50°-60°	422.6	5.4
60°-70°	314.7	4.0
70°-80°	170.9	2.2
80°-90°	41.2	0.5
90°-100°	377.3	4.8
100°-110°	1041.6	13.3
110°-120°	1074.2	13.7
120°-130°	863.2	11.0
130°-140°	678.4	8.6
140°-150°	520.3	6.6
150°-160°	373.9	4.8
160°-170°	228.7	2.9
170°-180°	77.1	1.0
0°-30°	735.9	9.4
0°-40°	1198.4	15.3
0°-60°	2095.0	26.7
0°-90°	2621.8	33.4
90°-120°	2493.0	31.7
90°-150°	4554.9	58.0
90°-180°	5235.0	66.6
0°-180°	7856.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	958	947	956	955	91
15°	920	918	909	916	916	259
25°	846	843	835	840	843	389
35°	745	743	736	736	740	465
45°	618	619	613	612	613	477
55°	479	479	473	469	470	427
65°	324	323	317	314	314	321
75°	166	165	161	158	157	175
85°	27	30	31	32	32	38
90°	3	5	10	12	13	5
95°	55	204	684	281	183	59
105°	186	286	1146	1749	1647	197
115°	333	402	923	1827	2078	327
125°	456	519	837	1416	1662	406
135°	549	608	813	1147	1293	425
145°	637	681	803	976	1050	399
155°	718	742	797	876	904	331
165°	777	787	800	832	838	219
175°	806	807	802	813	811	77
180°	806	806	806	806	806	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.0	960.0	960.0	960.0	960.0
2.5°	963.1	961.1	952.8	960.0	959.0
5°	958.7	957.5	947.2	956.2	954.9
7.5°	951.8	949.3	939.2	947.9	946.6
10°	944.6	942.1	933.0	940.7	939.4
12.5°	935.4	933.8	923.7	931.5	931.2
15°	920.2	917.6	908.7	916.3	916.3
17.5°	900.2	898.6	889.8	897.3	896.2
20°	886.8	884.3	876.5	882.9	882.9
22.5°	870.3	868.8	861.0	866.4	867.5
25°	845.6	843.1	835.4	840.5	843.1
27.5°	818.4	816.4	809.9	813.3	815.1
30°	796.8	796.8	790.4	791.7	795.6
32.5°	777.3	777.3	769.8	771.1	772.9
35°	745.4	742.9	736.4	736.5	740.2
37.5°	708.4	707.1	703.0	702.3	703.3
40°	683.7	682.4	677.3	678.6	678.6
42.5°	659.1	657.8	652.6	650.9	652.9
45°	618.2	619.4	613.0	611.7	613.0
47.5°	577.8	577.8	572.7	569.2	571.1
50°	550.0	550.0	544.9	542.3	542.3
52.5°	521.2	522.3	516.1	512.6	513.5
55°	479.3	479.3	472.9	469.1	470.3
57.5°	433.1	433.1	426.7	422.9	425.1
60°	402.2	402.2	395.8	392.0	393.2
62.5°	371.4	371.4	364.9	361.1	361.4
65°	323.8	322.6	317.4	313.6	313.6
67.5°	278.1	274.8	270.9	265.7	265.7
70°	244.1	243.0	239.0	233.9	233.9
72.5°	213.4	211.1	207.2	203.0	203.0
75°	165.8	164.6	160.6	158.1	156.8
77.5°	118.7	117.7	117.4	113.9	114.9
80°	89.9	89.9	88.6	86.1	86.1
82.5°	64.3	65.3	63.0	62.4	61.4
85°	27.0	29.5	30.9	32.1	32.1
87.5°	5.6	9.2	9.3	10.6	10.7
90°	2.6	5.1	10.3	11.7	12.9
92.5°	23.2	96.3	172.2	62.8	49.0
95°	55.4	204.2	684.4	281.3	183.0
97.5°	91.8	228.6	1013.9	780.6	565.3
100°	118.6	243.3	1135.6	1143.6	929.4
102.5°	144.3	260.1	1159.4	1413.1	1209.9
105°	185.6	286.5	1145.9	1749.4	1647.3
107.5°	229.4	319.2	1082.0	1911.7	1949.0
110°	260.4	341.1	1032.5	1946.6	2067.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.3	365.9	986.2	1919.0	2097.5
115°	332.6	401.9	922.9	1827.1	2078.0
117.5°	371.3	440.3	881.4	1697.7	1983.0
120°	397.0	465.0	865.0	1610.1	1897.4
122.5°	421.8	486.8	851.5	1528.2	1800.5
125°	456.3	519.3	836.6	1415.8	1661.6
127.5°	485.7	548.7	827.8	1320.6	1532.7
130°	505.3	568.3	823.7	1262.4	1455.3
132.5°	523.9	583.8	819.6	1213.6	1388.3
135°	549.1	608.4	813.3	1146.7	1292.9
137.5°	577.5	631.4	810.3	1090.5	1215.3
140°	592.9	645.9	808.2	1053.0	1162.7
142.5°	610.4	659.4	806.1	1019.8	1116.3
145°	636.8	680.9	803.0	976.2	1050.5
147.5°	662.1	700.6	800.2	939.5	997.2
150°	680.6	712.1	799.2	917.6	964.2
152.5°	695.0	724.5	798.2	898.8	937.4
155°	718.0	741.9	796.6	875.9	903.7
157.5°	739.1	757.5	796.9	859.1	878.1
160°	751.5	767.9	797.9	849.7	863.7
162.5°	761.8	776.1	798.9	841.4	852.3
165°	777.3	787.3	800.5	831.5	837.9
167.5°	789.1	795.2	801.8	825.5	827.6
170°	795.3	800.4	801.8	822.4	822.4
172.5°	800.5	803.5	801.8	818.3	817.2
175°	805.6	806.9	801.8	813.3	810.8
177.5°	807.7	806.7	801.6	808.7	806.7
180°	805.6	805.6	805.6	805.6	805.6

(END OF REPORT)