

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521570

Luminaire Tested: **SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521570
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

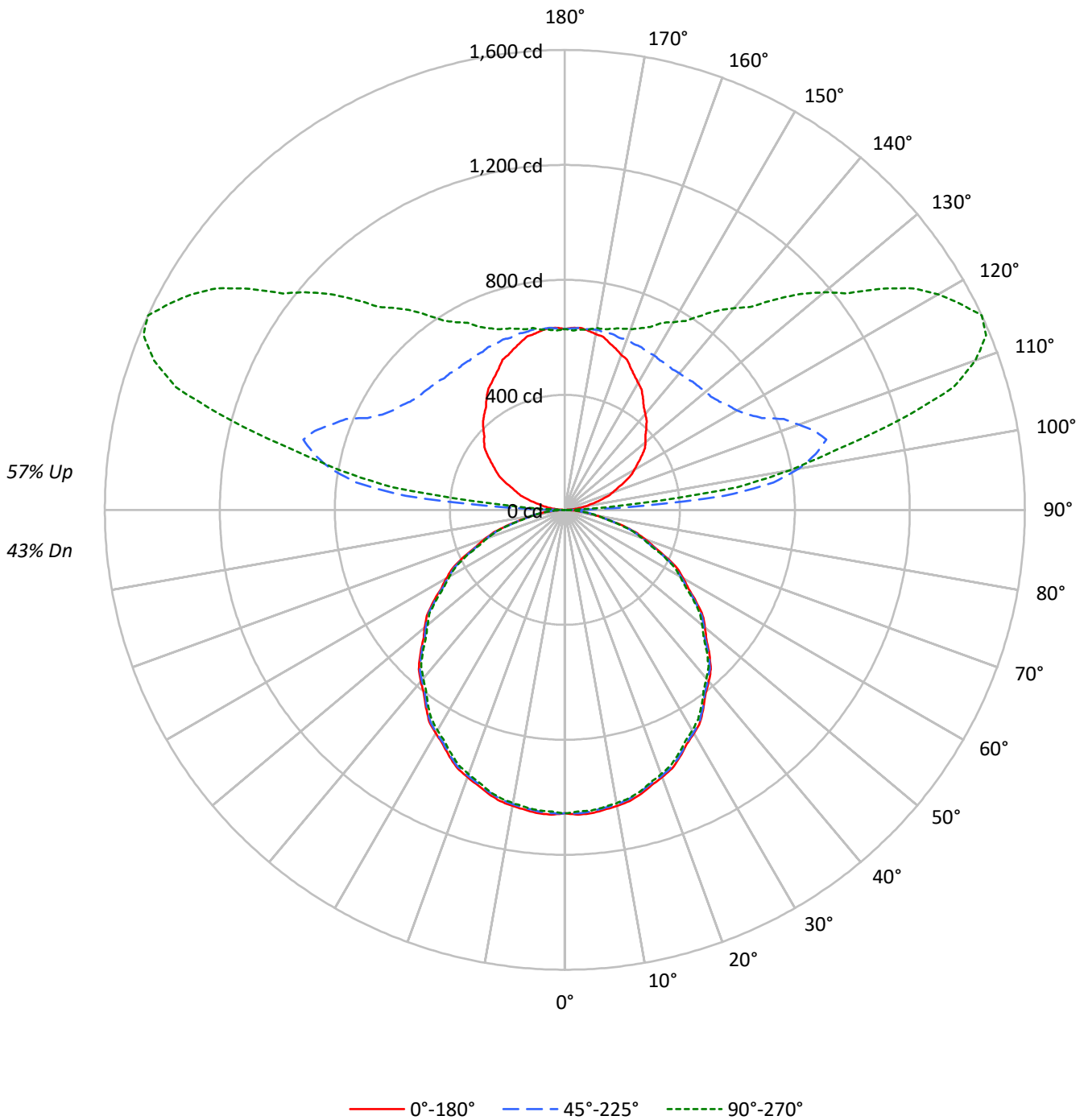
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7083.3 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 63.9
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43		
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41	36		
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	35	30		
3	79	70	63	57	72	64	58	53	53	48	45	43	40	37	33	31	29	25		
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	30	27	25	21		
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	27	24	22	18		
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16		
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14		
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	13		
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	19	16	14	11		
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9743	9743	9743
5°	9817	9752	9725
10°	9799	9743	9706
15°	9771	9704	9685
20°	9720	9671	9612
25°	9651	9610	9528
30°	9567	9535	9439
35°	9472	9427	9348
40°	9382	9322	9226
45°	9277	9199	9107
50°	9129	9057	8942
55°	8976	8863	8750
60°	8765	8617	8525
65°	8492	8274	8165
70°	7985	7769	7688
75°	7129	6987	6880
80°	5898	5951	5898
85°	4234	4764	4975



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.4
10°-20°	286.2	4.0
20°-30°	432.9	6.1
30°-40°	521.2	7.4
40°-50°	541.4	7.6
50°-60°	491.3	6.9
60°-70°	374.7	5.3
70°-80°	208.8	2.9
80°-90°	54.8	0.8
90°-100°	324.2	4.6
100°-110°	783.5	11.1
110°-120°	835.7	11.8
120°-130°	676.8	9.6
130°-140°	524.0	7.4
140°-150°	399.8	5.6
150°-160°	289.4	4.1
160°-170°	178.2	2.5
170°-180°	60.4	0.9
0°-30°	819.1	11.6
0°-40°	1340.3	18.9
0°-60°	2373.0	33.5
0°-90°	3011.3	42.5
90°-120°	1943.4	27.4
90°-150°	3544.1	50.0
90°-180°	4072.0	57.5
0°-180°	7083.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1060	1050	1053	1051	1050	101
15°	1023	1011	1016	1014	1014	289
25°	948	938	944	935	936	437
35°	841	835	837	828	830	526
45°	711	704	705	696	698	548
55°	558	555	551	544	544	498
65°	389	385	379	373	374	383
75°	200	199	196	194	193	213
85°	40	45	45	47	47	49
90°	0	0	0	0	0	3
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



TEST NUMBER: P521570

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1056.0	1056.0	1056.0	1056.0	1056.0
2.5°	1061.6	1053.8	1056.8	1054.3	1050.4
5°	1060.0	1050.2	1053.0	1051.0	1050.0
7.5°	1052.4	1042.6	1046.4	1043.4	1043.2
10°	1046.0	1036.2	1040.0	1037.0	1036.0
12.5°	1038.0	1027.4	1031.2	1028.2	1028.0
15°	1023.0	1011.3	1016.0	1014.0	1014.0
17.5°	1004.4	992.9	998.6	995.0	993.4
20°	990.0	979.2	985.0	979.0	979.0
22.5°	974.8	964.0	969.0	962.2	962.2
25°	948.0	938.2	944.0	935.0	936.0
27.5°	918.8	910.0	915.0	906.4	906.8
30°	898.0	889.2	895.0	884.0	886.0
32.5°	876.4	868.4	871.8	862.4	862.8
35°	841.0	835.1	837.0	828.0	830.0
37.5°	804.6	797.8	799.6	790.4	792.4
40°	779.0	772.2	774.0	764.0	766.0
42.5°	751.8	745.7	746.8	736.9	739.6
45°	711.0	704.2	705.0	696.0	698.0
47.5°	667.2	661.7	660.6	652.4	654.2
50°	636.0	632.1	631.0	622.0	623.0
52.5°	604.8	601.7	599.0	590.9	593.4
55°	558.0	555.1	551.0	544.0	544.0
57.5°	509.4	506.5	501.4	494.4	496.4
60°	475.0	472.1	467.0	460.0	462.0
62.5°	440.6	437.7	431.8	425.6	426.8
65°	389.0	385.1	379.0	373.0	374.0
67.5°	333.6	329.9	324.8	319.0	320.2
70°	296.0	293.1	288.0	283.0	285.0
72.5°	256.8	253.9	249.6	247.0	246.6
75°	200.0	199.0	196.0	194.0	193.0
77.5°	146.2	147.6	144.0	143.2	143.0
80°	111.0	113.9	112.0	112.0	111.0
82.5°	79.8	84.3	83.2	83.2	83.0
85°	40.0	44.9	45.0	47.0	47.0
87.5°	11.2	15.9	18.4	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)