

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: P521677

Luminaire Tested: **SQ4-F-150U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521677
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-150U-075D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

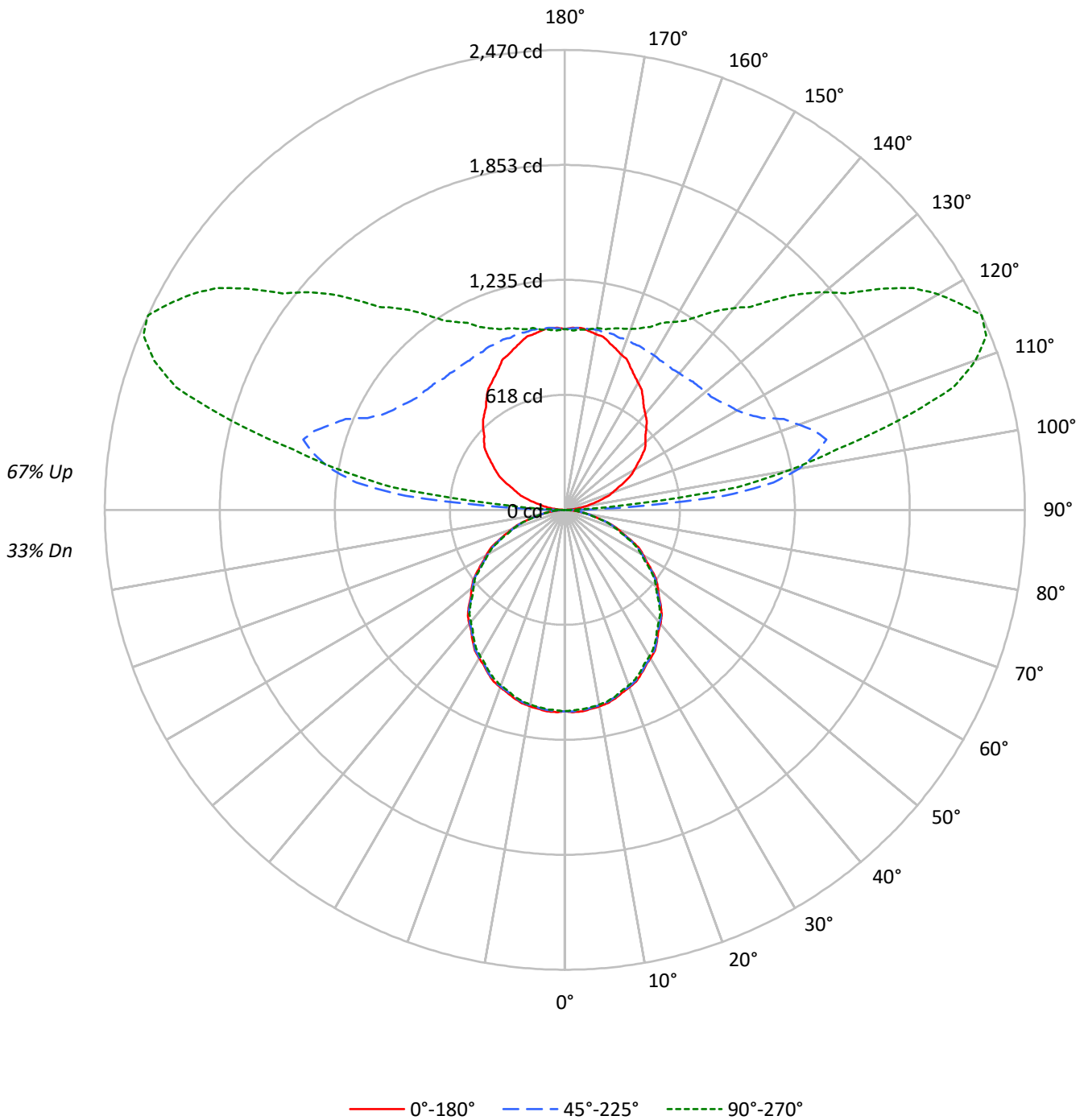
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9373.7 lumens
Efficiency: N/A
Efficacy: 113.8 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: Semi-Indirect

Input Watts (W): 82.4
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	56	56	56	40	40	40	33
1	94	90	86	82	84	81	78	75	64	62	60	49	48	47	36	35	34	28
2	85	78	72	67	77	71	65	61	56	53	50	43	41	39	31	30	28	23
3	78	68	61	56	70	62	56	51	50	45	42	38	35	33	27	26	24	19
4	71	60	53	47	64	55	48	43	44	39	35	34	30	28	24	22	21	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	35	30	49	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9984	9984	9984
5°	10060	9993	9965
10°	10042	9984	9946
15°	10013	9944	9925
20°	9961	9911	9850
25°	9889	9847	9764
30°	9803	9770	9672
35°	9707	9660	9579
40°	9615	9552	9453
45°	9507	9426	9333
50°	9354	9281	9163
55°	9198	9082	8966
60°	8981	8829	8735
65°	8702	8479	8366
70°	8182	7961	7877
75°	7304	7158	7051
80°	6041	6100	6041
85°	4340	4880	5102



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.1
10°-20°	293.3	3.1
20°-30°	443.6	4.7
30°-40°	534.1	5.7
40°-50°	554.8	5.9
50°-60°	503.4	5.4
60°-70°	383.9	4.1
70°-80°	213.9	2.3
80°-90°	56.2	0.6
90°-100°	500.6	5.3
100°-110°	1209.9	12.9
110°-120°	1290.5	13.8
120°-130°	1045.2	11.2
130°-140°	809.2	8.6
140°-150°	617.3	6.6
150°-160°	446.9	4.8
160°-170°	275.2	2.9
170°-180°	93.2	1.0
0°-30°	839.4	9.0
0°-40°	1373.5	14.7
0°-60°	2431.7	25.9
0°-90°	3085.7	32.9
90°-120°	3001.0	32.0
90°-150°	5472.7	58.4
90°-180°	6288.0	67.1
0°-180°	9373.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1086	1076	1079	1077	1076	103
15°	1048	1036	1041	1039	1039	296
25°	971	961	967	958	959	447
35°	862	856	858	848	850	539
45°	729	722	722	713	715	561
55°	572	569	565	557	557	510
65°	399	395	388	382	383	393
75°	205	204	201	199	198	218
85°	41	46	46	48	48	50
90°	0	0	0	0	0	4
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1087.8	1079.8	1082.9	1080.4	1076.4
5°	1086.2	1076.2	1079.0	1077.0	1076.0
7.5°	1078.4	1068.4	1072.3	1069.2	1069.0
10°	1071.9	1061.8	1065.7	1062.6	1061.6
12.5°	1063.7	1052.8	1056.7	1053.6	1053.4
15°	1048.3	1036.3	1041.1	1039.1	1039.1
17.5°	1029.2	1017.4	1023.3	1019.6	1018.0
20°	1014.5	1003.5	1009.4	1003.2	1003.2
22.5°	998.9	987.9	993.0	986.0	986.0
25°	971.4	961.4	967.3	958.1	959.1
27.5°	941.5	932.5	937.6	928.8	929.2
30°	920.2	911.2	917.1	905.9	907.9
32.5°	898.1	889.9	893.4	883.7	884.1
35°	861.8	855.8	857.7	848.5	850.5
37.5°	824.5	817.5	819.4	810.0	812.0
40°	798.3	791.2	793.1	782.9	784.9
42.5°	770.4	764.2	765.3	755.1	757.9
45°	728.6	721.6	722.4	713.3	715.3
47.5°	683.7	678.1	676.9	668.6	670.4
50°	651.7	647.7	646.6	637.4	638.4
52.5°	619.8	616.5	613.8	605.5	608.1
55°	571.8	568.8	564.6	557.4	557.4
57.5°	522.0	519.0	513.8	506.7	508.7
60°	486.7	483.7	478.5	471.4	473.4
62.5°	451.5	448.5	442.5	436.1	437.4
65°	398.6	394.6	388.4	382.2	383.2
67.5°	341.8	338.0	332.8	326.9	328.1
70°	303.3	300.3	295.1	290.0	292.0
72.5°	263.1	260.1	255.8	253.1	252.7
75°	204.9	203.9	200.8	198.8	197.8
77.5°	149.8	151.2	147.6	146.7	146.5
80°	113.7	116.8	114.8	114.7	113.7
82.5°	81.8	86.4	85.3	85.3	85.1
85°	41.0	46.0	46.1	48.2	48.2
87.5°	11.5	16.3	18.9	19.7	19.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)