

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: P521415

Luminaire Tested: **SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521415
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-050U-075D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

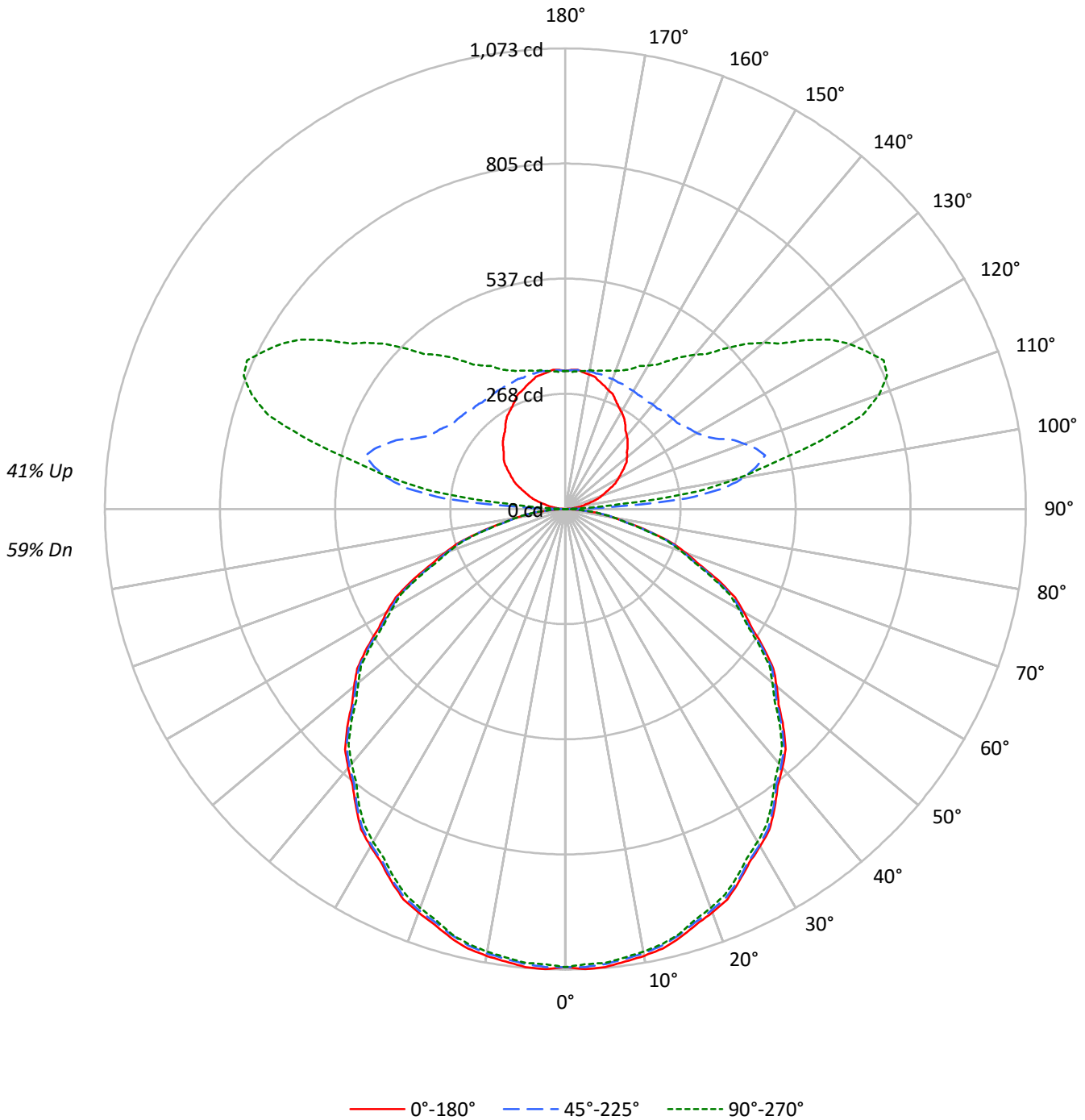
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5126.7 lumens
Efficiency: N/A
Efficacy: 107.7 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): 47.6
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	50	30	10	
RCR																					
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	59			
1	100	95	91	88	93	89	86	82	77	75	72	67	65	63	57	56	54	50			
2	91	83	77	71	84	78	72	67	68	63	60	58	55	52	50	48	45	41			
3	83	73	65	59	77	68	61	56	59	54	50	51	47	44	44	41	38	35			
4	75	64	56	50	70	60	53	47	53	47	42	46	41	38	39	36	33	30			
5	69	57	49	43	64	54	46	41	47	41	36	41	36	32	35	32	29	26			
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	32	28	25	22			
7	59	46	38	32	55	44	36	31	38	32	28	34	29	25	29	25	22	20			
8	55	42	34	29	51	40	32	27	35	29	25	31	26	22	27	23	20	18			
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16			
10	48	35	28	23	44	33	26	22	30	24	20	26	21	18	23	19	16	14			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9846	9846	9846
5°	9922	9856	9828
10°	9903	9847	9809
15°	9875	9808	9789
20°	9823	9774	9714
25°	9753	9712	9630
30°	9669	9636	9539
35°	9574	9527	9447
40°	9482	9421	9324
45°	9376	9297	9204
50°	9226	9153	9037
55°	9071	8958	8844
60°	8859	8710	8615
65°	8582	8361	8252
70°	8071	7853	7769
75°	7204	7062	6955
80°	5961	6014	5961
85°	4277	4817	5028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	2.0
10°-20°	289.3	5.6
20°-30°	437.5	8.5
30°-40°	526.8	10.3
40°-50°	547.2	10.7
50°-60°	496.5	9.7
60°-70°	378.7	7.4
70°-80°	211.0	4.1
80°-90°	55.4	1.1
90°-100°	165.9	3.2
100°-110°	400.9	7.8
110°-120°	427.6	8.3
120°-130°	346.3	6.8
130°-140°	268.1	5.2
140°-150°	204.5	4.0
150°-160°	148.0	2.9
160°-170°	91.2	1.8
170°-180°	30.9	0.6
0°-30°	827.8	16.1
0°-40°	1354.6	26.4
0°-60°	2398.3	46.8
0°-90°	3043.3	59.4
90°-120°	994.3	19.4
90°-150°	1813.2	35.4
90°-180°	2083.0	40.6
0°-180°	5126.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1071	1061	1064	1062	1061	102
15°	1034	1022	1027	1025	1025	292
25°	958	948	954	945	946	441
35°	850	844	846	837	839	532
45°	719	712	712	704	705	554
55°	564	561	557	550	550	503
65°	393	389	383	377	378	387
75°	202	201	198	196	195	215
85°	40	45	46	48	48	50
90°	0	0	0	0	0	2
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	



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CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.2	1067.2	1067.2	1067.2	1067.2
2.5°	1072.9	1065.0	1068.0	1065.5	1061.6
5°	1071.3	1061.4	1064.2	1062.2	1061.2
7.5°	1063.6	1053.7	1057.5	1054.5	1054.3
10°	1057.1	1047.3	1051.1	1048.0	1047.0
12.5°	1049.0	1038.4	1042.2	1039.1	1038.9
15°	1033.9	1022.0	1026.8	1024.8	1024.8
17.5°	1015.1	1003.4	1009.2	1005.6	1004.0
20°	1000.5	989.7	995.5	989.4	989.4
22.5°	985.2	974.3	979.3	972.4	972.4
25°	958.1	948.2	954.0	945.0	946.0
27.5°	928.6	919.7	924.7	916.1	916.5
30°	907.6	898.7	904.5	893.5	895.4
32.5°	885.7	877.6	881.1	871.6	872.0
35°	850.0	844.0	845.9	836.9	838.8
37.5°	813.2	806.2	808.1	798.9	800.8
40°	787.3	780.4	782.2	772.2	774.2
42.5°	759.8	753.7	754.7	744.7	747.5
45°	718.6	711.6	712.5	703.5	705.4
47.5°	674.3	668.8	667.6	659.4	661.2
50°	642.8	638.8	637.7	628.6	629.6
52.5°	611.2	608.1	605.4	597.1	599.7
55°	563.9	561.0	556.9	549.8	549.8
57.5°	514.8	511.9	506.7	499.7	501.7
60°	480.1	477.1	472.0	464.9	466.9
62.5°	445.3	442.3	436.4	430.2	431.3
65°	393.1	389.2	383.0	377.0	378.0
67.5°	337.2	333.4	328.3	322.4	323.6
70°	299.2	296.2	291.1	286.1	288.0
72.5°	259.5	256.6	252.3	249.6	249.2
75°	202.1	201.1	198.1	196.0	195.1
77.5°	147.8	149.1	145.5	144.7	144.5
80°	112.2	115.1	113.2	113.2	112.2
82.5°	80.6	85.2	84.1	84.1	83.9
85°	40.4	45.4	45.5	47.5	47.5
87.5°	11.3	16.1	18.6	19.4	19.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)