

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: P521417

Luminaire Tested: **SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521417
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 (5000K)
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

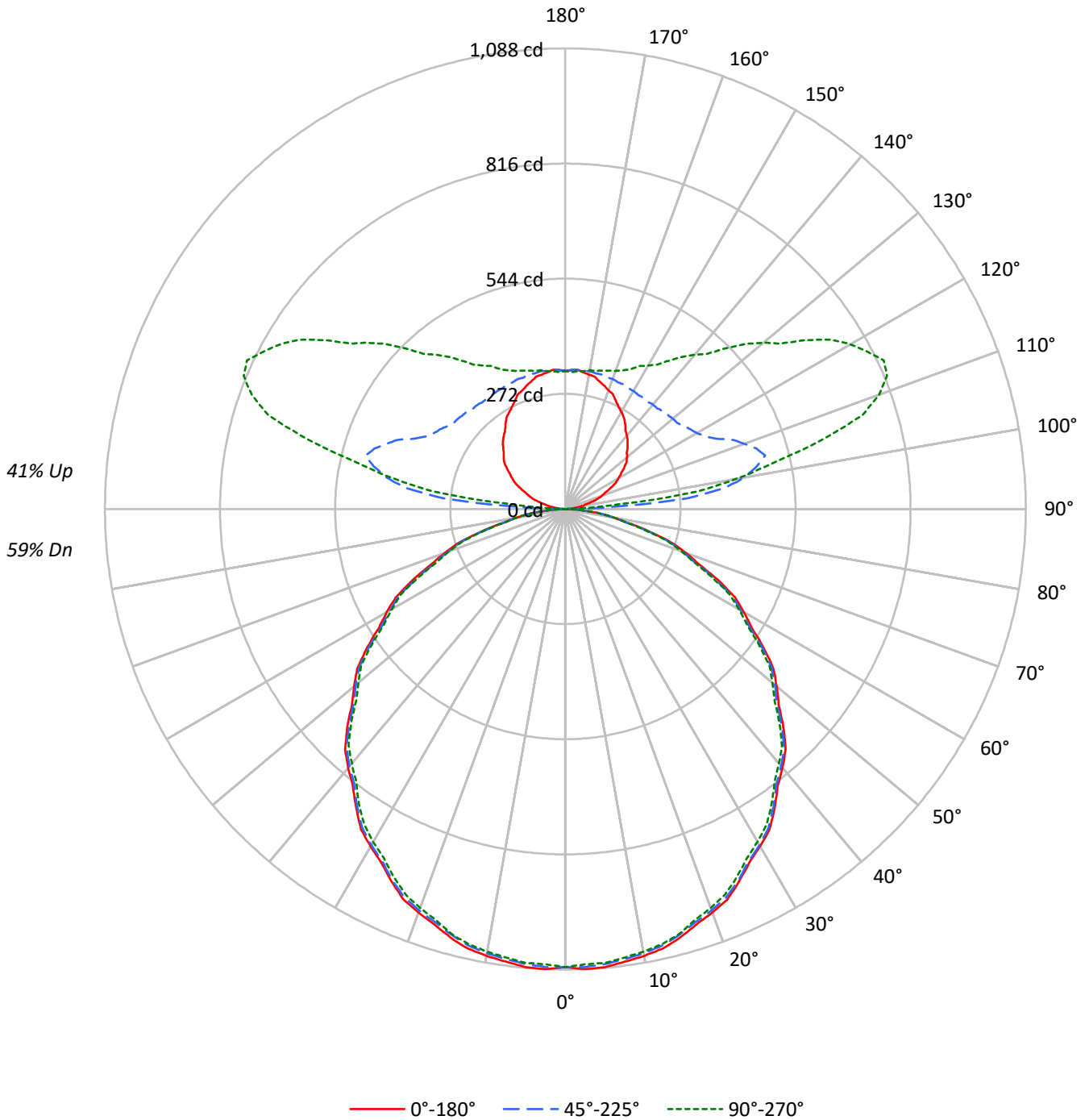
Lumens per Lamp: N/A
Luminaire Lumens: 5198.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.5
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	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°	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	2.0
10°-20°	293.3	5.6
20°-30°	443.6	8.5
30°-40°	534.1	10.3
40°-50°	554.8	10.7
50°-60°	503.4	9.7
60°-70°	383.9	7.4
70°-80°	213.9	4.1
80°-90°	56.2	1.1
90°-100°	168.2	3.2
100°-110°	406.5	7.8
110°-120°	433.5	8.3
120°-130°	351.1	6.8
130°-140°	271.8	5.2
140°-150°	207.4	4.0
150°-160°	150.1	2.9
160°-170°	92.5	1.8
170°-180°	31.3	0.6
0°-30°	839.4	16.1
0°-40°	1373.5	26.4
0°-60°	2431.7	46.8
0°-90°	3085.7	59.4
90°-120°	1008.1	19.4
90°-150°	1838.5	35.4
90°-180°	2112.0	40.6
0°-180°	5198.0	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	2
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	



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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°	5.5	45.5	107.2	52.1	35.4
95°	16.6	84.1	288.1	187.4	131.3
97.5°	29.4	93.2	379.5	365.6	313.8
100°	39.4	98.8	429.8	453.7	411.1
102.5°	48.8	103.9	463.0	527.1	501.8
105°	65.0	112.2	488.5	632.1	623.9
107.5°	80.8	122.1	473.5	716.3	735.3
110°	91.9	130.4	449.1	752.6	788.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)