

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: P521401

Luminaire Tested: **SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521401
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-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

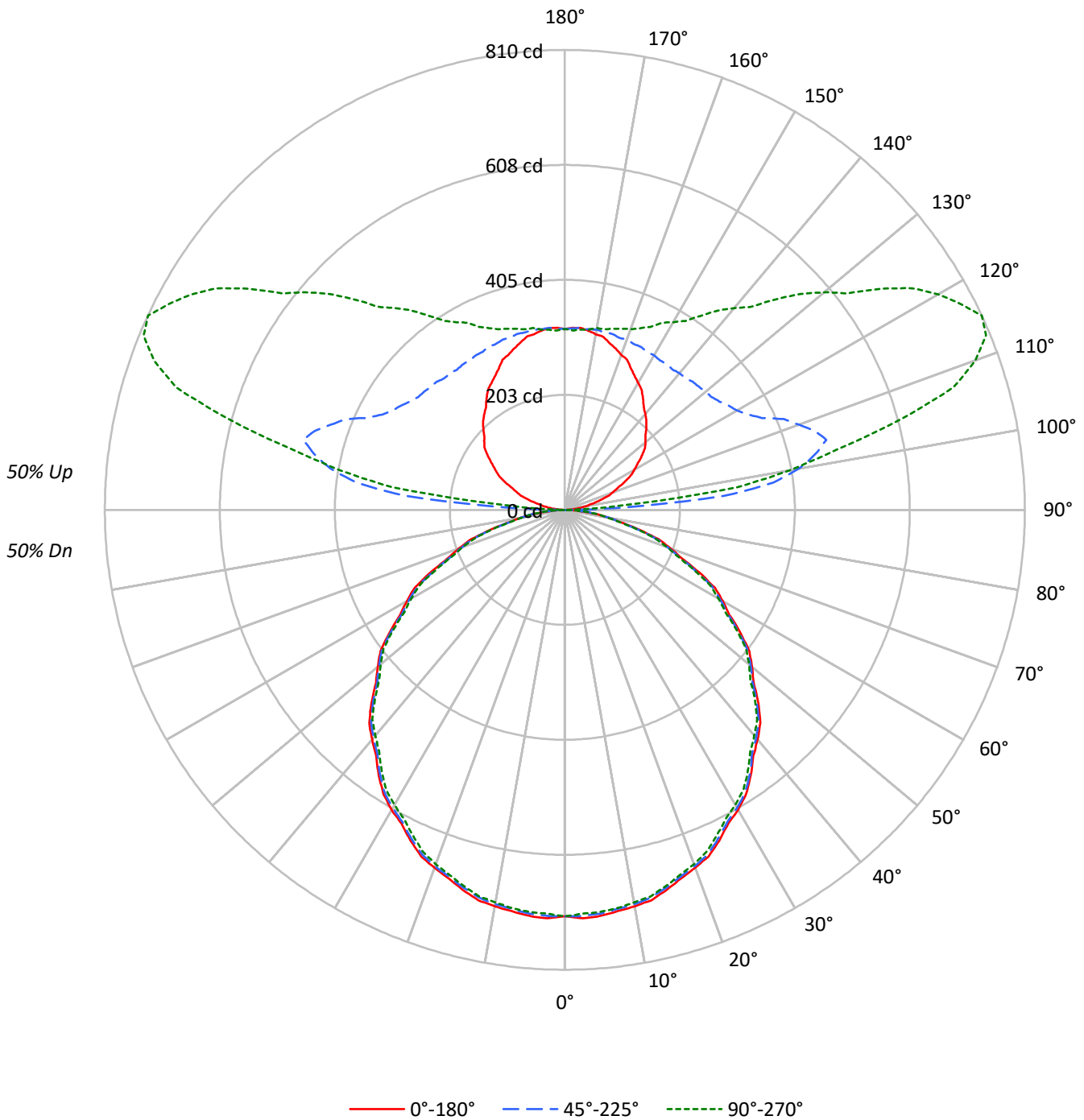
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4099.6 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50		
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42		
2	89	81	75	70	82	75	70	65	64	60	56	53	50	47	43	41	39	35		
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	35	33	29		
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28	25		
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21		
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	28	24	22	19		
7	58	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	17		
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15		
9	50	37	30	25	46	35	28	23	30	25	21	25	21	18	21	18	15	13		
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	20	16	14	12		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6606	6606	6606
5°	6650	6613	6585
10°	6642	6605	6577
15°	6619	6581	6552
20°	6588	6559	6519
25°	6546	6505	6444
30°	6499	6456	6392
35°	6431	6397	6330
40°	6359	6311	6251
45°	6289	6224	6172
50°	6172	6129	6071
55°	6064	6000	5936
60°	5923	5831	5757
65°	5698	5545	5480
70°	5341	5206	5152
75°	4848	4705	4634
80°	4038	4091	3985
85°	2858	3387	3387



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	1.7
10°-20°	194.1	4.7
20°-30°	293.3	7.2
30°-40°	353.2	8.6
40°-50°	366.8	8.9
50°-60°	332.8	8.1
60°-70°	252.4	6.2
70°-80°	140.7	3.4
80°-90°	37.2	0.9
90°-100°	164.1	4.0
100°-110°	396.6	9.7
110°-120°	423.1	10.3
120°-130°	342.6	8.4
130°-140°	265.3	6.5
140°-150°	202.4	4.9
150°-160°	146.5	3.6
160°-170°	90.2	2.2
170°-180°	30.6	0.7
0°-30°	555.1	13.5
0°-40°	908.3	22.2
0°-60°	1607.9	39.2
0°-90°	2038.2	49.7
90°-120°	983.8	24.0
90°-150°	1794.1	43.8
90°-180°	2061.0	50.3
0°-180°	4099.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	712	714	712	711	68
15°	693	685	689	687	686	196
25°	643	636	639	633	633	296
35°	571	565	568	561	562	357
45°	482	477	477	472	473	371
55°	377	376	373	369	369	337
65°	261	258	254	251	251	258
75°	136	134	132	130	130	144
85°	27	30	32	32	32	34
90°	0	0	0	0	0	2
95°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.0	716.0	716.0	716.0	716.0
2.5°	720.0	714.5	716.0	715.1	712.0
5°	718.0	712.1	714.0	712.0	711.0
7.5°	713.0	706.9	709.0	707.0	707.6
10°	709.0	702.2	705.0	703.0	702.0
12.5°	704.2	696.6	699.4	696.6	697.2
15°	693.0	685.2	689.0	687.0	686.0
17.5°	680.6	673.8	677.6	674.4	674.4
20°	671.0	664.2	668.0	664.0	664.0
22.5°	660.6	653.0	656.8	652.0	652.0
25°	643.0	636.2	639.0	633.0	633.0
27.5°	622.8	615.8	619.6	613.6	613.6
30°	610.0	602.2	606.0	600.0	600.0
32.5°	594.0	588.5	590.8	584.8	584.8
35°	571.0	565.1	568.0	561.0	562.0
37.5°	545.6	541.5	541.6	535.4	536.6
40°	528.0	523.1	524.0	517.0	519.0
42.5°	509.6	505.5	505.6	500.2	501.4
45°	482.0	477.1	477.0	472.0	473.0
47.5°	450.8	448.3	447.8	442.0	443.0
50°	430.0	429.0	427.0	422.0	423.0
52.5°	409.2	408.2	406.2	401.2	402.2
55°	377.0	376.0	373.0	369.0	369.0
57.5°	343.4	342.4	339.2	335.2	335.2
60°	321.0	320.0	316.0	312.0	312.0
62.5°	297.8	296.0	292.0	288.8	288.8
65°	261.0	258.1	254.0	251.0	251.0
67.5°	222.8	220.8	217.8	215.0	215.0
70°	198.0	196.0	193.0	191.0	191.0
72.5°	173.2	171.2	168.2	166.2	166.2
75°	136.0	134.0	132.0	130.0	130.0
77.5°	99.2	98.6	98.6	96.6	96.6
80°	76.0	77.0	77.0	75.0	75.0
82.5°	54.4	56.2	57.0	56.6	56.6
85°	27.0	29.9	32.0	32.0	32.0
87.5°	8.0	10.3	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)