

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: P521806

Luminaire Tested: **SQ4-WB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521806
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-WB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

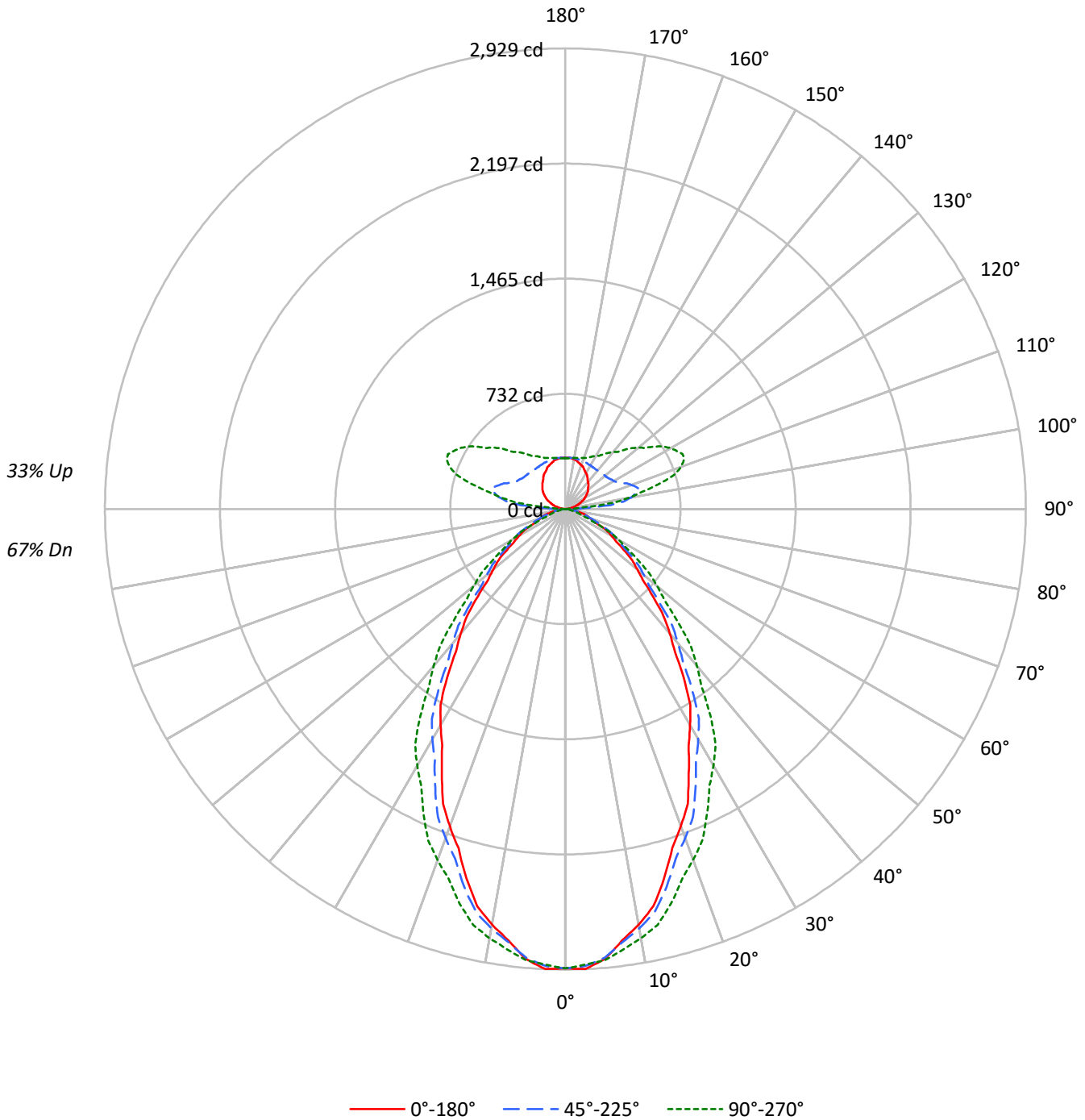
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6355.1 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.5
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					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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	81	79	74	73	71	66	65	64	59				
2	95	89	83	78	90	84	79	75	75	72	68	67	64	62	60	58	56	52				
3	88	79	73	67	83	75	69	65	68	63	59	61	57	54	55	52	50	46				
4	81	71	64	59	77	68	62	57	62	56	52	56	51	48	50	47	44	41				
5	75	65	57	52	71	62	55	50	56	51	46	51	46	43	46	42	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	33				
7	65	54	46	41	62	52	45	40	47	42	37	43	38	35	39	35	33	30				
8	61	50	42	37	58	47	41	36	44	38	34	40	35	32	36	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	27	26				
10	54	42	35	31	51	41	34	30	38	32	28	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26954	26954	26954
5°	26617	26523	26677
10°	25148	25377	25965
15°	23215	23754	24819
20°	21082	21874	23322
25°	18909	19940	21728
30°	16907	18013	20075
35°	14785	15853	18120
40°	12444	13433	15686
45°	10270	11156	13096
50°	8575	9347	10911
55°	7279	8022	9011
60°	6220	6955	7191
65°	4953	5849	4646
70°	4392	4564	2835
75°	4067	3700	1736
80°	3746	3406	1498
85°	3387	3123	1217



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.0	4.2
10°-20°	697.0	11.0
20°-30°	902.8	14.2
30°-40°	884.1	13.9
40°-50°	676.7	10.6
50°-60°	450.9	7.1
60°-70°	246.1	3.9
70°-80°	102.5	1.6
80°-90°	29.0	0.5
90°-100°	167.0	2.6
100°-110°	403.7	6.4
110°-120°	430.6	6.8
120°-130°	348.7	5.5
130°-140°	270.0	4.2
140°-150°	206.0	3.2
150°-160°	149.1	2.3
160°-170°	91.8	1.4
170°-180°	31.1	0.5
0°-30°	1867.8	29.4
0°-40°	2751.8	43.3
0°-60°	3879.5	61.0
0°-90°	4257.1	67.0
90°-120°	1001.3	15.8
90°-150°	1826.0	28.7
90°-180°	2098.0	33.0
0°-180°	6355.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2922	2922	2922	2922	2922	
5°	2874	2845	2864	2870	2880	267
15°	2430	2422	2487	2554	2598	679
25°	1858	1862	1959	2044	2134	854
35°	1313	1319	1408	1502	1609	816
45°	787	802	855	920	1004	614
55°	452	471	499	518	560	410
65°	227	246	268	234	213	236
75°	114	114	104	71	49	122
85°	32	32	30	19	12	35
90°	0	0	0	0	0	2
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2921.5	2921.5	2921.5	2921.5	2921.5
2.5°	2928.6	2902.6	2909.1	2909.0	2900.9
5°	2874.0	2845.2	2863.8	2870.4	2880.4
7.5°	2767.4	2745.6	2779.4	2804.5	2824.8
10°	2684.3	2665.5	2708.7	2745.2	2771.5
12.5°	2587.9	2572.1	2625.6	2674.6	2708.9
15°	2430.5	2421.7	2486.9	2554.5	2598.4
17.5°	2262.0	2257.8	2332.5	2411.5	2467.7
20°	2147.2	2145.9	2227.9	2310.2	2375.4
22.5°	2031.3	2034.1	2120.3	2205.8	2280.0
25°	1857.5	1862.5	1958.7	2044.1	2134.4
27.5°	1696.7	1699.0	1798.5	1888.6	1984.9
30°	1587.0	1593.3	1690.8	1784.1	1884.4
32.5°	1477.3	1484.5	1580.1	1676.5	1778.8
35°	1312.7	1318.9	1407.5	1502.2	1608.8
37.5°	1142.9	1151.5	1230.1	1319.7	1424.4
40°	1033.2	1045.7	1115.3	1199.6	1302.4
42.5°	927.6	943.1	1007.6	1087.6	1180.4
45°	787.1	802.1	855.0	919.8	1003.7
47.5°	666.1	683.4	724.0	779.7	851.4
50°	597.4	613.7	651.2	692.5	760.2
52.5°	536.9	553.2	586.6	618.4	676.1
55°	452.5	471.3	498.7	517.6	560.2
57.5°	383.3	401.3	423.0	431.6	457.4
60°	337.1	357.2	376.9	375.9	389.7
62.5°	295.1	312.1	331.8	318.2	318.9
65°	226.9	245.7	267.9	234.1	212.8
67.5°	183.3	187.3	210.2	163.3	137.9
70°	162.8	162.8	169.2	126.4	105.1
72.5°	143.3	143.3	137.4	102.8	80.5
75°	114.1	114.1	103.8	71.3	48.7
77.5°	87.9	86.9	79.5	53.2	35.4
80°	70.5	70.5	64.1	42.0	28.2
82.5°	55.1	55.1	49.7	32.8	21.0
85°	32.0	32.0	29.5	19.1	11.5
87.5°	11.3	11.3	10.3	6.1	5.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)