

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: P521077

Luminaire Tested: **SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521077
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-BB-050U-125D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

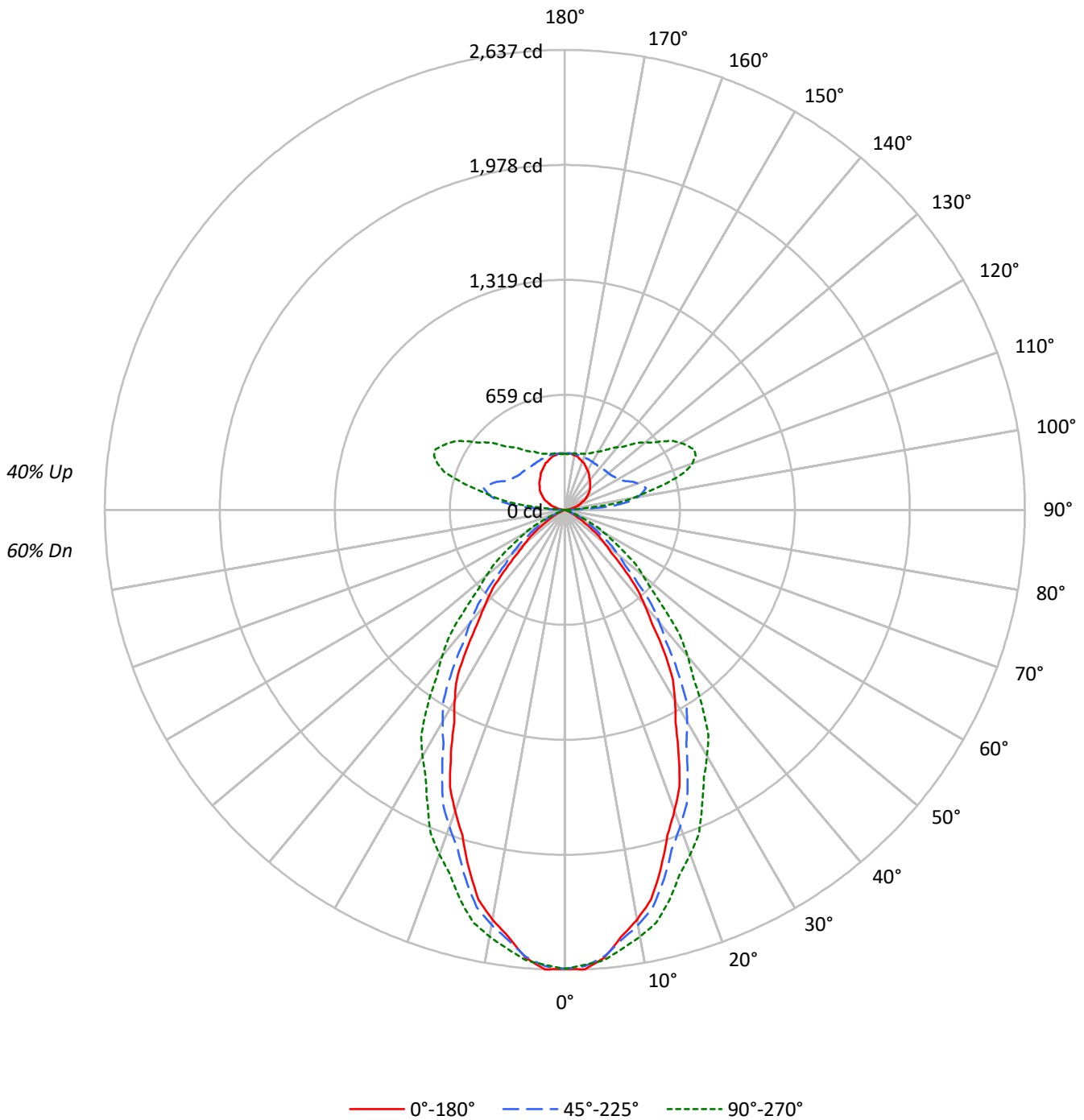
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5222.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.6
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				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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	102	99	95	93	96	93	90	87	81	79	77	71	69	68	61	60	59	55
2	95	89	84	79	89	84	79	75	74	71	68	65	62	60	57	55	53	50
3	88	80	74	69	82	76	70	66	67	63	60	59	56	54	52	50	48	45
4	82	72	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	71	63	56	52	56	51	47	50	46	43	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	46	42	39	41	38	36	34
7	66	55	48	43	62	53	46	42	48	42	39	43	39	36	39	35	33	31
8	62	51	44	39	58	49	42	38	44	39	35	40	36	33	36	33	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	30	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	28	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24275	24275	24275
5°	23884	23825	24002
10°	22348	22647	23278
15°	20316	20961	22128
20°	18034	18972	20634
25°	15706	16950	18958
30°	13452	14931	17372
35°	11154	12674	15455
40°	8570	10134	13169
45°	6195	7673	10596
50°	4220	5718	8404
55°	2744	4136	6532
60°	1574	2912	4722
65°	417	1779	2391
70°	205	550	688
75°	89	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.1	4.6
10°-20°	614.1	11.8
20°-30°	768.7	14.7
30°-40°	710.1	13.6
40°-50°	477.1	9.1
50°-60°	246.4	4.7
60°-70°	77.2	1.5
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	165.9	3.2
100°-110°	400.9	7.7
110°-120°	427.6	8.2
120°-130°	346.3	6.6
130°-140°	268.1	5.1
140°-150°	204.5	3.9
150°-160°	148.0	2.8
160°-170°	91.2	1.7
170°-180°	30.9	0.6
0°-30°	1622.9	31.1
0°-40°	2333.0	44.7
0°-60°	3056.5	58.5
0°-90°	3138.7	60.1
90°-120°	994.3	19.0
90°-150°	1813.2	34.7
90°-180°	2083.0	39.9
0°-180°	5222.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2631	2631	2631	2631	2631	
5°	2579	2553	2572	2582	2592	239
15°	2127	2120	2194	2268	2317	592
25°	1543	1555	1665	1779	1862	707
35°	990	1015	1125	1258	1372	613
45°	475	503	588	703	812	373
55°	171	199	257	330	406	159
65°	19	36	82	98	110	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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	



TEST NUMBER: P521077

CATALOG NUMBER: SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2631.1	2631.1	2631.1	2631.1	2631.1
2.5°	2637.2	2612.3	2618.9	2618.7	2611.8
5°	2578.9	2552.8	2572.5	2581.7	2591.6
7.5°	2469.9	2449.5	2487.5	2516.0	2536.6
10°	2385.4	2368.0	2417.3	2456.1	2484.7
12.5°	2287.7	2274.2	2333.7	2387.0	2423.6
15°	2127.0	2119.6	2194.5	2268.2	2316.7
17.5°	1954.9	1954.7	2040.2	2131.7	2190.2
20°	1836.8	1840.5	1932.3	2033.1	2101.6
22.5°	1718.7	1727.4	1825.3	1930.5	2008.9
25°	1542.8	1555.2	1665.0	1778.9	1862.3
27.5°	1373.7	1391.9	1507.4	1625.8	1727.3
30°	1262.7	1283.9	1401.5	1526.0	1630.6
32.5°	1153.8	1178.9	1293.5	1425.3	1531.8
35°	990.3	1015.2	1125.3	1257.7	1372.2
37.5°	821.5	845.9	953.4	1083.8	1207.5
40°	711.6	738.9	841.4	967.7	1093.4
42.5°	611.8	639.1	735.5	859.6	978.4
45°	474.8	503.4	588.1	702.6	812.1
47.5°	361.3	392.4	466.6	570.2	670.1
50°	294.0	325.2	398.4	489.7	585.5
52.5°	240.1	270.2	336.3	422.3	510.2
55°	170.6	199.2	257.1	330.1	406.1
57.5°	117.9	142.5	194.5	255.4	314.9
60°	85.3	108.9	157.8	207.3	255.9
62.5°	56.8	78.4	126.3	164.2	196.8
65°	19.1	36.5	81.5	98.3	109.5
67.5°	9.7	11.7	42.8	45.1	48.9
70°	7.6	7.6	20.4	21.7	25.5
72.5°	5.6	5.6	8.1	10.5	11.2
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)