

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518485

Luminaire Tested: **SQ4-BB-050U-125D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518485
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

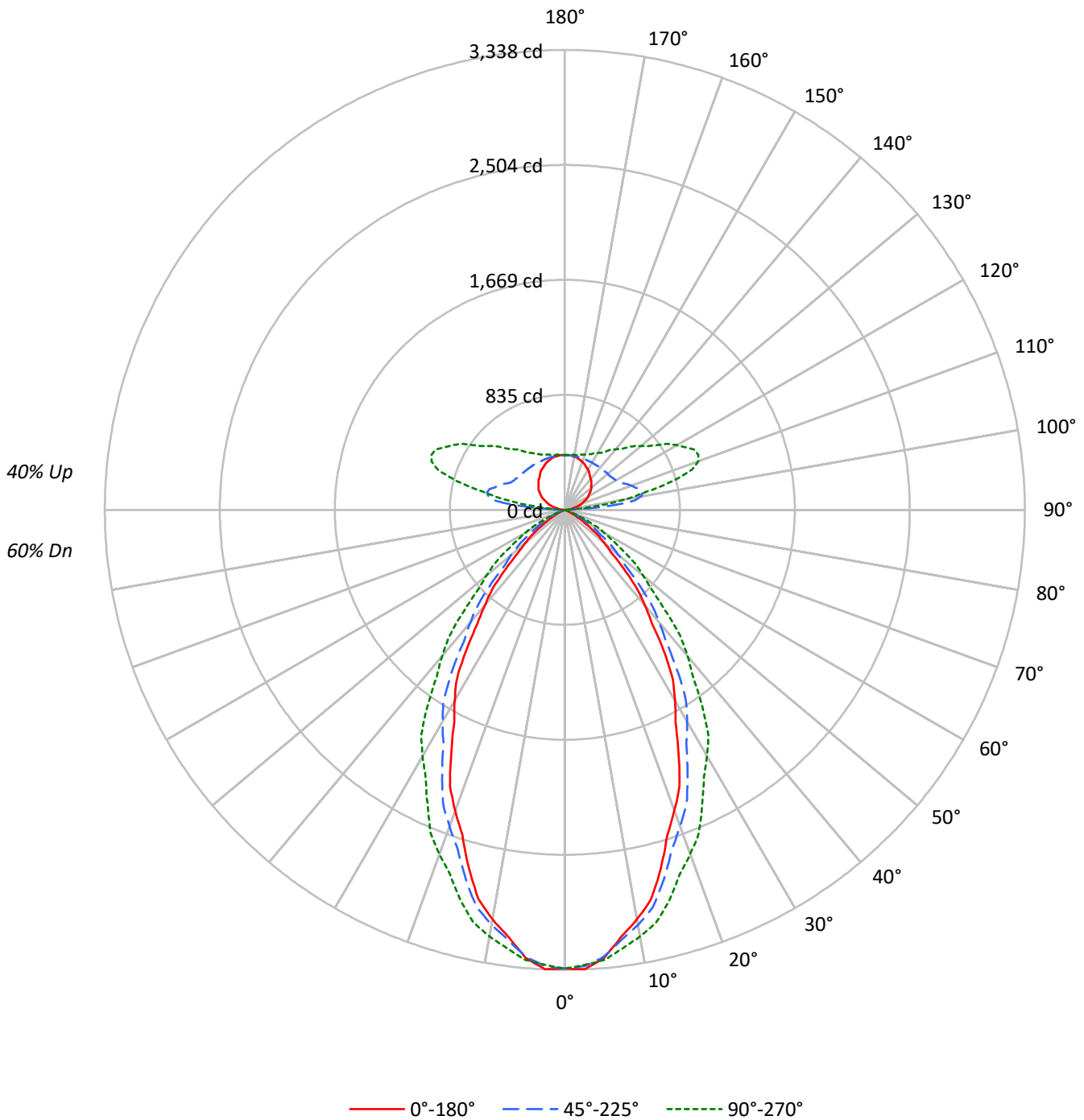
Lumens per Lamp: N/A
Luminaire Lumens: 6569.7 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 87.8
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	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20480	20480	20480
5°	20151	20101	20250
10°	18854	19106	19640
15°	17141	17685	18669
20°	15215	16006	17409
25°	13250	14300	15994
30°	11350	12597	14656
35°	9411	10692	13040
40°	7230	8550	11111
45°	5227	6473	8940
50°	3561	4825	7091
55°	2315	3489	5511
60°	1327	2458	3983
65°	352	1501	2016
70°	174	464	579
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.9	4.6
10°-20°	777.1	11.8
20°-30°	972.9	14.8
30°-40°	898.6	13.7
40°-50°	603.8	9.2
50°-60°	311.9	4.7
60°-70°	97.7	1.5
70°-80°	6.2	0.1
80°-90°	1.6	0.0
90°-100°	190.9	2.9
100°-110°	518.5	7.9
110°-120°	533.1	8.1
120°-130°	426.2	6.5
130°-140°	334.9	5.1
140°-150°	256.8	3.9
150°-160°	184.7	2.8
160°-170°	112.9	1.7
170°-180°	38.1	0.6
0°-30°	2053.8	31.3
0°-40°	2952.4	44.9
0°-60°	3868.1	58.9
0°-90°	3973.6	60.5
90°-120°	1242.5	18.9
90°-150°	2260.4	34.4
90°-180°	2596.0	39.5
0°-180°	6569.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3330	3330	3330	3330	3330	
5°	3264	3231	3256	3267	3280	303
15°	2692	2682	2777	2870	2932	750
25°	1952	1968	2107	2251	2357	895
35°	1253	1285	1424	1592	1737	776
45°	601	637	744	889	1028	472
55°	216	252	325	418	514	201
65°	24	46	103	124	138	41
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	1	5	9	12	12	2
95°	28	104	332	145	97	30
105°	92	143	570	868	817	98
115°	164	199	456	908	1034	161
125°	225	256	413	696	821	201
135°	271	301	402	567	639	210
145°	313	336	396	482	518	197
155°	354	367	394	432	445	163
165°	384	389	395	412	413	108
175°	398	399	396	401	400	38
180°	398	398	398	398	398	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3329.7	3329.7	3329.7	3329.7	3329.7
2.5°	3337.5	3306.0	3314.3	3314.1	3305.2
5°	3263.7	3230.6	3255.6	3267.2	3279.8
7.5°	3125.8	3100.0	3148.0	3184.1	3210.2
10°	3018.8	2996.8	3059.1	3108.3	3144.5
12.5°	2895.1	2878.1	2953.4	3020.8	3067.2
15°	2691.8	2682.4	2777.2	2870.4	2931.8
17.5°	2474.0	2473.7	2582.0	2697.7	2771.7
20°	2324.5	2329.3	2445.3	2573.0	2659.6
22.5°	2175.0	2186.1	2310.0	2443.1	2542.3
25°	1952.4	1968.2	2107.1	2251.2	2356.7
27.5°	1738.5	1761.5	1907.6	2057.5	2186.0
30°	1598.0	1624.8	1773.6	1931.3	2063.6
32.5°	1460.1	1491.9	1637.0	1803.7	1938.6
35°	1253.3	1284.8	1424.0	1591.6	1736.6
37.5°	1039.7	1070.5	1206.6	1371.5	1528.1
40°	900.5	935.1	1064.8	1224.7	1383.8
42.5°	774.2	808.9	930.8	1087.9	1238.1
45°	600.9	637.1	744.2	889.1	1027.8
47.5°	457.2	496.6	590.6	721.7	848.0
50°	372.1	411.5	504.2	619.7	741.0
52.5°	303.8	341.9	425.6	534.4	645.6
55°	215.9	252.1	325.4	417.8	513.9
57.5°	149.2	180.4	246.1	323.2	398.5
60°	107.9	137.9	199.8	262.4	323.8
62.5°	71.8	99.3	159.8	207.8	249.0
65°	24.2	46.2	103.1	124.4	138.5
67.5°	12.2	14.8	54.1	57.1	61.9
70°	9.7	9.7	25.8	27.5	32.2
72.5°	7.1	7.1	10.3	13.2	14.2
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	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°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.3	90.8	39.0	33.0
95°	28.1	104.4	332.4	144.7	97.2
97.5°	46.5	115.3	509.6	396.5	278.5
100°	58.8	122.6	563.8	571.5	461.5
102.5°	71.1	129.8	578.1	706.9	609.8
105°	92.1	143.3	570.2	868.2	817.0
107.5°	113.8	159.0	537.2	951.5	965.8
110°	129.1	170.4	512.7	967.9	1029.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	142.4	181.7	488.1	954.3	1046.6
115°	163.6	198.7	456.4	908.1	1034.3
117.5°	183.6	217.1	436.2	842.4	984.7
120°	196.9	229.4	427.0	798.4	939.7
122.5°	208.1	240.6	420.9	754.3	890.6
125°	225.0	256.3	413.0	695.8	820.8
127.5°	240.1	271.1	408.6	651.4	758.7
130°	249.3	279.3	406.6	623.5	719.8
132.5°	258.5	288.5	404.5	599.8	685.0
135°	271.0	301.0	401.5	566.7	639.3
137.5°	284.6	311.8	399.9	537.6	598.6
140°	292.8	319.0	398.9	519.0	574.0
142.5°	301.0	325.2	397.9	504.5	550.5
145°	313.2	335.7	396.3	481.5	517.8
147.5°	327.0	346.3	395.1	463.5	492.0
150°	336.2	352.5	395.1	453.1	475.6
152.5°	343.4	357.7	394.0	443.8	462.3
155°	354.1	366.6	393.8	432.4	444.9
157.5°	364.6	374.4	393.8	424.7	434.2
160°	370.8	379.5	393.8	419.5	427.0
162.5°	376.9	383.7	394.8	415.4	420.9
165°	383.6	388.6	395.1	411.7	413.0
167.5°	390.5	393.0	396.3	407.4	408.4
170°	392.5	395.0	396.3	405.3	405.3
172.5°	394.5	396.0	396.3	403.2	403.2
175°	397.6	398.9	396.3	401.4	400.2
177.5°	398.6	398.6	395.6	399.6	397.6
180°	397.6	397.6	397.6	397.6	397.6

(END OF REPORT)