

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: P518489

Luminaire Tested: **SQ4-BB-050U-125D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518489
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

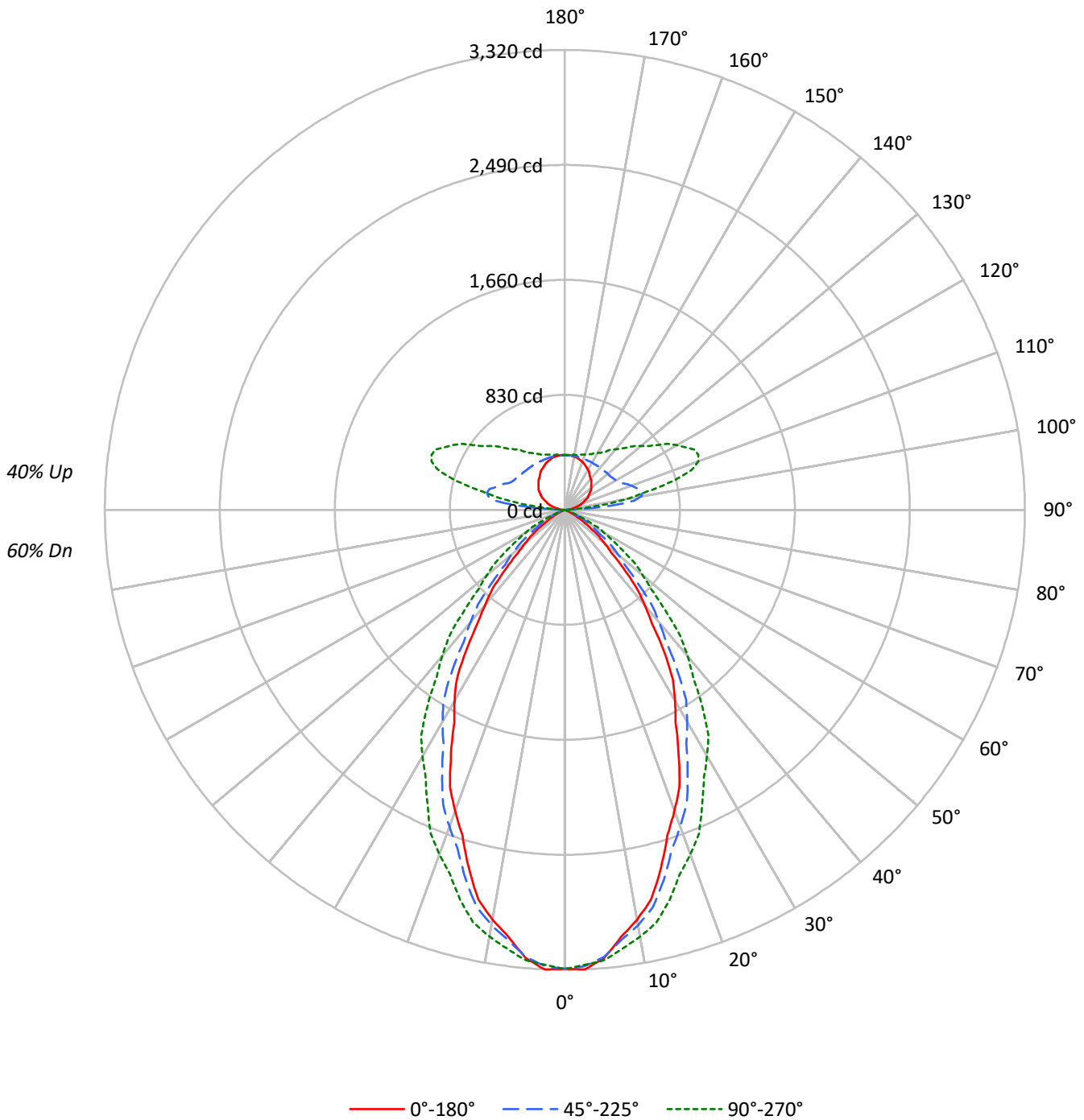
Lumens per Lamp: N/A
Luminaire Lumens: 6536.4 lumens
Efficiency: N/A
Efficacy: 74.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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°	20376	20376	20376
5°	20049	19999	20147
10°	18759	19009	19540
15°	17054	17595	18575
20°	15138	15925	17320
25°	13183	14228	15913
30°	11292	12533	14582
35°	9363	10638	12973
40°	7193	8506	11054
45°	5200	6441	8894
50°	3542	4801	7055
55°	2303	3471	5483
60°	1321	2444	3962
65°	349	1493	2006
70°	173	460	577
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.3	4.6
10°-20°	773.2	11.8
20°-30°	967.9	14.8
30°-40°	894.0	13.7
40°-50°	600.7	9.2
50°-60°	310.3	4.7
60°-70°	97.2	1.5
70°-80°	6.2	0.1
80°-90°	1.6	0.0
90°-100°	189.9	2.9
100°-110°	515.9	7.9
110°-120°	530.4	8.1
120°-130°	424.1	6.5
130°-140°	333.2	5.1
140°-150°	255.5	3.9
150°-160°	183.7	2.8
160°-170°	112.4	1.7
170°-180°	37.9	0.6
0°-30°	2043.4	31.3
0°-40°	2937.4	44.9
0°-60°	3848.5	58.9
0°-90°	3953.4	60.5
90°-120°	1236.2	18.9
90°-150°	2249.0	34.4
90°-180°	2583.0	39.5
0°-180°	6536.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3313	3313	3313	3313	3313	
5°	3247	3214	3239	3251	3263	301
15°	2678	2669	2763	2856	2917	746
25°	1942	1958	2096	2240	2345	891
35°	1247	1278	1417	1584	1728	772
45°	598	634	740	885	1022	470
55°	215	251	324	416	511	200
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	11	11	2
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	903	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3312.8	3312.8	3312.8	3312.8	3312.8
2.5°	3320.5	3289.2	3297.4	3297.2	3288.5
5°	3247.1	3214.2	3239.1	3250.6	3263.1
7.5°	3109.9	3084.2	3132.0	3167.9	3193.9
10°	3003.5	2981.6	3043.6	3092.5	3128.5
12.5°	2880.4	2863.5	2938.4	3005.5	3051.6
15°	2678.1	2668.7	2763.1	2855.8	2917.0
17.5°	2461.5	2461.1	2568.8	2684.0	2757.6
20°	2312.7	2317.4	2432.9	2559.9	2646.1
22.5°	2164.0	2175.0	2298.3	2430.7	2529.4
25°	1942.5	1958.2	2096.4	2239.8	2344.8
27.5°	1729.7	1752.5	1897.9	2047.0	2174.9
30°	1589.9	1616.5	1764.6	1921.4	2053.1
32.5°	1452.7	1484.4	1628.7	1794.6	1928.7
35°	1246.9	1278.3	1416.8	1583.6	1727.7
37.5°	1034.4	1065.1	1200.4	1364.6	1520.3
40°	895.9	930.4	1059.4	1218.5	1376.7
42.5°	770.3	804.7	926.1	1082.3	1231.9
45°	597.8	633.9	740.5	884.6	1022.5
47.5°	454.9	494.0	587.6	718.0	843.7
50°	370.2	409.4	501.7	616.6	737.3
52.5°	302.3	340.2	423.4	531.7	642.4
55°	214.8	250.8	323.7	415.7	511.3
57.5°	148.4	179.4	244.9	321.6	396.5
60°	107.4	137.2	198.7	261.0	322.1
62.5°	71.5	98.7	159.0	206.7	247.8
65°	24.0	46.0	102.6	123.7	137.8
67.5°	12.2	14.7	53.9	56.8	61.5
70°	9.6	9.6	25.6	27.4	32.1
72.5°	7.1	7.1	10.3	13.2	14.1
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	11.4	11.4
92.5°	11.4	52.0	90.3	38.8	32.8
95°	28.0	103.9	330.7	143.9	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	121.9	561.0	568.6	459.2
102.5°	70.7	129.2	575.2	703.3	606.8
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.2	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.7	949.5	1041.3
115°	162.8	197.6	454.1	903.4	1029.1
117.5°	182.7	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	934.9
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.9	255.0	410.9	692.3	816.6
127.5°	238.9	269.7	406.5	648.1	754.8
130°	248.0	277.9	404.5	620.4	716.1
132.5°	257.2	287.1	402.5	596.7	681.5
135°	269.7	299.5	399.4	563.9	636.0
137.5°	283.2	310.3	397.9	534.9	595.6
140°	291.3	317.4	396.9	516.4	571.1
142.5°	299.4	323.6	395.9	502.0	547.7
145°	311.6	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.1	461.1	489.5
150°	334.5	350.7	393.1	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	460.0
155°	352.3	364.8	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	375.0	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.1	409.6	410.9
167.5°	388.5	391.0	394.3	405.3	406.3
170°	390.5	393.0	394.3	403.2	403.2
172.5°	392.5	394.0	394.3	401.2	401.2
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)