

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: P518469

Luminaire Tested: **SQ4-BB-050U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518469
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

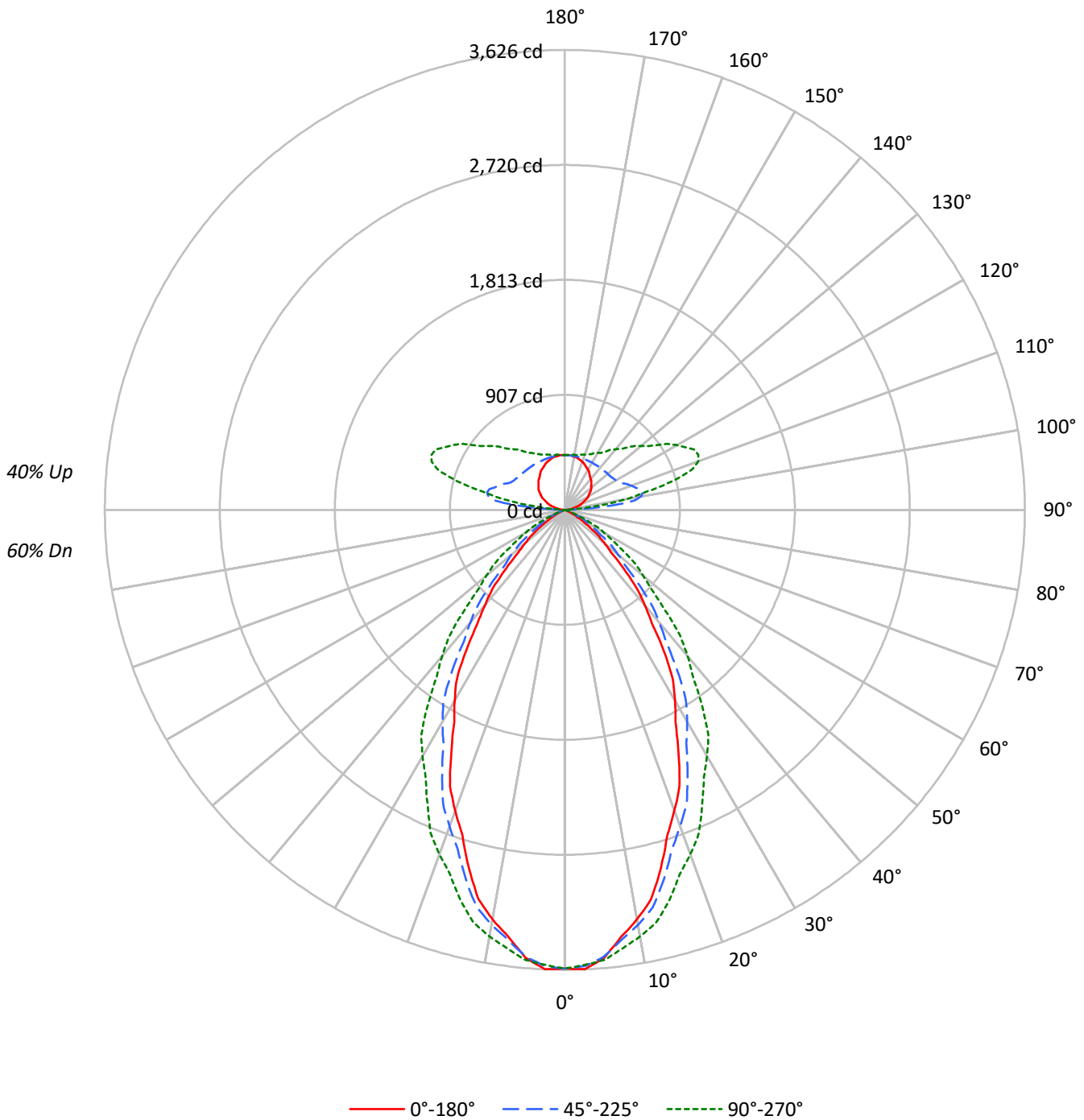
Lumens per Lamp: N/A
Luminaire Lumens: 7136.8 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18621	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14164
40°	7854	9287	12070
45°	5678	7033	9712
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4326
65°	381	1630	2190
70°	189	504	629
75°	83	40	0
80°	60	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.1	4.6
10°-20°	844.2	11.8
20°-30°	1056.8	14.8
30°-40°	976.2	13.7
40°-50°	655.9	9.2
50°-60°	338.8	4.7
60°-70°	106.1	1.5
70°-80°	6.7	0.1
80°-90°	1.8	0.0
90°-100°	207.4	2.9
100°-110°	563.3	7.9
110°-120°	579.1	8.1
120°-130°	463.0	6.5
130°-140°	363.8	5.1
140°-150°	279.0	3.9
150°-160°	200.6	2.8
160°-170°	122.7	1.7
170°-180°	41.3	0.6
0°-30°	2231.1	31.3
0°-40°	3207.3	44.9
0°-60°	4202.0	58.9
0°-90°	4316.6	60.5
90°-120°	1349.8	18.9
90°-150°	2455.6	34.4
90°-180°	2820.0	39.5
0°-180°	7136.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3617	3617	3617	3617	3617	
5°	3545	3510	3537	3549	3563	329
15°	2924	2914	3017	3118	3185	814
25°	2121	2138	2289	2446	2560	972
35°	1362	1396	1547	1729	1886	843
45°	653	692	808	966	1116	513
55°	234	274	354	454	558	219
65°	26	50	112	135	150	44
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	1	6	10	12	12	2
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3617.1	3617.1	3617.1	3617.1	3617.1
2.5°	3625.5	3591.3	3600.3	3600.1	3590.5
5°	3545.4	3509.5	3536.6	3549.2	3562.9
7.5°	3395.6	3367.5	3419.7	3458.9	3487.3
10°	3279.4	3255.4	3323.1	3376.5	3415.9
12.5°	3145.0	3126.5	3208.4	3281.6	3331.9
15°	2924.2	2913.9	3016.9	3118.2	3184.9
17.5°	2687.6	2687.2	2804.8	2930.5	3011.0
20°	2525.2	2530.3	2656.4	2795.1	2889.2
22.5°	2362.8	2374.8	2509.4	2654.0	2761.8
25°	2120.9	2138.0	2288.9	2445.5	2560.2
27.5°	1888.5	1913.5	2072.3	2235.1	2374.7
30°	1735.9	1765.0	1926.7	2098.0	2241.7
32.5°	1586.2	1620.7	1778.3	1959.4	2105.9
35°	1361.5	1395.7	1547.0	1729.0	1886.4
37.5°	1129.4	1163.0	1310.7	1489.9	1660.0
40°	978.2	1015.9	1156.7	1330.4	1503.2
42.5°	841.0	878.7	1011.1	1181.8	1345.0
45°	652.7	692.1	808.5	965.9	1116.5
47.5°	496.6	539.4	641.5	783.9	921.2
50°	404.2	447.0	547.7	673.2	805.0
52.5°	330.0	371.4	462.3	580.6	701.4
55°	234.5	273.8	353.5	453.9	558.2
57.5°	162.0	195.9	267.4	351.1	432.9
60°	117.2	149.8	217.0	285.0	351.7
62.5°	78.0	107.8	173.6	225.7	270.5
65°	26.2	50.2	112.0	135.1	150.5
67.5°	13.3	16.0	58.8	62.1	67.2
70°	10.5	10.5	28.0	29.9	35.0
72.5°	7.7	7.7	11.2	14.4	15.4
75°	3.5	3.5	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	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	1.1	1.9	2.5	2.5
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)