

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: P518478

Luminaire Tested: **SQ4-BB-050U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518478
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10182.9 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

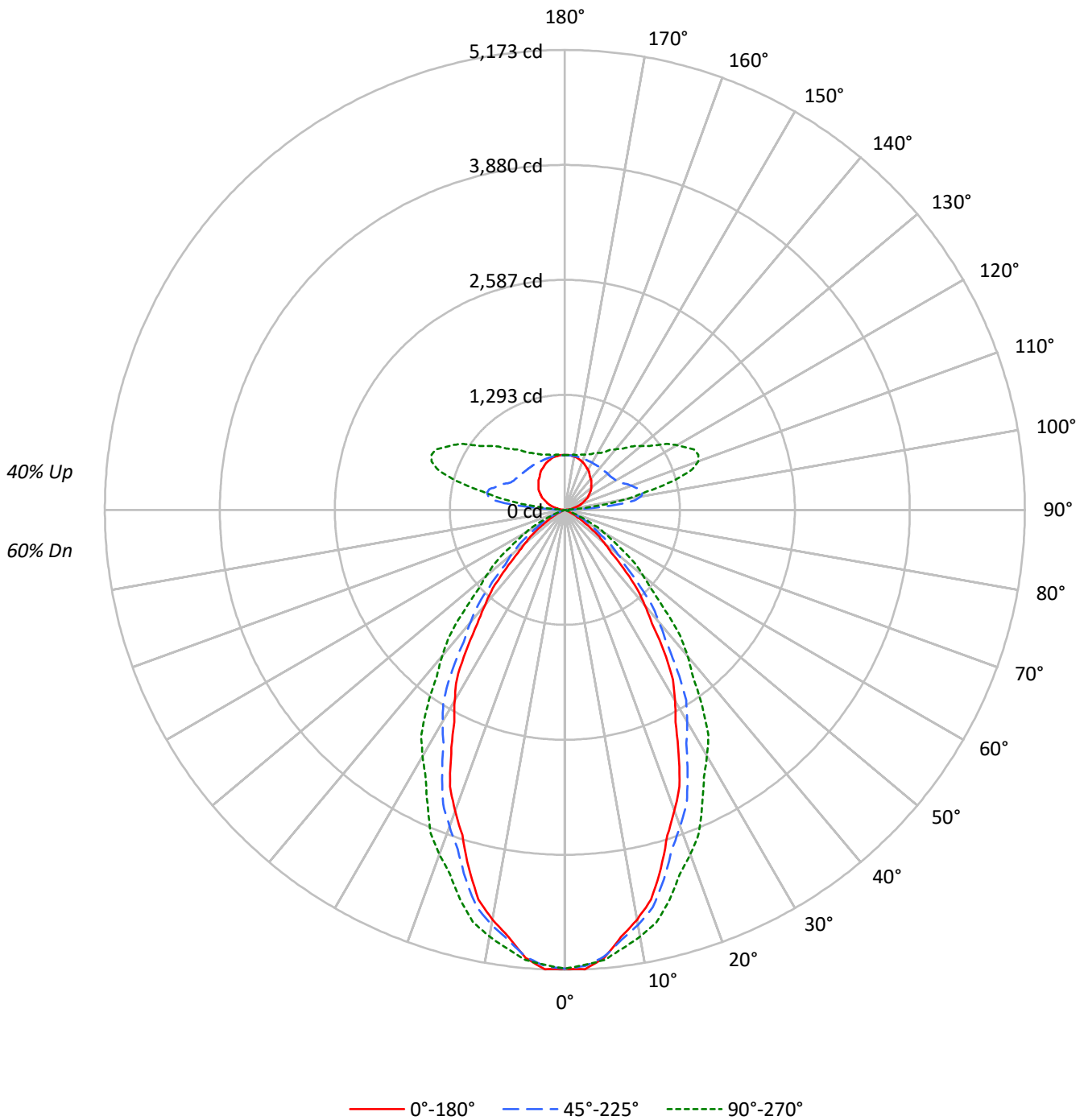
Input Watts (W): 114.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									20
RC	80									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	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	66	66	66	66	66	66	66	66	66	66	66	66	60																
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	55																
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	54	54	54	54	54	54	54	54	54	54	54	54	50																
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	48	48	48	48	48	48	48	48	48	48	48	48	45																
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	44	44	44	44	44	44	44	44	44	44	44	44	41																
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	40	40	40	40	40	40	40	40	40	40	40	40	37																
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	36	36	36	36	36	36	36	36	36	36	36	36	34																
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	33	33	33	33	33	33	33	33	33	33	33	33	31																
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	31	31	31	31	31	31	31	31	31	31	31	31	29																
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	28	28	28	28	28	28	28	28	28	28	28	28	26																
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	26	26	26	26	26	26	26	26	26	26	26	26	24																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7525	10393
50°	4140	5609	8242
55°	2691	4057	6406
60°	1544	2856	4631
65°	409	1744	2344
70°	202	538	673
75°	89	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.0	4.6
10°-20°	1204.5	11.8
20°-30°	1507.9	14.8
30°-40°	1392.8	13.7
40°-50°	935.9	9.2
50°-60°	483.4	4.7
60°-70°	151.4	1.5
70°-80°	9.6	0.1
80°-90°	2.6	0.0
90°-100°	295.8	2.9
100°-110°	803.7	7.9
110°-120°	826.3	8.1
120°-130°	660.7	6.5
130°-140°	519.1	5.1
140°-150°	398.0	3.9
150°-160°	286.2	2.8
160°-170°	175.1	1.7
170°-180°	59.0	0.6
0°-30°	3183.4	31.3
0°-40°	4576.2	44.9
0°-60°	5995.4	58.9
0°-90°	6159.0	60.5
90°-120°	1925.8	18.9
90°-150°	3503.7	34.4
90°-180°	4024.0	39.5
0°-180°	10182.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5161	5161	5161	5161	5161	
5°	5059	5007	5046	5064	5084	469
15°	4172	4158	4304	4449	4544	1162
25°	3026	3051	3266	3489	3653	1387
35°	1942	1991	2207	2467	2692	1203
45°	931	988	1154	1378	1593	731
55°	335	391	504	648	796	312
65°	38	72	160	193	215	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	8	14	18	18	3
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5161.0	5161.0	5161.0	5161.0	5161.0
2.5°	5172.9	5124.1	5137.0	5136.7	5123.0
5°	5058.6	5007.3	5046.1	5064.0	5083.6
7.5°	4844.9	4804.8	4879.3	4935.2	4975.7
10°	4679.1	4644.9	4741.5	4817.7	4873.8
12.5°	4487.3	4460.9	4577.7	4682.2	4754.0
15°	4172.2	4157.6	4304.5	4449.0	4544.2
17.5°	3834.6	3834.1	4001.9	4181.3	4296.1
20°	3602.9	3610.3	3790.2	3988.0	4122.3
22.5°	3371.2	3388.3	3580.5	3786.7	3940.5
25°	3026.2	3050.6	3265.9	3489.3	3652.9
27.5°	2694.6	2730.2	2956.7	3189.0	3388.2
30°	2476.9	2518.4	2749.0	2993.4	3198.4
32.5°	2263.1	2312.4	2537.3	2795.7	3004.7
35°	1942.5	1991.4	2207.2	2467.0	2691.6
37.5°	1611.5	1659.3	1870.1	2125.8	2368.5
40°	1395.7	1449.4	1650.4	1898.2	2144.8
42.5°	1200.0	1253.7	1442.7	1686.2	1919.1
45°	931.3	987.5	1153.5	1378.1	1593.0
47.5°	708.6	769.6	915.3	1118.5	1314.3
50°	576.8	637.8	781.5	960.6	1148.5
52.5°	470.9	530.0	659.7	828.4	1000.7
55°	334.6	390.7	504.4	647.6	796.5
57.5°	231.2	279.5	381.5	501.0	617.7
60°	167.3	213.7	309.6	406.7	501.9
62.5°	111.4	153.8	247.7	322.0	386.0
65°	37.5	71.6	159.8	192.8	214.7
67.5°	19.0	22.9	83.9	88.6	95.9
70°	15.0	15.0	39.9	42.6	49.9
72.5°	11.0	11.0	16.0	20.5	22.0
75°	5.0	5.0	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.6	2.8	3.6	3.6
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)