

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: P518827

Luminaire Tested: **SQ4-BB-125U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518827
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

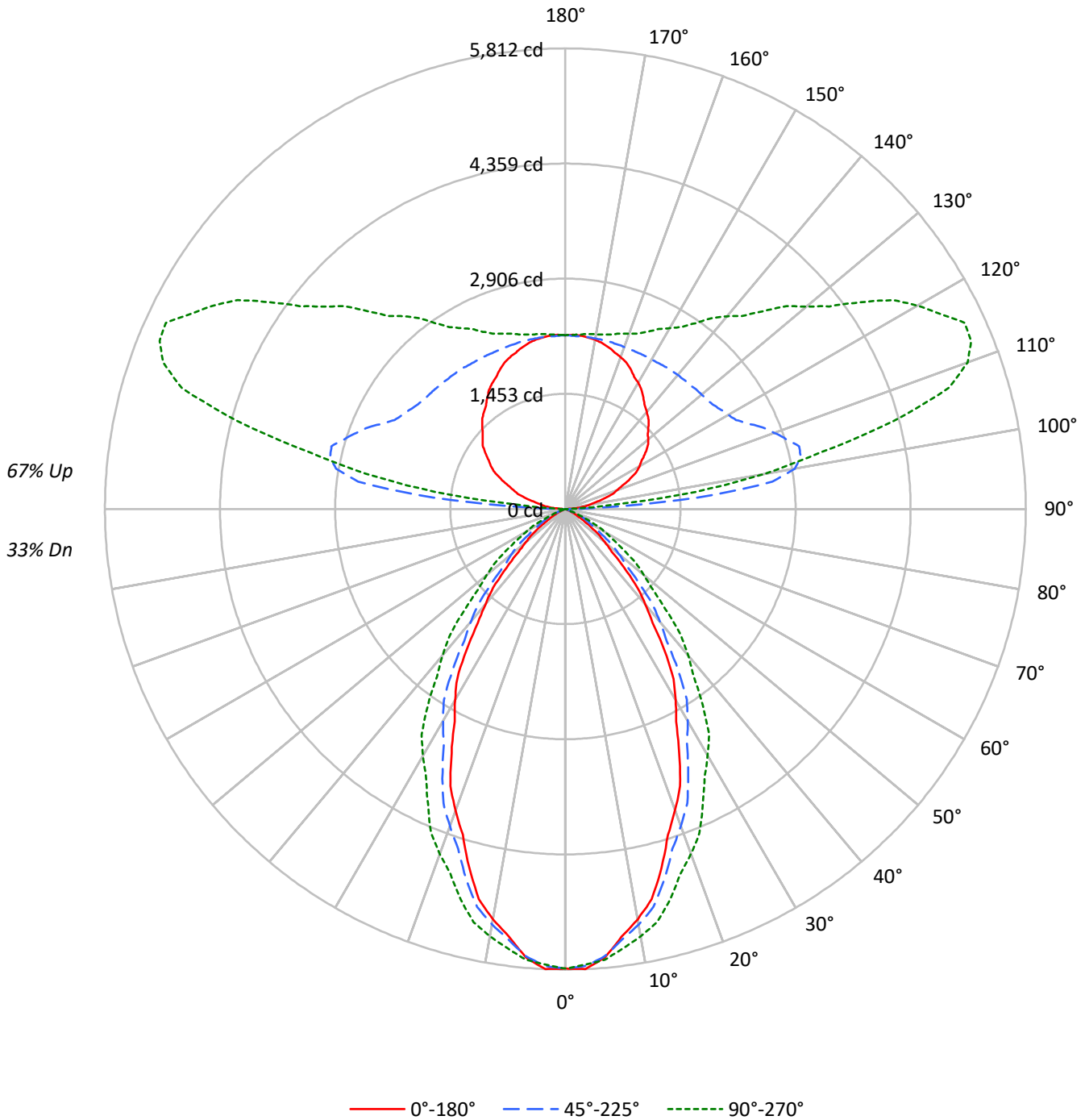
Lumens per Lamp: N/A
Luminaire Lumens: 21079.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 201.2
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17834	17834	17834
5°	17546	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10968	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	306	1306	1756
70°	151	404	504
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.2	2.5
10°-20°	1353.3	6.4
20°-30°	1694.2	8.0
30°-40°	1564.9	7.4
40°-50°	1051.5	5.0
50°-60°	543.1	2.6
60°-70°	170.1	0.8
70°-80°	10.7	0.1
80°-90°	5.3	0.0
90°-100°	1025.9	4.9
100°-110°	2763.4	13.1
110°-120°	2900.1	13.8
120°-130°	2353.3	11.2
130°-140°	1845.6	8.8
140°-150°	1417.0	6.7
150°-160°	1018.8	4.8
160°-170°	622.4	3.0
170°-180°	209.9	1.0
0°-30°	3576.8	17.0
0°-40°	5141.7	24.4
0°-60°	6736.4	32.0
0°-90°	6922.6	32.8
90°-120°	6689.3	31.7
90°-150°	12305.3	58.4
90°-180°	14156.0	67.2
0°-180°	21079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5799	5799	5799	5799	5799	
5°	5684	5626	5670	5690	5712	527
15°	4688	4671	4836	4999	5106	1306
25°	3400	3428	3670	3920	4104	1559
35°	2183	2238	2480	2772	3024	1352
45°	1046	1110	1296	1548	1790	822
55°	376	439	567	728	895	351
65°	42	80	180	217	241	71
75°	6	6	3	0	0	8
85°	0	0	0	0	0	1
90°	6	16	34	36	36	11
95°	156	558	1682	860	595	163
105°	511	795	3056	4572	4291	537
115°	902	1104	2545	4917	5562	888
125°	1232	1415	2285	3862	4545	1100
135°	1483	1655	2221	3116	3528	1145
145°	1715	1849	2193	2664	2861	1076
155°	1947	2018	2173	2390	2467	896
165°	2112	2136	2182	2269	2280	596
175°	2196	2193	2184	2215	2210	209
180°	2193	2193	2193	2193	2193	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5798.8	5798.8	5798.8	5798.8	5798.8
2.5°	5812.2	5757.4	5771.8	5771.5	5756.1
5°	5683.7	5626.1	5669.7	5689.8	5711.8
7.5°	5443.6	5398.6	5482.3	5545.1	5590.6
10°	5257.3	5218.9	5327.4	5413.0	5476.1
12.5°	5041.9	5012.2	5143.4	5260.8	5341.5
15°	4687.8	4671.4	4836.5	4998.8	5105.8
17.5°	4308.5	4308.0	4496.5	4698.0	4827.0
20°	4048.2	4056.4	4258.6	4480.8	4631.7
22.5°	3787.8	3807.0	4022.9	4254.7	4427.5
25°	3400.1	3427.6	3669.5	3920.5	4104.3
27.5°	3027.6	3067.6	3322.1	3583.1	3806.9
30°	2783.0	2829.6	3088.7	3363.3	3593.7
32.5°	2542.8	2598.2	2850.8	3141.2	3376.0
35°	2182.6	2237.5	2480.0	2771.9	3024.2
37.5°	1810.6	1864.4	2101.2	2388.5	2661.2
40°	1568.2	1628.6	1854.4	2132.8	2409.8
42.5°	1348.3	1408.6	1621.0	1894.5	2156.2
45°	1046.4	1109.5	1296.1	1548.5	1789.8
47.5°	796.2	864.7	1028.5	1256.8	1476.8
50°	648.0	716.6	878.1	1079.3	1290.5
52.5°	529.1	595.5	741.2	930.7	1124.4
55°	375.9	439.0	566.7	727.6	894.9
57.5°	259.8	314.1	428.7	562.9	694.1
60°	188.0	240.1	347.9	456.9	563.9
62.5°	125.1	172.8	278.3	361.8	433.7
65°	42.1	80.5	179.5	216.6	241.3
67.5°	21.3	25.7	94.3	99.5	107.7
70°	16.8	16.8	44.9	47.9	56.1
72.5°	12.3	12.3	18.0	23.0	24.7
75°	5.6	5.6	2.8	0.0	0.0
77.5°	2.8	2.8	2.2	0.0	0.0
80°	2.8	2.8	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	3.3	6.7	7.3	7.3
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.2	159.2
95°	156.4	558.0	1681.7	860.0	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.6
100°	321.3	670.9	2941.6	3077.7	2553.3
102.5°	390.5	716.1	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.2	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.4
115°	902.3	1104.4	2544.9	4917.3	5561.9
117.5°	1012.4	1201.9	2429.8	4612.7	5330.6
120°	1083.9	1266.9	2371.7	4394.2	5131.7
122.5°	1146.5	1327.3	2329.2	4170.7	4906.0
125°	1231.9	1414.9	2285.1	3862.2	4545.0
127.5°	1314.1	1494.3	2257.2	3590.1	4199.8
130°	1363.2	1543.5	2246.0	3434.2	3969.6
132.5°	1412.4	1590.5	2234.8	3296.9	3788.6
135°	1483.4	1655.4	2220.8	3115.8	3528.2
137.5°	1551.0	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.3	2206.9	2867.5	3173.4
142.5°	1647.1	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.1	2192.9	2663.9	2860.6
147.5°	1789.0	1905.3	2183.4	2566.8	2721.4
150°	1838.1	1939.2	2178.9	2505.9	2634.3
152.5°	1882.8	1970.8	2176.7	2456.2	2560.5
155°	1947.1	2018.1	2173.3	2390.2	2466.7
157.5°	2003.5	2058.7	2173.9	2343.8	2395.2
160°	2039.3	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.5	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.9	2253.2
170°	2167.8	2173.2	2184.5	2237.6	2237.6
172.5°	2181.2	2182.3	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.8	2197.5	2186.2	2204.0	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)