

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: P518773

Luminaire Tested: **SQ4-BB-100U-125D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518773
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

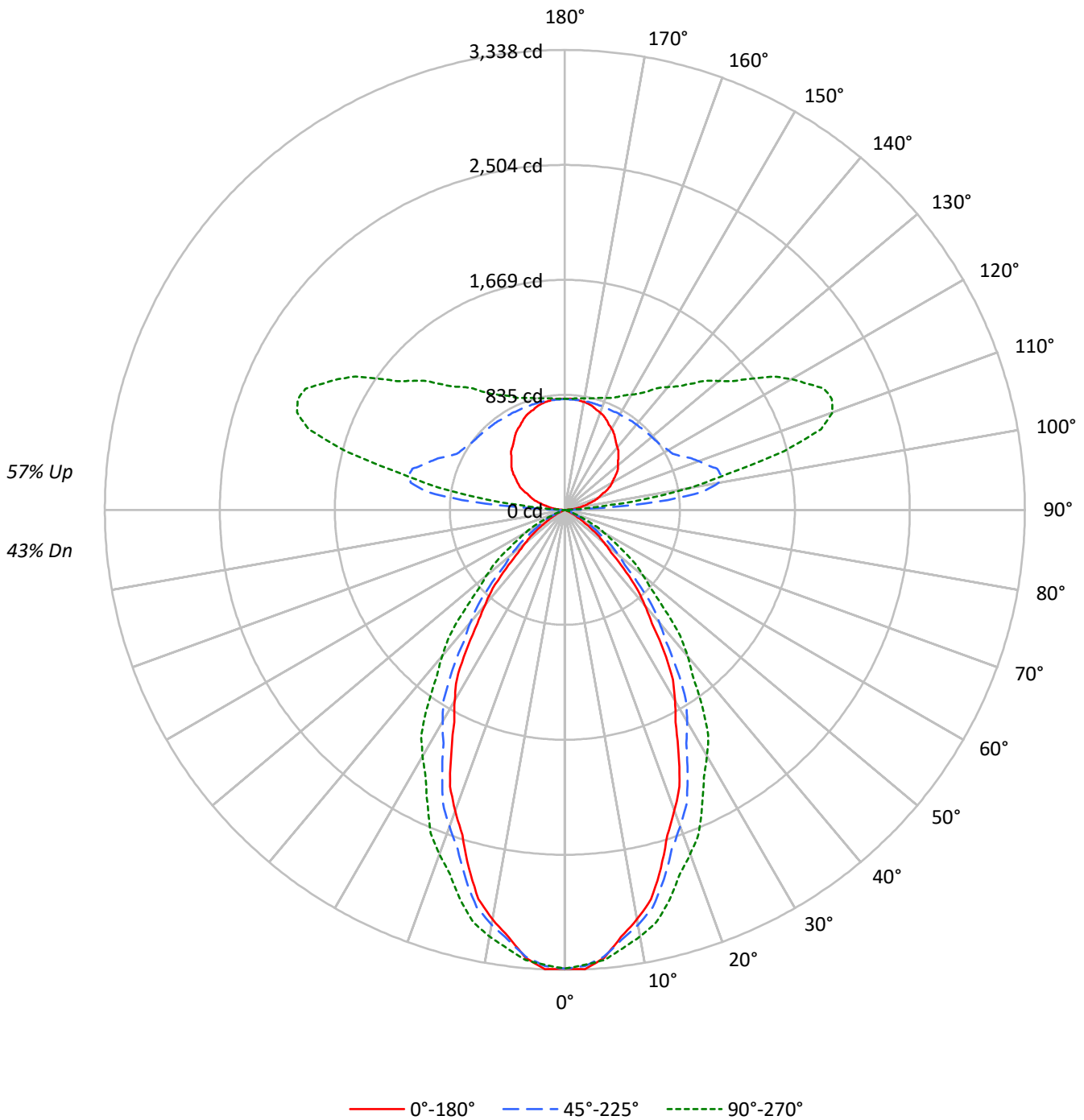
Lumens per Lamp: N/A
Luminaire Lumens: 9208.4 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43		
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39		
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36		
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32		
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29		
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26		
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24		
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22		
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20		
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19		
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17		

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	3.3
10°-20°	777.1	8.4
20°-30°	972.9	10.6
30°-40°	898.6	9.8
40°-50°	603.8	6.6
50°-60°	311.9	3.4
60°-70°	97.7	1.1
70°-80°	6.2	0.1
80°-90°	1.8	0.0
90°-100°	377.3	4.1
100°-110°	1041.6	11.3
110°-120°	1074.2	11.7
120°-130°	863.2	9.4
130°-140°	678.4	7.4
140°-150°	520.3	5.7
150°-160°	373.9	4.1
160°-170°	228.7	2.5
170°-180°	77.1	0.8
0°-30°	2053.8	22.3
0°-40°	2952.4	32.1
0°-60°	3868.1	42.0
0°-90°	3973.8	43.2
90°-120°	2493.0	27.1
90°-150°	4554.9	49.5
90°-180°	5235.0	56.9
0°-180°	9208.4	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°	3	5	10	12	13	4
95°	55	204	684	281	183	59
105°	186	286	1146	1750	1647	197
115°	333	402	923	1827	2078	327
125°	456	519	837	1416	1662	406
135°	549	608	813	1147	1293	425
145°	637	681	803	976	1051	399
155°	718	742	797	876	904	331
165°	777	787	800	832	838	219
175°	806	807	802	813	811	77
180°	806	806	806	806	806	



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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°	0.5	1.0	2.1	2.3	2.6
90°	2.6	5.1	10.3	11.6	12.9
92.5°	23.2	96.3	172.2	62.8	49.0
95°	55.4	204.2	684.5	281.4	183.0
97.5°	91.8	228.7	1013.9	780.6	565.4
100°	118.6	243.4	1135.6	1143.7	929.4
102.5°	144.4	260.1	1159.3	1413.1	1209.9
105°	185.6	286.4	1145.9	1749.5	1647.4
107.5°	229.4	319.2	1082.0	1911.7	1949.0
110°	260.4	341.0	1032.5	1946.6	2067.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	365.9	986.1	1919.0	2097.5
115°	332.6	401.9	922.9	1827.1	2077.9
117.5°	371.2	440.3	881.4	1697.7	1983.0
120°	397.0	465.1	864.9	1610.1	1897.4
122.5°	421.8	486.8	851.5	1528.3	1800.5
125°	456.3	519.3	836.6	1415.8	1661.6
127.5°	485.7	548.7	827.8	1320.7	1532.6
130°	505.3	568.3	823.7	1262.5	1455.3
132.5°	523.9	583.9	819.6	1213.6	1388.3
135°	549.1	608.4	813.4	1146.7	1292.9
137.5°	577.5	631.4	810.3	1090.5	1215.3
140°	593.0	645.9	808.2	1053.0	1162.7
142.5°	610.5	659.4	806.2	1019.7	1116.3
145°	636.8	680.9	803.1	976.2	1050.6
147.5°	662.0	700.6	800.2	939.5	997.2
150°	680.6	712.1	799.2	917.6	964.2
152.5°	695.0	724.5	798.2	898.8	937.4
155°	718.0	741.9	796.6	875.9	903.6
157.5°	739.1	757.5	796.9	859.2	878.1
160°	751.5	767.9	797.9	849.8	863.6
162.5°	761.8	776.2	798.9	841.5	852.3
165°	777.3	787.4	800.5	831.6	837.9
167.5°	789.1	795.2	801.8	825.5	827.6
170°	795.3	800.4	801.8	822.4	822.4
172.5°	800.5	803.5	801.8	818.2	817.2
175°	805.6	806.9	801.8	813.3	810.8
177.5°	807.7	806.7	801.5	808.7	806.7
180°	805.6	805.6	805.6	805.6	805.6

(END OF REPORT)