

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: P518777

Luminaire Tested: **SQ4-BB-100U-125D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518777
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

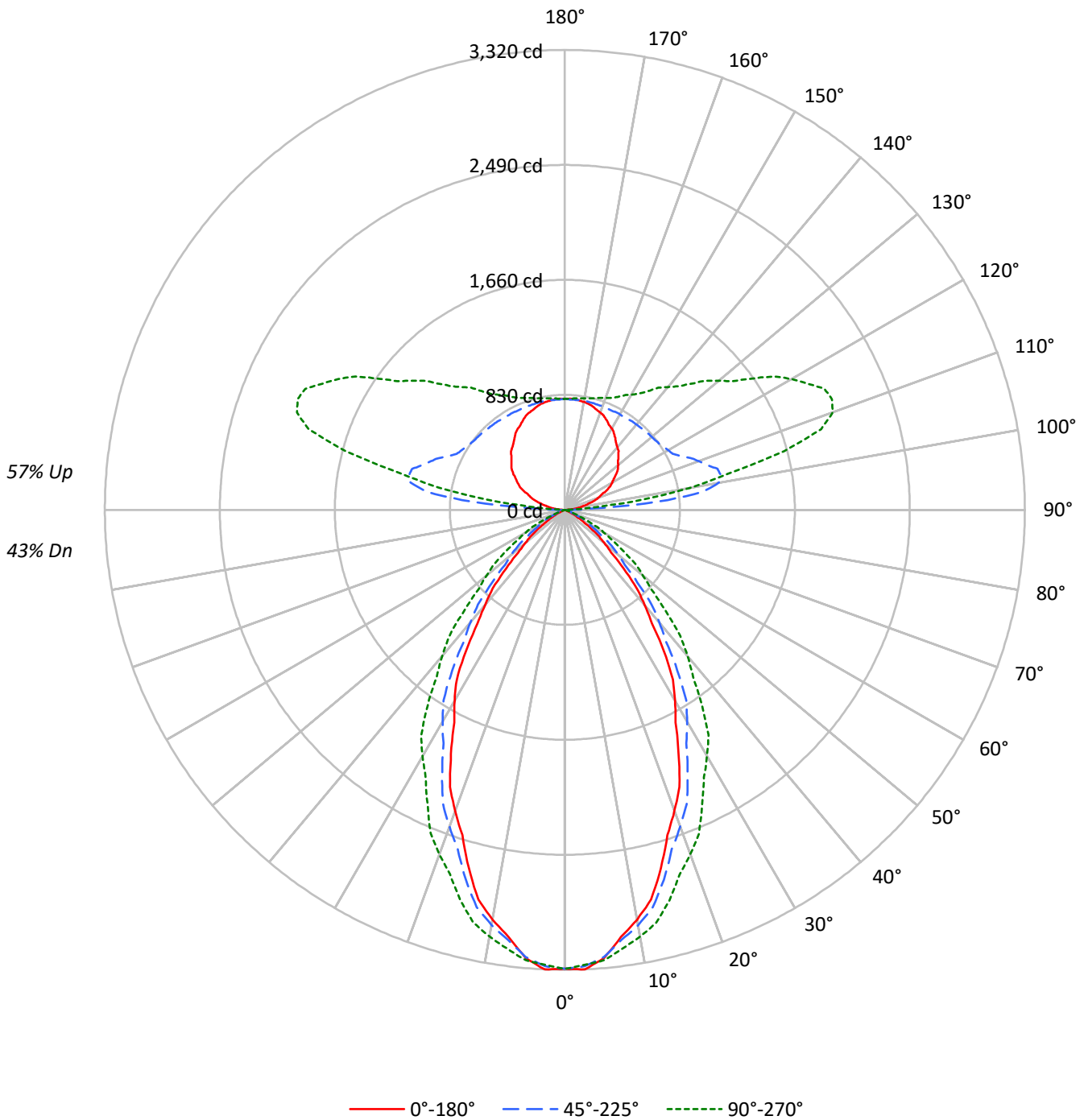
Lumens per Lamp: N/A
Luminaire Lumens: 9161.6 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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				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	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°	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	3.3
10°-20°	773.2	8.4
20°-30°	967.9	10.6
30°-40°	894.0	9.8
40°-50°	600.7	6.6
50°-60°	310.3	3.4
60°-70°	97.2	1.1
70°-80°	6.2	0.1
80°-90°	1.8	0.0
90°-100°	375.4	4.1
100°-110°	1036.3	11.3
110°-120°	1068.7	11.7
120°-130°	858.8	9.4
130°-140°	674.9	7.4
140°-150°	517.7	5.7
150°-160°	372.0	4.1
160°-170°	227.5	2.5
170°-180°	76.7	0.8
0°-30°	2043.4	22.3
0°-40°	2937.4	32.1
0°-60°	3848.5	42.0
0°-90°	3953.6	43.2
90°-120°	2480.4	27.1
90°-150°	4531.8	49.5
90°-180°	5208.0	56.8
0°-180°	9161.6	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°	3	5	10	12	13	4
95°	55	203	681	280	182	59
105°	185	285	1140	1741	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1409	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	



TEST NUMBER: P518777

CATALOG NUMBER: SQ4-BB-100U-125D-940-1D-UNV-STD-W-6

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°	0.5	1.0	2.1	2.3	2.6
90°	2.6	5.1	10.3	11.6	12.8
92.5°	23.1	95.8	171.3	62.5	48.7
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.7	562.5
100°	118.0	242.1	1129.9	1137.8	924.7
102.5°	143.6	258.8	1153.5	1405.9	1203.7
105°	184.7	285.0	1140.1	1740.6	1639.0
107.5°	228.3	317.6	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1

TEST NUMBER: P518777

CATALOG NUMBER: SQ4-BB-100U-125D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.8
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.1	877.0	1689.1	1973.0
120°	395.0	462.7	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.6	1653.1
127.5°	483.2	545.9	823.6	1313.9	1524.9
130°	502.7	565.4	819.5	1256.1	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.2	1140.9	1286.3
137.5°	574.6	628.2	806.2	1085.0	1209.1
140°	589.9	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.6	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.1	796.2	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.3
152.5°	691.5	720.9	794.1	894.2	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.8	854.8	873.6
160°	747.7	764.0	793.9	845.5	859.3
162.5°	757.9	772.2	794.9	837.2	848.0
165°	773.3	783.4	796.4	827.3	833.6
167.5°	785.1	791.2	797.7	821.3	823.4
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.5	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.5	801.5	801.5	801.5	801.5

(END OF REPORT)