

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: P518570

Luminaire Tested: **SQ4-BB-075U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518570
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

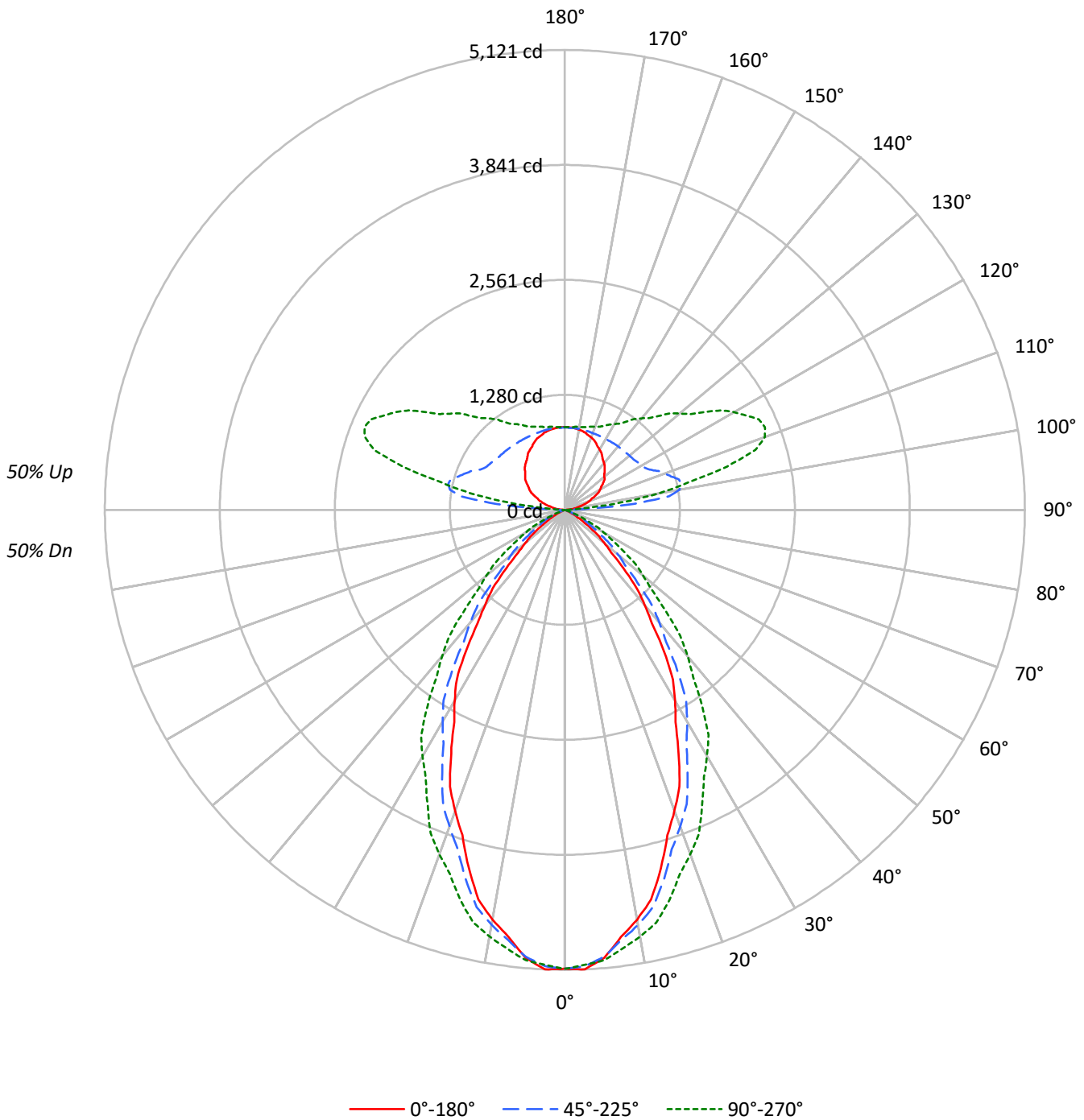
Lumens per Lamp: N/A
Luminaire Lumens: 12085.1 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 127.7
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16457	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	534	666
75°	87	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.3	3.9
10°-20°	1192.5	9.9
20°-30°	1492.9	12.4
30°-40°	1378.9	11.4
40°-50°	926.5	7.7
50°-60°	478.6	4.0
60°-70°	149.9	1.2
70°-80°	9.5	0.1
80°-90°	2.5	0.0
90°-100°	433.5	3.6
100°-110°	1192.6	9.9
110°-120°	1231.0	10.2
120°-130°	986.3	8.2
130°-140°	774.7	6.4
140°-150°	593.7	4.9
150°-160°	426.8	3.5
160°-170°	261.0	2.2
170°-180°	88.0	0.7
0°-30°	3151.6	26.1
0°-40°	4530.6	37.5
0°-60°	5935.7	49.1
0°-90°	6097.6	50.5
90°-120°	2857.1	23.6
90°-150°	5211.7	43.1
90°-180°	5988.0	49.5
0°-180°	12085.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5110	5110	5110	5110	5110	
5°	5008	4957	4996	5014	5033	464
15°	4131	4116	4262	4405	4499	1150
25°	2996	3020	3233	3454	3616	1374
35°	1923	1972	2185	2442	2665	1191
45°	922	978	1142	1364	1577	724
55°	331	387	499	641	789	309
65°	37	71	158	191	213	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	8	14	18	18	4
95°	64	237	767	328	209	68
105°	213	328	1314	2001	1868	225
115°	377	460	1054	2099	2382	372
125°	520	593	956	1618	1895	464
135°	628	697	929	1308	1480	484
145°	726	775	915	1115	1201	455
155°	821	848	909	1002	1031	377
165°	888	899	913	950	956	250
175°	919	921	915	927	925	87
180°	919	919	919	919	919	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5121.4	5073.1	5085.8	5085.5	5072.0
5°	5008.2	4957.4	4995.8	5013.6	5032.9
7.5°	4796.6	4756.9	4830.7	4886.0	4926.1
10°	4632.5	4598.6	4694.2	4769.7	4825.3
12.5°	4442.6	4416.5	4532.1	4635.5	4706.6
15°	4130.6	4116.1	4261.7	4404.7	4499.0
17.5°	3796.4	3796.0	3962.1	4139.7	4253.3
20°	3567.0	3574.3	3752.4	3948.3	4081.2
22.5°	3337.6	3354.6	3544.8	3749.0	3901.2
25°	2996.0	3020.2	3233.3	3454.5	3616.5
27.5°	2667.7	2703.0	2927.3	3157.2	3354.4
30°	2452.2	2493.3	2721.6	2963.5	3166.6
32.5°	2240.6	2289.4	2512.0	2767.9	2974.8
35°	1923.2	1971.5	2185.2	2442.4	2664.8
37.5°	1595.4	1642.8	1851.5	2104.6	2344.9
40°	1381.8	1435.0	1634.0	1879.3	2123.4
42.5°	1188.0	1241.2	1428.3	1669.4	1899.9
45°	922.0	977.6	1142.0	1364.4	1577.1
47.5°	701.5	762.0	906.2	1107.4	1301.2
50°	571.0	631.4	773.7	951.0	1137.1
52.5°	466.2	524.7	653.1	820.1	990.8
55°	331.2	386.8	499.3	641.1	788.6
57.5°	228.9	276.8	377.7	496.0	611.6
60°	165.6	211.5	306.5	402.6	496.9
62.5°	110.2	152.3	245.2	318.8	382.2
65°	37.1	70.9	158.2	190.8	212.6
67.5°	18.8	22.7	83.1	87.7	94.9
70°	14.8	14.8	39.6	42.2	49.4
72.5°	10.9	10.9	15.8	20.3	21.8
75°	4.9	4.9	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	1.5	2.7	3.5	3.5
90°	2.0	7.7	13.7	17.6	17.6
92.5°	27.0	115.3	199.9	76.7	63.0
95°	64.5	236.6	766.6	327.8	209.2
97.5°	105.2	262.4	1169.8	901.3	635.9
100°	134.9	278.3	1296.5	1308.6	1067.7
102.5°	163.1	297.3	1329.4	1623.5	1402.5
105°	213.2	327.9	1314.1	2001.4	1867.5
107.5°	260.9	365.6	1239.4	2186.4	2226.2
110°	295.3	390.9	1183.1	2232.4	2370.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.6	419.1	1126.8	2202.8	2412.3
115°	377.4	459.6	1054.0	2098.8	2381.8
117.5°	425.9	501.6	1007.9	1953.0	2273.1
120°	455.6	528.3	987.5	1843.8	2174.6
122.5°	482.2	554.9	973.5	1747.9	2061.9
125°	520.2	592.8	956.3	1617.7	1894.9
127.5°	556.2	625.4	944.9	1508.9	1752.2
130°	574.9	645.7	938.7	1444.3	1666.1
132.5°	596.8	667.6	934.0	1387.5	1587.9
135°	627.7	696.6	928.9	1308.3	1480.3
137.5°	656.7	720.5	924.6	1244.2	1386.1
140°	678.6	737.8	923.0	1201.7	1329.8
142.5°	697.3	752.0	919.9	1163.7	1273.4
145°	725.5	775.2	915.2	1114.7	1200.7
147.5°	755.6	798.4	912.8	1071.2	1140.1
150°	774.4	812.6	911.3	1047.4	1101.0
152.5°	791.6	826.8	909.7	1026.9	1071.2
155°	821.3	848.1	909.3	1001.9	1030.6
157.5°	842.8	864.6	909.3	981.3	1001.2
160°	858.5	875.7	909.3	970.3	985.6
162.5°	871.0	885.1	910.9	960.8	973.1
165°	887.8	899.3	913.2	950.5	956.3
167.5°	899.5	908.3	915.2	941.8	943.3
170°	907.4	913.1	915.2	938.7	938.7
172.5°	913.6	916.3	915.2	933.9	932.4
175°	919.1	921.0	915.2	926.9	925.0
177.5°	920.7	920.7	914.4	923.7	920.7
180°	919.1	919.1	919.1	919.1	919.1

(END OF REPORT)