

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: P518522

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518522
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

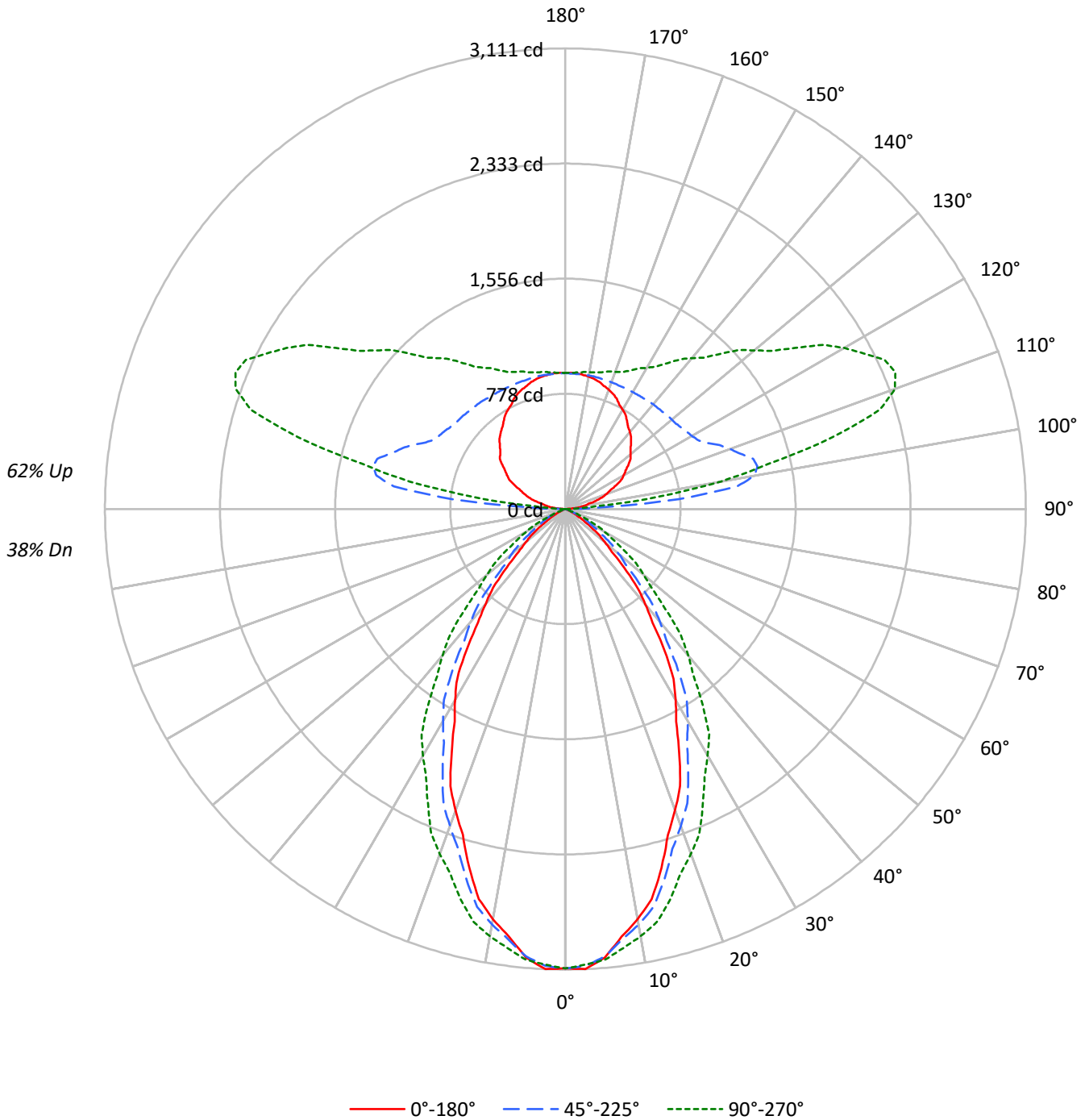
Lumens per Lamp: N/A
Luminaire Lumens: 9692.2 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 91
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



TEST NUMBER: P518522
CATALOG NUMBER: SQ4-BB-075U-075D-835-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518522

CATALOG NUMBER: SQ4-BB-075U-075D-835-1D-UNV-STD-W-8

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14157
10°	13181	13357	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4526	6250
50°	2489	3373	4957
55°	1618	2439	3852
60°	928	1718	2784
65°	246	1049	1409
70°	121	324	405
75°	53	27	0
80°	40	0	0
85°	0	0	0



TEST NUMBER: P518522

CATALOG NUMBER: SQ4-BB-075U-075D-835-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	2.9
10°-20°	724.3	7.5
20°-30°	906.8	9.4
30°-40°	837.6	8.6
40°-50°	562.8	5.8
50°-60°	290.7	3.0
60°-70°	91.1	0.9
70°-80°	5.7	0.1
80°-90°	2.4	0.0
90°-100°	433.5	4.5
100°-110°	1192.6	12.3
110°-120°	1231.0	12.7
120°-130°	986.3	10.2
130°-140°	774.7	8.0
140°-150°	593.7	6.1
150°-160°	426.8	4.4
160°-170°	261.0	2.7
170°-180°	88.0	0.9
0°-30°	1914.4	19.8
0°-40°	2751.9	28.4
0°-60°	3605.4	37.2
0°-90°	3704.7	38.2
90°-120°	2857.1	29.5
90°-150°	5211.7	53.8
90°-180°	5988.0	61.8
0°-180°	9692.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3042	3011	3034	3045	3057	282
15°	2509	2500	2589	2676	2733	699
25°	1820	1834	1964	2098	2197	834
35°	1168	1198	1327	1484	1619	724
45°	560	594	694	829	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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	



TEST NUMBER: P518522

CATALOG NUMBER: SQ4-BB-075U-075D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3103.6	3103.6	3103.6	3103.6	3103.6
2.5°	3110.8	3081.5	3089.2	3089.0	3080.8
5°	3042.0	3011.2	3034.5	3045.3	3057.1
7.5°	2913.5	2889.4	2934.2	2967.8	2992.2
10°	2813.8	2793.3	2851.4	2897.2	2930.9
12.5°	2698.5	2682.6	2752.9	2815.7	2858.9
15°	2509.0	2500.2	2588.6	2675.5	2732.7
17.5°	2306.0	2305.7	2406.6	2514.5	2583.5
20°	2166.7	2171.1	2279.3	2398.2	2479.0
22.5°	2027.3	2037.6	2153.2	2277.2	2369.7
25°	1819.8	1834.5	1964.0	2098.3	2196.7
27.5°	1620.4	1641.9	1778.1	1917.7	2037.5
30°	1489.5	1514.5	1653.2	1800.1	1923.4
32.5°	1361.0	1390.6	1525.8	1681.2	1806.9
35°	1168.2	1197.5	1327.3	1483.6	1618.6
37.5°	969.1	997.8	1124.6	1278.4	1424.3
40°	839.3	871.6	992.5	1141.5	1289.8
42.5°	721.6	753.9	867.6	1014.0	1154.1
45°	560.1	593.8	693.7	828.8	958.0
47.5°	426.1	462.8	550.5	672.6	790.4
50°	346.8	383.6	470.0	577.6	690.7
52.5°	283.2	318.7	396.7	498.2	601.8
55°	201.2	235.0	303.3	389.4	479.0
57.5°	139.0	168.1	229.4	301.3	371.5
60°	100.6	128.5	186.2	244.5	301.8
62.5°	67.0	92.5	148.9	193.7	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.5	53.3	57.7
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.4	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

TEST NUMBER: P518522

CATALOG NUMBER: SQ4-BB-075U-075D-835-1D-UNV-STD-W-8

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)