

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: P518518

Luminaire Tested: **SQ4-BB-075U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518518
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

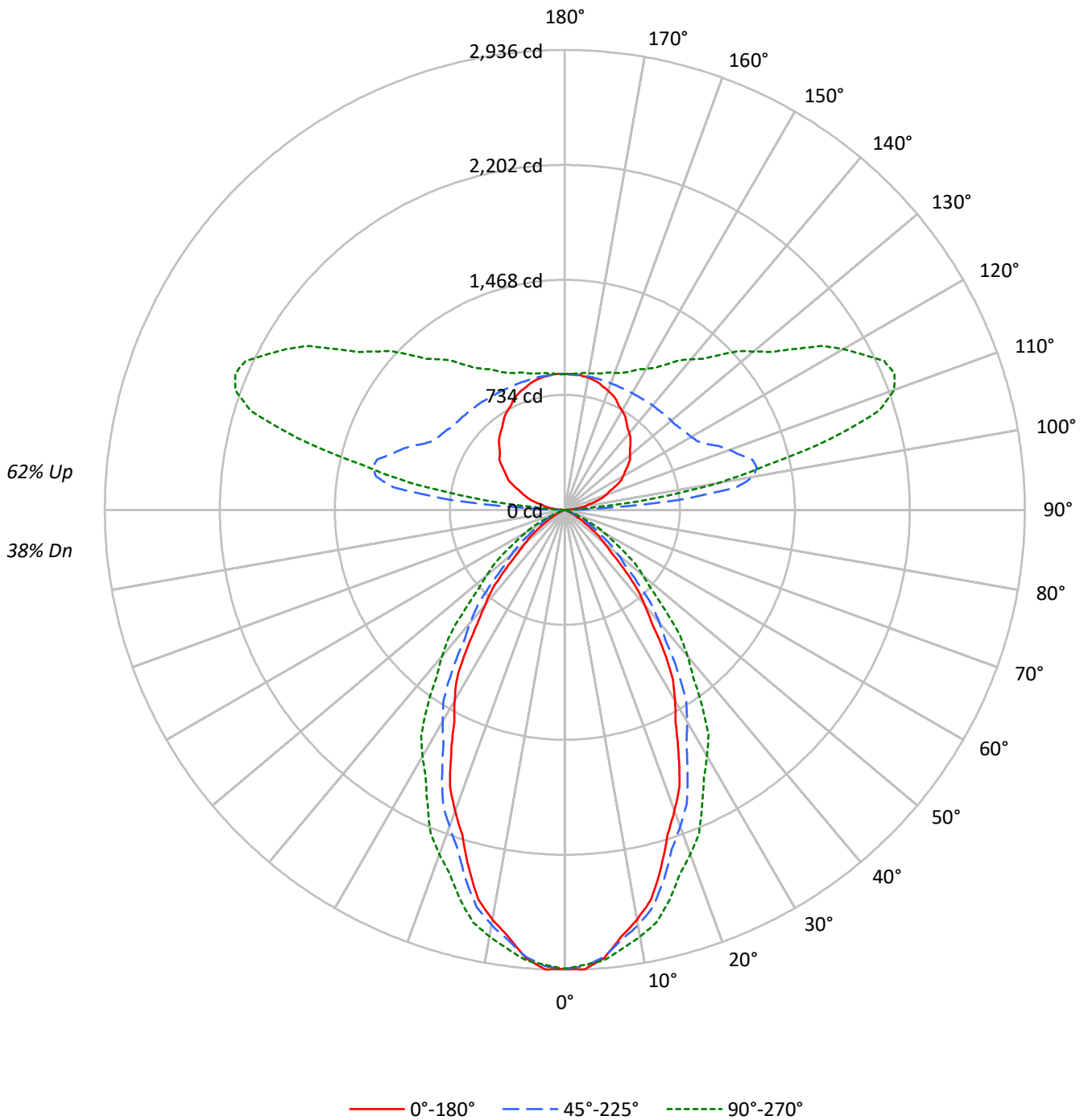
Lumens per Lamp: N/A
Luminaire Lumens: 9148.4 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



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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	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°	13514	13514	13514
5°	13297	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4678
55°	1527	2303	3636
60°	876	1621	2629
65°	233	990	1331
70°	115	306	382
75°	50	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.3	2.9
10°-20°	683.7	7.5
20°-30°	855.9	9.4
30°-40°	790.6	8.6
40°-50°	531.2	5.8
50°-60°	274.4	3.0
60°-70°	85.9	0.9
70°-80°	5.4	0.1
80°-90°	2.3	0.0
90°-100°	409.2	4.5
100°-110°	1125.7	12.3
110°-120°	1161.9	12.7
120°-130°	931.0	10.2
130°-140°	731.2	8.0
140°-150°	560.3	6.1
150°-160°	402.9	4.4
160°-170°	246.4	2.7
170°-180°	83.0	0.9
0°-30°	1806.9	19.8
0°-40°	2597.5	28.4
0°-60°	3403.1	37.2
0°-90°	3496.8	38.2
90°-120°	2696.8	29.5
90°-150°	4919.3	53.8
90°-180°	5652.0	61.8
0°-180°	9148.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2871	2842	2864	2874	2886	266
15°	2368	2360	2443	2525	2579	660
25°	1718	1732	1854	1981	2073	788
35°	1103	1130	1253	1400	1528	683
45°	529	560	655	782	904	415
55°	190	222	286	368	452	177
65°	21	41	91	109	122	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	7	13	17	17	4
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2929.5	2929.5	2929.5	2929.5	2929.5
2.5°	2936.3	2908.6	2915.9	2915.7	2907.9
5°	2871.4	2842.3	2864.3	2874.5	2885.5
7.5°	2750.0	2727.3	2769.6	2801.3	2824.3
10°	2655.9	2636.5	2691.4	2734.6	2766.5
12.5°	2547.1	2532.1	2598.4	2657.7	2698.5
15°	2368.2	2359.9	2443.4	2525.4	2579.4
17.5°	2176.6	2176.3	2271.6	2373.4	2438.5
20°	2045.1	2049.3	2151.4	2263.7	2339.9
22.5°	1913.6	1923.3	2032.3	2149.4	2236.7
25°	1717.7	1731.6	1853.8	1980.6	2073.4
27.5°	1529.5	1549.7	1678.3	1810.1	1923.2
30°	1405.9	1429.5	1560.4	1699.1	1815.5
32.5°	1284.6	1312.6	1440.2	1586.9	1705.5
35°	1102.6	1130.3	1252.9	1400.3	1527.8
37.5°	914.7	941.9	1061.5	1206.7	1344.4
40°	792.2	822.7	936.8	1077.5	1217.4
42.5°	681.1	711.6	818.9	957.1	1089.3
45°	528.6	560.5	654.8	782.3	904.2
47.5°	402.2	436.9	519.6	634.9	746.0
50°	327.4	362.0	443.6	545.2	651.9
52.5°	267.3	300.8	374.4	470.2	568.0
55°	189.9	221.8	286.3	367.6	452.1
57.5°	131.2	158.7	216.6	284.4	350.6
60°	95.0	121.3	175.7	230.8	284.9
62.5°	63.2	87.3	140.6	182.8	219.1
65°	21.3	40.7	90.7	109.4	121.9
67.5°	10.8	13.0	47.6	50.3	54.4
70°	8.5	8.5	22.7	24.2	28.3
72.5°	6.2	6.2	9.1	11.6	12.5
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	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	2.6	3.3	3.3
90°	1.8	7.3	12.9	16.6	16.6
92.5°	25.5	108.9	188.6	72.4	59.4
95°	60.9	223.3	723.6	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.8	1235.2	1007.8
102.5°	153.9	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.1	1762.7
107.5°	246.2	345.1	1169.9	2063.7	2101.3
110°	278.7	369.0	1116.7	2107.2	2237.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.3	395.6	1063.6	2079.2	2277.0
115°	356.2	433.8	994.9	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.4	2145.6
120°	430.1	498.7	932.1	1740.3	2052.5
122.5°	455.2	523.8	918.8	1649.9	1946.2
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	524.9	590.3	891.9	1424.3	1653.8
130°	542.7	609.4	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.8	1397.3
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.2
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.8	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.1	1076.1
150°	730.9	767.0	860.1	988.7	1039.2
152.5°	747.2	780.4	858.7	969.3	1011.1
155°	775.2	800.5	858.3	945.7	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.6	858.3	915.9	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.8	889.0	890.4
170°	856.5	861.9	863.8	886.0	886.0
172.5°	862.4	864.9	863.8	881.5	880.1
175°	867.5	869.3	863.8	874.9	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)