

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: P518713

Luminaire Tested: **SQ4-BB-100U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518713
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-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

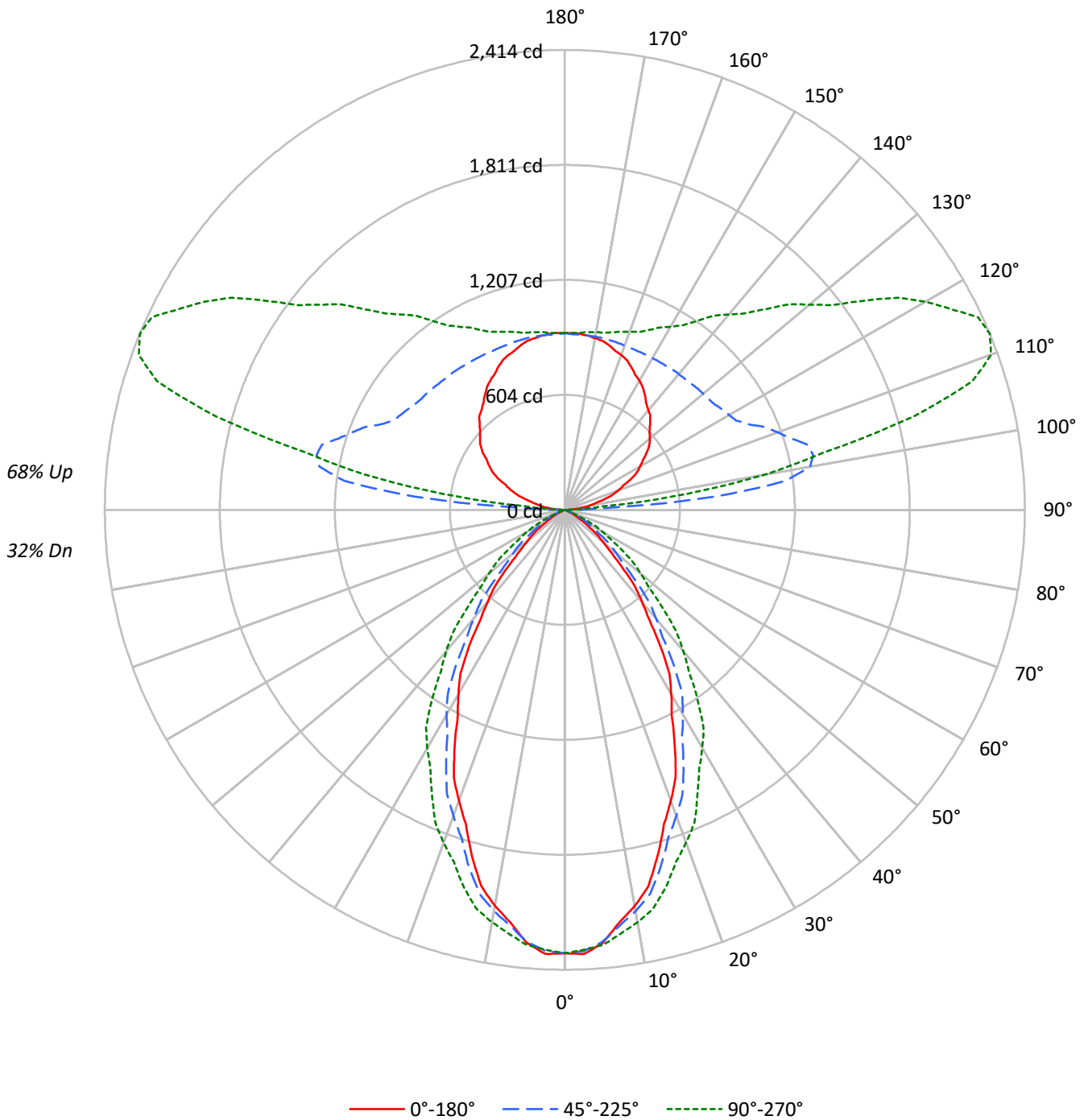
Lumens per Lamp: N/A
Luminaire Lumens: 8803.2 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12362	13051
20°	10637	11190	12169
25°	9263	9997	11181
30°	7934	8806	10246
35°	6578	7475	9116
40°	5054	5977	7767
45°	3653	4526	6250
50°	2489	3373	4957
55°	1618	2440	3852
60°	929	1717	2785
65°	246	1049	1409
70°	122	324	405
75°	55	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.4	2.4
10°-20°	543.3	6.2
20°-30°	680.1	7.7
30°-40°	628.2	7.1
40°-50°	422.1	4.8
50°-60°	218.0	2.5
60°-70°	68.3	0.8
70°-80°	4.3	0.0
80°-90°	2.0	0.0
90°-100°	434.2	4.9
100°-110°	1198.7	13.6
110°-120°	1236.3	14.0
120°-130°	993.5	11.3
130°-140°	780.8	8.9
140°-150°	598.8	6.8
150°-160°	430.4	4.9
160°-170°	263.2	3.0
170°-180°	88.7	1.0
0°-30°	1435.8	16.3
0°-40°	2064.0	23.4
0°-60°	2704.1	30.7
0°-90°	2778.7	31.6
90°-120°	2869.2	32.6
90°-150°	5242.2	59.5
90°-180°	6024.0	68.4
0°-180°	8803.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2282	2258	2276	2284	2293	212
15°	1882	1875	1941	2007	2050	524
25°	1365	1376	1473	1574	1648	626
35°	876	898	996	1113	1214	543
45°	420	445	520	622	718	330
55°	151	176	228	292	359	141
65°	17	32	72	87	97	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	6	12	13	15	5
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2327.7	2327.7	2327.7	2327.7	2327.7
2.5°	2333.1	2311.1	2316.9	2316.8	2310.6
5°	2281.5	2258.4	2275.9	2284.0	2292.8
7.5°	2185.1	2167.1	2200.7	2225.9	2244.1
10°	2110.4	2094.9	2138.5	2172.9	2198.2
12.5°	2023.9	2012.0	2064.6	2111.8	2144.1
15°	1881.8	1875.2	1941.4	2006.6	2049.6
17.5°	1729.5	1729.3	1805.0	1885.9	1937.6
20°	1625.0	1628.3	1709.5	1798.7	1859.2
22.5°	1520.5	1528.2	1614.9	1707.9	1777.3
25°	1364.9	1375.9	1473.0	1573.8	1647.5
27.5°	1215.3	1231.4	1333.6	1438.3	1528.2
30°	1117.1	1135.8	1239.9	1350.1	1442.6
32.5°	1020.7	1043.0	1144.4	1260.9	1355.2
35°	876.1	898.1	995.5	1112.7	1214.0
37.5°	726.8	748.4	843.5	958.8	1068.2
40°	629.5	653.7	744.4	856.1	967.3
42.5°	541.2	565.4	650.7	760.5	865.5
45°	420.0	445.4	520.3	621.6	718.5
47.5°	319.6	347.1	412.8	504.5	592.8
50°	260.1	287.7	352.5	433.2	518.0
52.5°	212.4	239.0	297.5	373.6	451.4
55°	150.9	176.2	227.5	292.1	359.2
57.5°	104.3	126.1	172.1	226.0	278.6
60°	75.5	96.4	139.6	183.4	226.4
62.5°	50.2	69.4	111.7	145.3	174.1
65°	16.9	32.3	72.1	86.9	96.8
67.5°	8.6	10.3	37.8	39.9	43.2
70°	6.8	6.8	18.0	19.2	22.5
72.5°	5.0	5.0	7.2	9.2	9.9
75°	2.3	2.3	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.2	2.4	2.7	3.0
90°	3.0	5.9	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)