

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: P518544

Luminaire Tested: **SQ4-BB-075U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518544
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-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

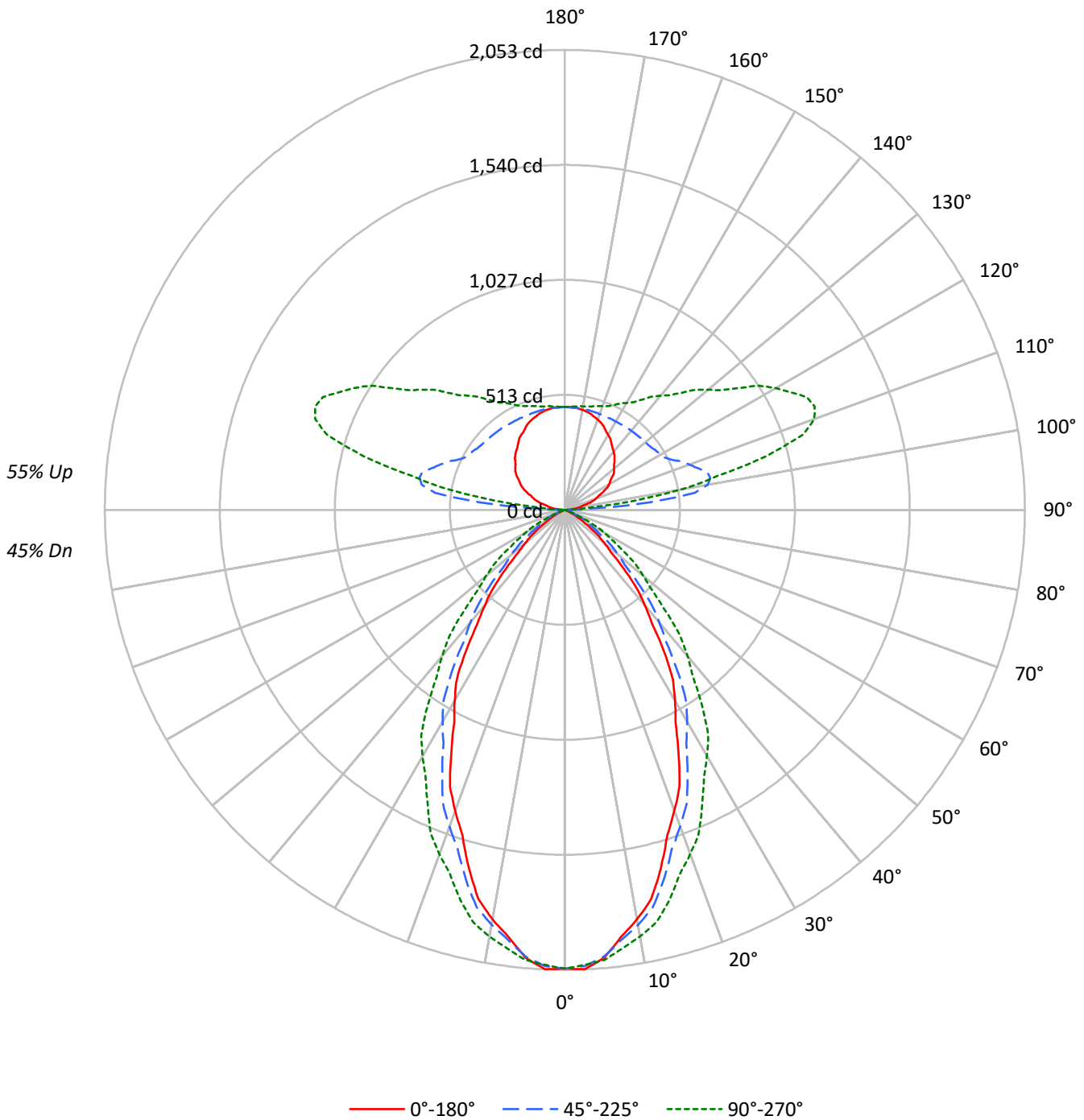
Lumens per Lamp: N/A
Luminaire Lumens: 5437.8 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18543	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7888	10249
45°	4821	5972	8248
50°	3285	4451	6541
55°	2136	3219	5083
60°	1225	2266	3674
65°	325	1384	1860
70°	159	429	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	3.4
10°-20°	477.9	8.8
20°-30°	598.3	11.0
30°-40°	552.6	10.2
40°-50°	371.3	6.8
50°-60°	191.8	3.5
60°-70°	60.1	1.1
70°-80°	3.8	0.1
80°-90°	1.2	0.0
90°-100°	216.8	4.0
100°-110°	596.3	11.0
110°-120°	615.5	11.3
120°-130°	493.1	9.1
130°-140°	387.3	7.1
140°-150°	296.8	5.5
150°-160°	213.4	3.9
160°-170°	130.5	2.4
170°-180°	44.0	0.8
0°-30°	1263.1	23.2
0°-40°	1815.8	33.4
0°-60°	2378.9	43.7
0°-90°	2444.0	44.9
90°-120°	1428.6	26.3
90°-150°	2605.9	47.9
90°-180°	2994.0	55.1
0°-180°	5437.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2007	1987	2002	2009	2017	186
15°	1656	1650	1708	1765	1803	461
25°	1201	1210	1296	1384	1449	551
35°	771	790	876	979	1068	477
45°	370	392	458	547	632	290
55°	133	155	200	257	316	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	32	118	383	164	105	34
105°	107	164	657	1001	934	112
115°	189	230	527	1049	1191	186
125°	260	296	478	809	948	232
135°	314	348	464	654	740	242
145°	363	388	458	557	600	227
155°	411	424	455	501	515	189
165°	444	450	457	475	478	125
175°	460	460	458	463	462	44
180°	460	460	460	460	460	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2047.8	2047.8	2047.8	2047.8	2047.8
2.5°	2052.6	2033.2	2038.3	2038.2	2032.8
5°	2007.2	1986.9	2002.2	2009.4	2017.1
7.5°	1922.4	1906.5	1936.1	1958.2	1974.3
10°	1856.6	1843.0	1881.4	1911.6	1933.9
12.5°	1780.5	1770.1	1816.4	1857.8	1886.3
15°	1655.5	1649.7	1708.0	1765.3	1803.1
17.5°	1521.5	1521.4	1587.9	1659.1	1704.6
20°	1429.6	1432.5	1503.9	1582.4	1635.7
22.5°	1337.7	1344.4	1420.7	1502.5	1563.6
25°	1200.8	1210.4	1295.9	1384.5	1449.4
27.5°	1069.2	1083.3	1173.2	1265.4	1344.4
30°	982.8	999.3	1090.8	1187.7	1269.1
32.5°	898.0	917.6	1006.8	1109.3	1192.2
35°	770.8	790.2	875.8	978.9	1068.0
37.5°	639.4	658.4	742.0	843.5	939.8
40°	553.8	575.1	654.9	753.2	851.0
42.5°	476.1	497.5	572.4	669.1	761.5
45°	369.5	391.8	457.7	546.8	632.1
47.5°	281.2	305.4	363.2	443.8	521.5
50°	228.9	253.1	310.1	381.1	455.7
52.5°	186.8	210.3	261.7	328.7	397.1
55°	132.8	155.0	200.1	256.9	316.0
57.5°	91.7	110.9	151.4	198.8	245.1
60°	66.4	84.8	122.8	161.4	199.1
62.5°	44.2	61.0	98.3	127.8	153.2
65°	14.9	28.4	63.4	76.5	85.2
67.5°	7.5	9.1	33.3	35.1	38.0
70°	5.9	5.9	15.9	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.2	0.8	1.4	1.8	1.8
90°	1.0	3.8	6.8	8.8	8.8
92.5°	13.5	57.7	99.9	38.4	31.5
95°	32.3	118.3	383.3	163.9	104.6
97.5°	52.6	131.2	584.9	450.7	318.0
100°	67.5	139.2	648.3	654.3	533.9
102.5°	81.5	148.7	664.7	811.8	701.3
105°	106.6	163.9	657.1	1000.7	933.8
107.5°	130.4	182.8	619.7	1093.2	1113.1
110°	147.6	195.4	591.5	1116.2	1185.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.3	209.6	563.4	1101.4	1206.2
115°	188.7	229.8	527.0	1049.4	1190.9
117.5°	213.0	250.8	503.9	976.5	1136.6
120°	227.8	264.1	493.8	921.9	1087.3
122.5°	241.1	277.4	486.7	874.0	1031.0
125°	260.1	296.4	478.1	808.8	947.5
127.5°	278.1	312.7	472.5	754.5	876.1
130°	287.5	322.8	469.3	722.2	833.1
132.5°	298.4	333.8	467.0	693.8	793.9
135°	313.9	348.3	464.4	654.1	740.2
137.5°	328.3	360.3	462.3	622.1	693.0
140°	339.3	368.9	461.5	600.8	664.9
142.5°	348.7	376.0	459.9	581.8	636.7
145°	362.8	387.6	457.6	557.3	600.3
147.5°	377.8	399.2	456.4	535.6	570.0
150°	387.2	406.3	455.6	523.7	550.5
152.5°	395.8	413.4	454.9	513.4	535.6
155°	410.7	424.0	454.7	500.9	515.3
157.5°	421.4	432.3	454.7	490.7	500.6
160°	429.2	437.8	454.7	485.1	492.8
162.5°	435.5	442.6	455.4	480.4	486.5
165°	443.9	449.6	456.6	475.3	478.1
167.5°	449.8	454.2	457.6	470.9	471.7
170°	453.7	456.6	457.6	469.3	469.3
172.5°	456.8	458.2	457.6	467.0	466.2
175°	459.5	460.5	457.6	463.4	462.5
177.5°	460.3	460.3	457.2	461.9	460.3
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)