

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: P518425

Luminaire Tested: **SQ4-BB-050U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518425
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

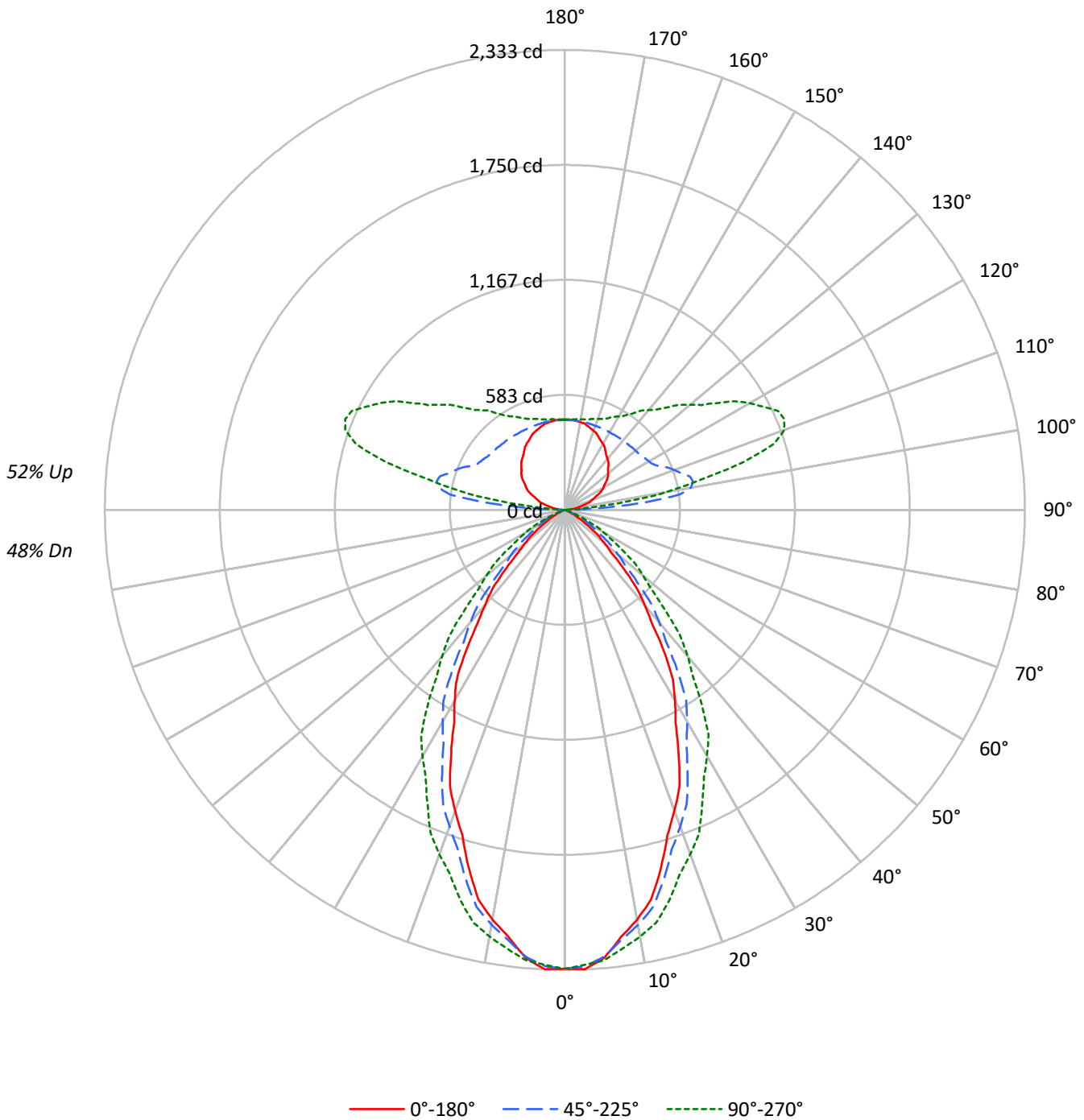
Lumens per Lamp: N/A
Luminaire Lumens: 5766.4 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20

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	3.7
10°-20°	543.3	9.4
20°-30°	680.1	11.8
30°-40°	628.2	10.9
40°-50°	422.1	7.3
50°-60°	218.0	3.8
60°-70°	68.3	1.2
70°-80°	4.3	0.1
80°-90°	1.8	0.0
90°-100°	219.7	3.8
100°-110°	596.8	10.3
110°-120°	613.6	10.6
120°-130°	490.6	8.5
130°-140°	385.5	6.7
140°-150°	295.6	5.1
150°-160°	212.5	3.7
160°-170°	130.0	2.3
170°-180°	43.8	0.8
0°-30°	1435.8	24.9
0°-40°	2064.0	35.8
0°-60°	2704.1	46.9
0°-90°	2778.5	48.2
90°-120°	1430.0	24.8
90°-150°	2601.6	45.1
90°-180°	2988.0	51.8
0°-180°	5766.4	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°	2	6	10	13	13	2
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	461	43
180°	458	458	458	458	458	



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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°	0.3	1.2	2.1	2.6	2.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)