

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: P518318

Luminaire Tested: **SQ4-BB-025U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518318
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

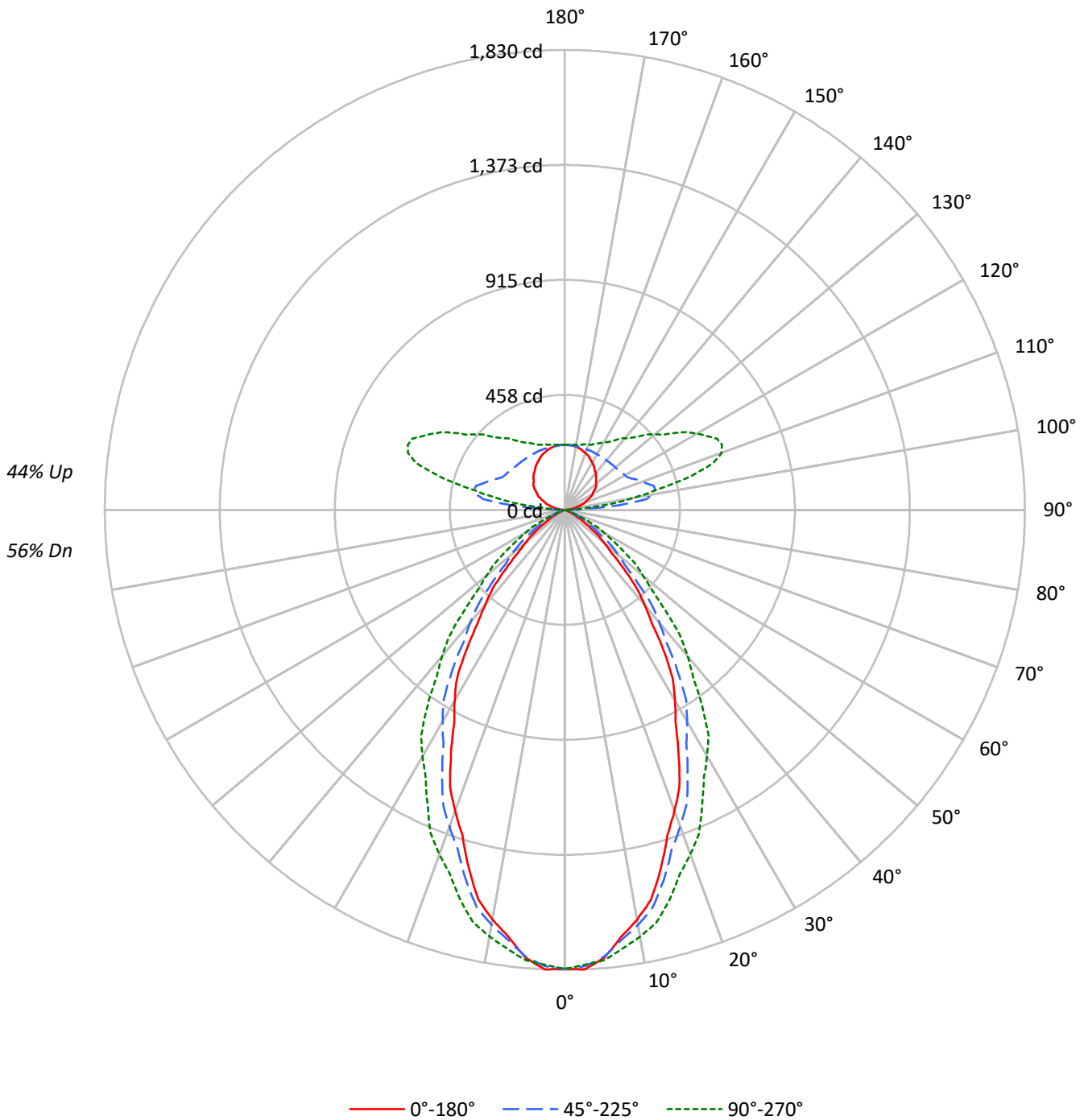
Lumens per Lamp: N/A
Luminaire Lumens: 3858.2 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.7
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56				
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52				
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47				
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42				
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38				
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35				
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32				
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29				
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27				
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25				
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8424	8424	8424
5°	8288	8267	8329
10°	7755	7858	8078
15°	7050	7274	7679
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3871	4398	5363
40°	2974	3516	4569
45°	2150	2662	3677
50°	1465	1984	2917
55°	952	1435	2266
60°	546	1010	1639
65°	145	617	830
70°	71	190	239
75°	32	16	0
80°	24	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	4.3
10°-20°	426.2	11.0
20°-30°	533.5	13.8
30°-40°	492.8	12.8
40°-50°	331.1	8.6
50°-60°	171.0	4.4
60°-70°	53.6	1.4
70°-80°	3.4	0.1
80°-90°	1.5	0.0
90°-100°	126.2	3.3
100°-110°	331.8	8.6
110°-120°	344.1	8.9
120°-130°	276.0	7.2
130°-140°	216.6	5.6
140°-150°	166.2	4.3
150°-160°	119.7	3.1
160°-170°	73.2	1.9
170°-180°	24.7	0.6
0°-30°	1126.3	29.2
0°-40°	1619.1	42.0
0°-60°	2121.2	55.0
0°-90°	2179.6	56.5
90°-120°	802.1	20.8
90°-150°	1460.9	37.9
90°-180°	1679.0	43.5
0°-180°	3858.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1790	1772	1785	1792	1799	166
15°	1476	1471	1523	1574	1608	411
25°	1071	1079	1156	1234	1292	491
35°	687	704	781	873	952	426
45°	330	349	408	488	564	259
55°	118	138	178	229	282	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	5	13	7	7	1
95°	17	65	218	112	76	19
105°	60	91	367	557	520	63
115°	106	129	294	586	669	105
125°	148	166	267	452	533	131
135°	176	194	259	365	413	136
145°	204	217	256	311	335	128
155°	231	237	256	281	289	106
165°	249	252	256	266	269	70
175°	259	259	257	261	261	25
180°	259	259	259	259	259	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1826.0	1826.0	1826.0	1826.0	1826.0
2.5°	1830.2	1812.9	1817.5	1817.4	1812.5
5°	1789.7	1771.6	1785.3	1791.7	1798.6
7.5°	1714.1	1700.0	1726.3	1746.1	1760.4
10°	1655.5	1643.4	1677.5	1704.5	1724.4
12.5°	1587.6	1578.3	1619.6	1656.6	1682.0
15°	1476.1	1471.0	1523.0	1574.1	1607.8
17.5°	1356.7	1356.5	1415.9	1479.4	1520.0
20°	1274.7	1277.3	1341.0	1411.0	1458.5
22.5°	1192.7	1198.8	1266.8	1339.7	1394.2
25°	1070.7	1079.3	1155.5	1234.5	1292.4
27.5°	953.3	966.0	1046.1	1128.3	1198.8
30°	876.3	891.0	972.6	1059.1	1131.6
32.5°	800.7	818.1	897.7	989.1	1063.1
35°	687.3	704.5	780.9	872.8	952.3
37.5°	570.1	587.1	661.7	752.1	838.0
40°	493.8	512.8	583.9	671.6	758.8
42.5°	424.6	443.6	510.4	596.6	679.0
45°	329.5	349.4	408.1	487.6	563.6
47.5°	250.7	272.3	323.8	395.7	465.0
50°	204.1	225.7	276.5	339.8	406.4
52.5°	166.6	187.5	233.4	293.1	354.1
55°	118.4	138.2	178.4	229.1	281.8
57.5°	81.8	98.9	135.0	177.3	218.5
60°	59.2	75.6	109.5	143.9	177.6
62.5°	39.4	54.4	87.6	113.9	136.6
65°	13.3	25.3	56.5	68.2	76.0
67.5°	6.7	8.1	29.7	31.3	33.9
70°	5.3	5.3	14.1	15.1	17.7
72.5°	3.9	3.9	5.7	7.3	7.8
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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	1.0	2.7	1.3	1.3
90°	1.7	4.9	13.3	6.6	6.6
92.5°	7.0	33.6	74.4	32.9	21.2
95°	16.6	65.3	217.5	112.1	76.4
97.5°	28.9	71.7	325.4	258.8	190.6
100°	38.2	77.1	358.6	363.4	282.2
102.5°	46.2	82.5	367.9	452.6	383.1
105°	59.8	90.6	366.9	556.9	519.6
107.5°	73.7	102.3	346.0	611.1	620.2
110°	83.0	109.0	328.7	625.1	664.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.3	117.0	312.8	616.3	676.0
115°	106.2	129.0	293.8	586.2	669.0
117.5°	119.9	140.6	280.9	544.6	636.5
120°	127.8	147.3	275.6	516.7	605.9
122.5°	135.8	155.3	271.6	488.7	576.7
125°	147.7	165.6	267.3	451.7	532.9
127.5°	157.4	175.6	263.6	421.9	490.4
130°	162.7	182.2	262.3	403.2	466.5
132.5°	168.0	187.5	261.0	387.1	443.9
135°	176.0	193.8	259.0	364.7	413.4
137.5°	184.3	201.8	258.6	347.9	387.8
140°	190.9	207.1	257.3	334.5	371.9
142.5°	196.2	211.2	257.3	325.1	357.3
145°	204.2	217.2	255.7	311.0	335.3
147.5°	212.2	224.8	255.7	299.3	319.4
150°	217.5	228.8	255.7	292.5	308.8
152.5°	222.8	231.5	255.7	287.1	299.5
155°	230.8	237.2	255.7	280.7	288.9
157.5°	236.7	242.9	255.7	275.0	280.9
160°	240.7	245.6	255.7	272.3	275.6
162.5°	244.7	248.3	255.7	269.7	272.9
165°	249.0	252.3	255.7	265.7	268.9
167.5°	253.0	254.6	257.3	264.0	265.3
170°	255.7	257.3	257.3	264.0	264.0
172.5°	257.0	257.3	257.3	262.6	261.3
175°	259.0	259.0	257.3	260.6	260.6
177.5°	259.0	259.0	257.6	260.3	259.0
180°	259.0	259.0	259.0	259.0	259.0

(END OF REPORT)