

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: P518366

Luminaire Tested: **SQ4-BB-025U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518366
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-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

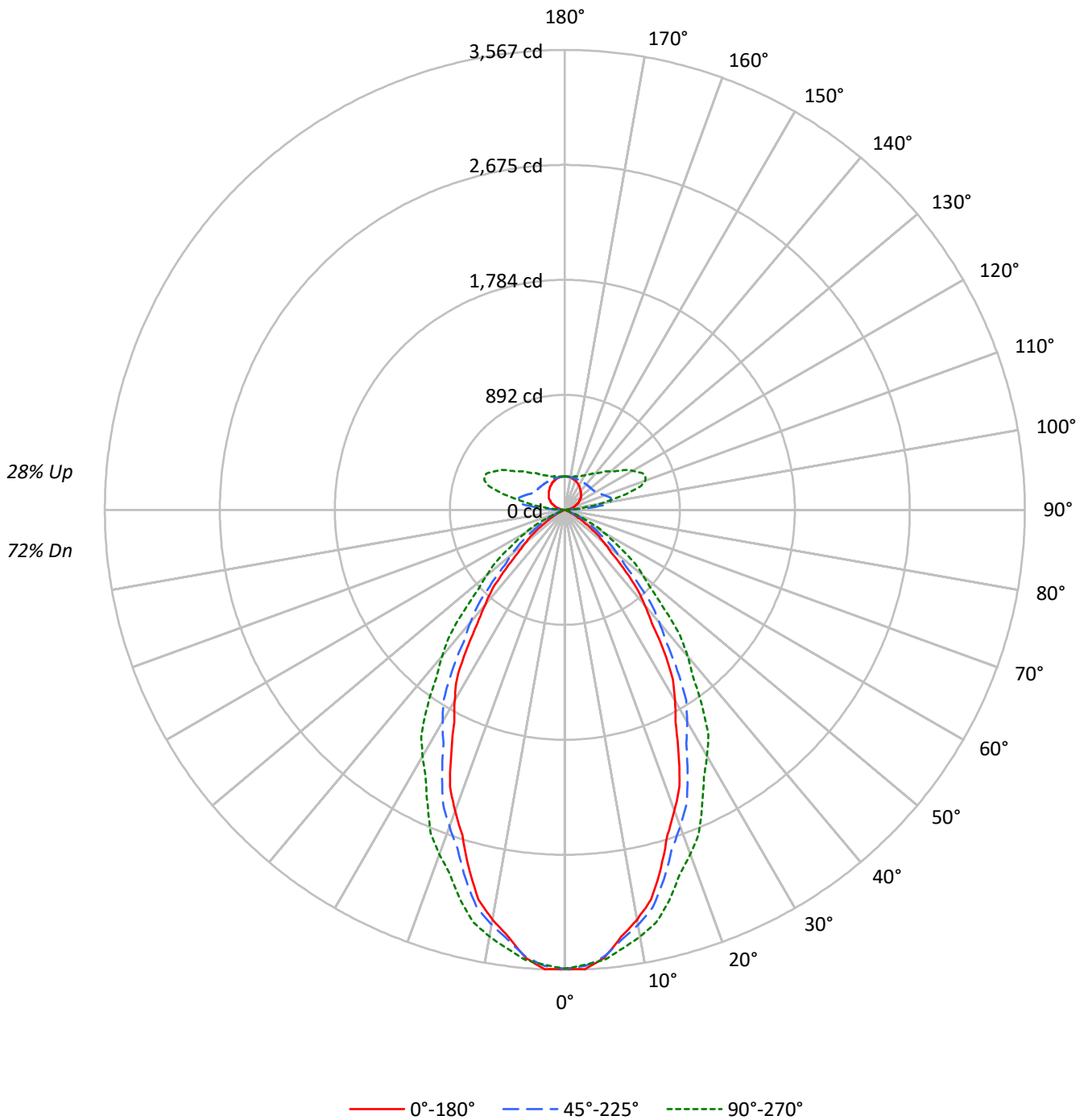
Lumens per Lamp: N/A
Luminaire Lumens: 5925.2 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 82.2
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16417	16417	16417
5°	16152	16113	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9098	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1065	1970	3193
65°	282	1203	1617
70°	139	371	464
75°	61	30	0
80°	45	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.8	5.5
10°-20°	830.5	14.0
20°-30°	1039.7	17.5
30°-40°	960.4	16.2
40°-50°	645.3	10.9
50°-60°	333.3	5.6
60°-70°	104.4	1.8
70°-80°	6.6	0.1
80°-90°	1.5	0.0
90°-100°	126.2	2.1
100°-110°	331.8	5.6
110°-120°	344.1	5.8
120°-130°	276.0	4.7
130°-140°	216.6	3.7
140°-150°	166.2	2.8
150°-160°	119.7	2.0
160°-170°	73.2	1.2
170°-180°	24.7	0.4
0°-30°	2195.0	37.0
0°-40°	3155.4	53.3
0°-60°	4134.1	69.8
0°-90°	4246.6	71.7
90°-120°	802.1	13.5
90°-150°	1460.9	24.7
90°-180°	1679.0	28.3
0°-180°	5925.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3559	3559	3559	3559	3559	
5°	3488	3453	3480	3492	3505	323
15°	2877	2867	2968	3068	3133	801
25°	2087	2104	2252	2406	2519	957
35°	1339	1373	1522	1701	1856	830
45°	642	681	795	950	1098	504
55°	231	269	348	446	549	215
65°	26	49	110	133	148	44
75°	3	3	2	0	0	5
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°	3558.7	3558.7	3558.7	3558.7	3558.7
2.5°	3566.9	3533.3	3542.1	3541.9	3532.5
5°	3488.1	3452.7	3479.5	3491.8	3505.3
7.5°	3340.7	3313.1	3364.5	3403.0	3430.9
10°	3226.4	3202.8	3269.4	3322.0	3360.7
12.5°	3094.2	3076.0	3156.5	3228.5	3278.0
15°	2876.9	2866.8	2968.1	3067.8	3133.4
17.5°	2644.1	2643.8	2759.5	2883.2	2962.3
20°	2484.4	2489.4	2613.5	2749.9	2842.5
22.5°	2324.6	2336.4	2468.9	2611.1	2717.1
25°	2086.6	2103.5	2251.9	2406.0	2518.8
27.5°	1858.0	1882.6	2038.8	2198.9	2336.3
30°	1707.9	1736.5	1895.5	2064.0	2205.4
32.5°	1560.5	1594.5	1749.5	1927.7	2071.8
35°	1339.4	1373.1	1521.9	1701.1	1855.9
37.5°	1111.2	1144.2	1289.5	1465.8	1633.2
40°	962.4	999.4	1138.0	1308.9	1478.9
42.5°	827.4	864.5	994.8	1162.7	1323.3
45°	642.2	680.9	795.4	950.3	1098.4
47.5°	488.6	530.7	631.2	771.3	906.3
50°	397.7	439.8	538.9	662.3	792.0
52.5°	324.7	365.4	454.9	571.2	690.0
55°	230.7	269.4	347.8	446.5	549.2
57.5°	159.4	192.8	263.1	345.5	425.9
60°	115.4	147.3	213.5	280.4	346.1
62.5°	76.8	106.1	170.8	222.1	266.2
65°	25.8	49.4	110.2	132.9	148.1
67.5°	13.1	15.8	57.8	61.1	66.1
70°	10.3	10.3	27.5	29.4	34.4
72.5°	7.6	7.6	11.0	14.1	15.2
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	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°	0.3	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)