

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: P518379

Luminaire Tested: **SQ4-BB-025U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518379
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-125D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

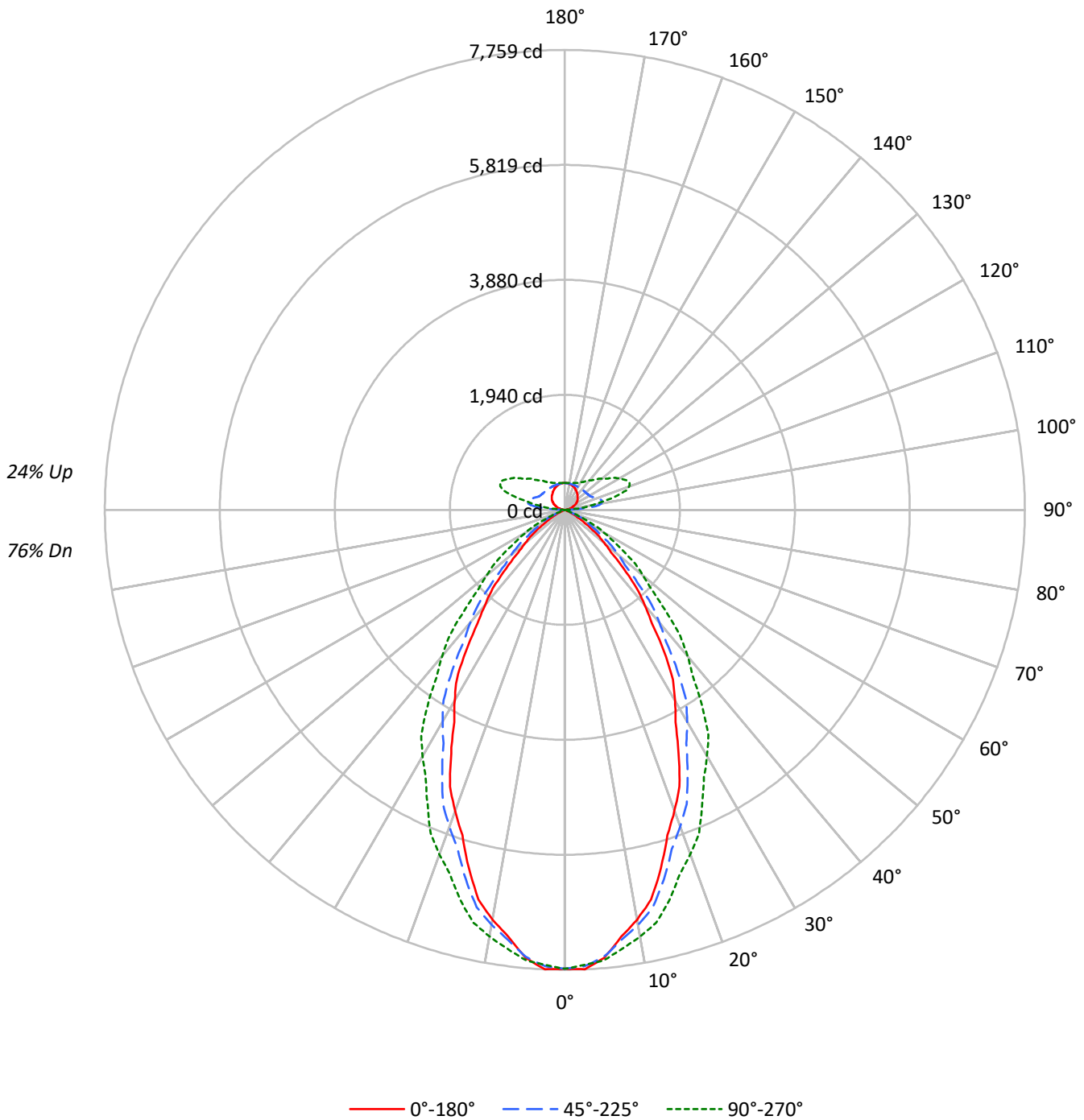
Lumens per Lamp: N/A
Luminaire Lumens: 12164.2 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 156.2
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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	80	80	80	76	
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	75	74	73	69	
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	69	67	66	63	
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	64	62	59	57	
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	59	56	54	51	
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	55	52	49	46	
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	51	47	45	42	
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	48	44	41	39	
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	44	41	38	36	
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	42	38	35	33	
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	39	35	32	31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23540
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4056	6406
60°	1543	2856	4630
65°	409	1744	2344
70°	202	539	673
75°	89	44	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	706.5	5.8
10°-20°	1806.7	14.9
20°-30°	2261.8	18.6
30°-40°	2089.2	17.2
40°-50°	1403.8	11.5
50°-60°	725.1	6.0
60°-70°	227.1	1.9
70°-80°	14.4	0.1
80°-90°	2.7	0.0
90°-100°	220.1	1.8
100°-110°	578.6	4.8
110°-120°	600.0	4.9
120°-130°	481.3	4.0
130°-140°	377.6	3.1
140°-150°	289.8	2.4
150°-160°	208.7	1.7
160°-170°	127.7	1.0
170°-180°	43.1	0.4
0°-30°	4775.0	39.3
0°-40°	6864.2	56.4
0°-60°	8993.1	73.9
0°-90°	9237.3	75.9
90°-120°	1398.7	11.5
90°-150°	2547.3	20.9
90°-180°	2927.0	24.1
0°-180°	12164.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7741	7741	7741	7741	7741	
5°	7588	7511	7569	7596	7625	703
15°	6258	6236	6457	6674	6816	1743
25°	4539	4576	4899	5234	5479	2081
35°	2914	2987	3311	3700	4037	1805
45°	1397	1481	1730	2067	2390	1097
55°	502	586	756	971	1195	468
65°	56	107	240	289	322	95
75°	8	8	4	0	0	11
85°	0	0	0	0	0	1
90°	3	9	23	12	12	3
95°	29	114	379	195	133	32
105°	104	158	640	971	906	110
115°	185	225	512	1022	1167	183
125°	258	289	466	788	929	229
135°	307	338	452	636	721	237
145°	356	379	446	542	585	223
155°	402	414	446	490	504	185
165°	434	440	446	463	469	123
175°	452	452	449	454	454	43
180°	452	452	452	452	452	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7741.4	7741.4	7741.4	7741.4	7741.4
2.5°	7759.4	7686.2	7705.5	7705.0	7684.5
5°	7587.9	7511.0	7569.1	7596.0	7625.3
7.5°	7267.3	7207.2	7319.0	7402.7	7463.5
10°	7018.6	6967.3	7112.2	7226.5	7310.7
12.5°	6731.0	6691.4	6866.5	7023.3	7131.0
15°	6258.3	6236.3	6456.8	6673.5	6816.4
17.5°	5752.0	5751.2	6002.9	6272.0	6444.1
20°	5404.4	5415.4	5685.3	5982.0	6183.4
22.5°	5056.8	5082.5	5370.7	5680.0	5910.8
25°	4539.2	4575.9	4898.8	5233.9	5479.3
27.5°	4041.9	4095.3	4435.1	4783.5	5082.3
30°	3715.3	3777.5	4123.5	4490.1	4797.7
32.5°	3394.7	3468.7	3805.9	4193.6	4507.0
35°	2913.8	2987.0	3310.8	3700.5	4037.4
37.5°	2417.2	2489.0	2805.2	3188.7	3552.7
40°	2093.6	2174.2	2475.6	2847.3	3217.2
42.5°	1800.0	1880.5	2164.0	2529.2	2878.6
45°	1397.0	1481.2	1730.3	2067.2	2389.5
47.5°	1062.9	1154.5	1373.0	1677.8	1971.5
50°	865.2	956.7	1172.3	1440.8	1722.8
52.5°	706.4	795.0	989.5	1242.6	1501.1
55°	501.9	586.1	756.5	971.4	1194.7
57.5°	346.8	419.3	572.3	751.5	926.6
60°	250.9	320.5	464.4	610.0	752.8
62.5°	167.0	230.8	371.5	483.1	579.0
65°	56.2	107.4	239.7	289.1	322.1
67.5°	28.5	34.3	125.8	132.8	143.8
70°	22.5	22.5	59.9	63.9	74.9
72.5°	16.5	16.5	24.0	30.8	33.0
75°	7.5	7.5	3.7	0.0	0.0
77.5°	3.7	3.7	3.0	0.0	0.0
80°	3.7	3.7	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	4.6	2.3	2.3
90°	2.9	8.6	23.2	11.6	11.6
92.5°	12.2	58.6	129.7	57.4	37.1
95°	28.9	113.9	379.2	195.4	133.2
97.5°	50.4	125.1	567.4	451.2	332.3
100°	66.6	134.5	625.3	633.6	492.1
102.5°	80.5	143.9	641.5	789.2	668.1
105°	104.2	158.0	639.7	971.1	906.0
107.5°	128.5	178.3	603.3	1065.6	1081.5
110°	144.7	190.0	573.2	1090.0	1157.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	160.9	204.0	545.4	1074.6	1178.7
115°	185.3	224.9	512.4	1022.2	1166.6
117.5°	209.0	245.2	489.8	949.6	1109.8
120°	222.9	256.9	480.5	900.9	1056.6
122.5°	236.8	270.8	473.6	852.2	1005.6
125°	257.6	288.8	466.0	787.7	929.2
127.5°	274.4	306.1	459.7	735.7	855.1
130°	283.7	317.6	457.4	703.0	813.4
132.5°	292.9	326.9	455.0	675.0	774.0
135°	306.8	338.0	451.6	635.9	720.8
137.5°	321.3	351.9	451.0	606.6	676.2
140°	332.9	361.2	448.7	583.3	648.4
142.5°	342.2	368.2	448.7	566.9	622.9
145°	356.0	378.7	445.8	542.3	584.7
147.5°	369.9	392.0	445.8	521.8	556.9
150°	379.2	399.0	445.8	510.1	538.4
152.5°	388.5	403.8	445.8	500.7	522.2
155°	402.4	413.7	445.8	489.5	503.7
157.5°	412.8	423.5	445.8	479.6	489.8
160°	419.7	428.2	445.8	474.9	480.5
162.5°	426.7	432.9	445.8	470.2	475.9
165°	434.2	439.9	445.8	463.3	468.9
167.5°	441.2	444.0	448.7	460.3	462.6
170°	445.8	448.6	448.7	460.3	460.3
172.5°	448.1	448.7	448.7	457.9	455.6
175°	451.6	451.6	448.7	454.5	454.5
177.5°	451.6	451.6	449.3	453.8	451.6
180°	451.6	451.6	451.6	451.6	451.6

(END OF REPORT)