

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: P518307

Luminaire Tested: **SQ4-BB-025U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518307
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-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

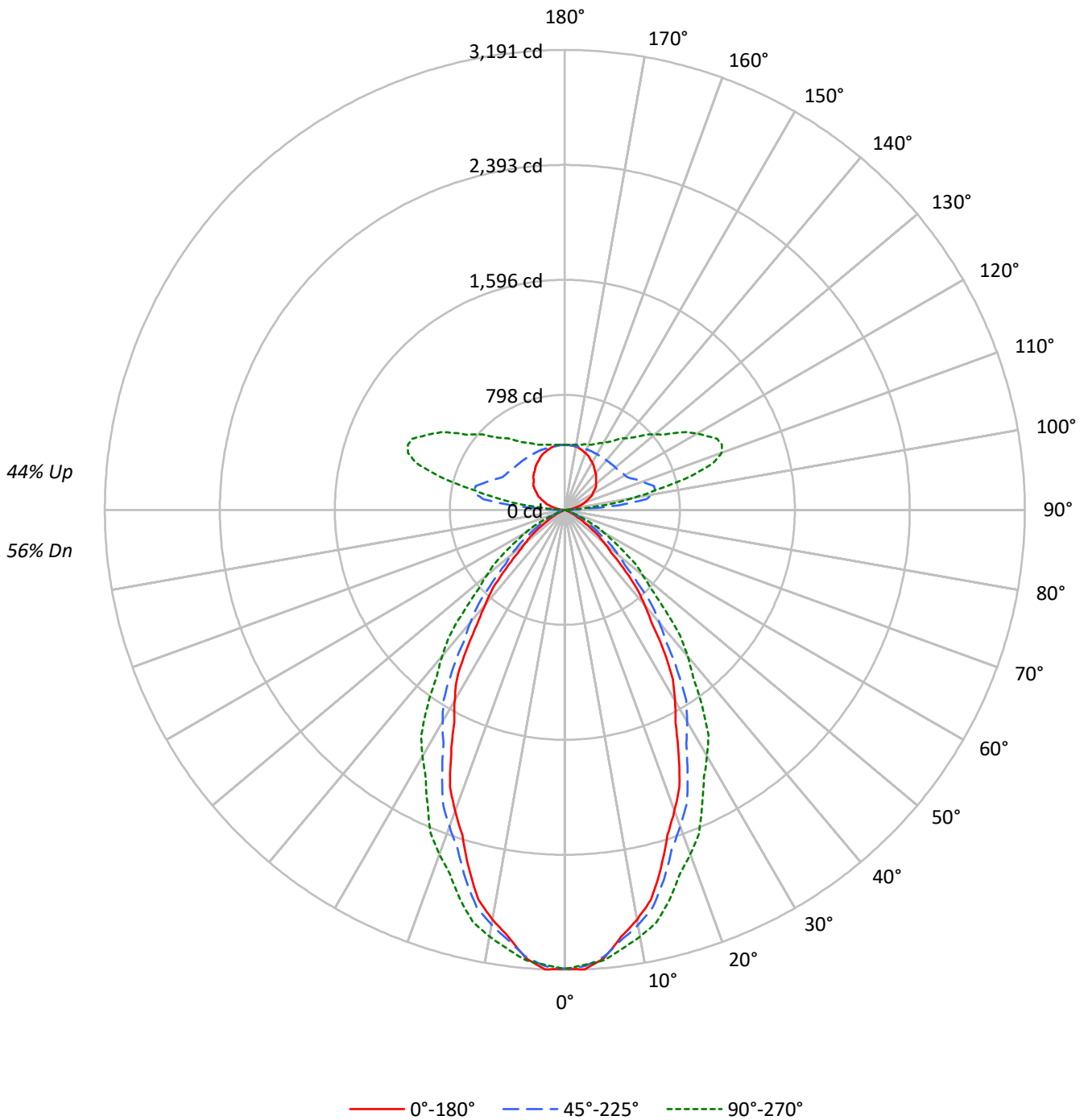
Lumens per Lamp: N/A
Luminaire Lumens: 6727.5 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.8
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				
RC	80					70					50					30				
RW	70	50	30	10	70	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°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7653	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	168	718	964
70°	83	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.6	4.3
10°-20°	743.1	11.0
20°-30°	930.3	13.8
30°-40°	859.2	12.8
40°-50°	577.4	8.6
50°-60°	298.2	4.4
60°-70°	93.4	1.4
70°-80°	5.9	0.1
80°-90°	2.5	0.0
90°-100°	220.1	3.3
100°-110°	578.6	8.6
110°-120°	600.0	8.9
120°-130°	481.3	7.2
130°-140°	377.6	5.6
140°-150°	289.8	4.3
150°-160°	208.7	3.1
160°-170°	127.7	1.9
170°-180°	43.1	0.6
0°-30°	1963.9	29.2
0°-40°	2823.1	42.0
0°-60°	3698.7	55.0
0°-90°	3800.6	56.5
90°-120°	1398.7	20.8
90°-150°	2547.3	37.9
90°-180°	2927.0	43.5
0°-180°	6727.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3121	3089	3113	3124	3136	289
15°	2574	2565	2656	2745	2804	717
25°	1867	1882	2015	2153	2254	856
35°	1198	1228	1362	1522	1660	742
45°	575	609	712	850	983	451
55°	206	241	311	400	491	193
65°	23	44	99	119	132	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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°	3183.9	3183.9	3183.9	3183.9	3183.9
2.5°	3191.3	3161.2	3169.1	3168.9	3160.5
5°	3120.8	3089.1	3113.1	3124.1	3136.2
7.5°	2988.9	2964.2	3010.2	3044.6	3069.6
10°	2886.6	2865.6	2925.1	2972.1	3006.8
12.5°	2768.3	2752.1	2824.1	2888.6	2932.8
15°	2573.9	2564.9	2655.6	2744.7	2803.5
17.5°	2365.7	2365.4	2468.9	2579.6	2650.3
20°	2222.7	2227.3	2338.3	2460.3	2543.1
22.5°	2079.8	2090.3	2208.9	2336.1	2431.0
25°	1866.9	1882.0	2014.8	2152.6	2253.5
27.5°	1662.4	1684.3	1824.1	1967.4	2090.3
30°	1528.0	1553.6	1695.9	1846.7	1973.2
32.5°	1396.2	1426.6	1565.3	1724.7	1853.7
35°	1198.4	1228.5	1361.7	1521.9	1660.5
37.5°	994.1	1023.7	1153.7	1311.5	1461.2
40°	861.1	894.2	1018.2	1171.1	1323.2
42.5°	740.3	773.4	890.0	1040.2	1183.9
45°	574.6	609.2	711.6	850.2	982.8
47.5°	437.2	474.8	564.7	690.1	810.8
50°	355.8	393.5	482.1	592.6	708.6
52.5°	290.5	327.0	407.0	511.0	617.4
55°	206.4	241.0	311.2	399.5	491.4
57.5°	142.6	172.5	235.4	309.1	381.1
60°	103.2	131.8	191.0	250.9	309.6
62.5°	68.7	94.9	152.8	198.7	238.1
65°	23.1	44.2	98.6	118.9	132.5
67.5°	11.7	14.1	51.8	54.6	59.1
70°	9.2	9.2	24.6	26.3	30.8
72.5°	6.8	6.8	9.9	12.7	13.6
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.6	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°	<i>160.9</i>	204.0	545.4	1074.6	1178.7
115°	<i>185.3</i>	224.9	512.4	1022.2	1166.6
117.5°	<i>209.0</i>	245.2	489.8	949.6	1109.8
120°	<i>222.9</i>	256.9	480.5	900.9	1056.6
122.5°	<i>236.8</i>	270.8	473.6	852.2	1005.6
125°	<i>257.6</i>	288.8	466.0	787.7	929.2
127.5°	<i>274.4</i>	306.1	459.7	735.7	855.1
130°	<i>283.7</i>	317.6	457.4	703.0	813.4
132.5°	<i>292.9</i>	326.9	455.0	675.0	774.0
135°	<i>306.8</i>	338.0	451.6	635.9	720.8
137.5°	<i>321.3</i>	351.9	451.0	606.6	676.2
140°	<i>332.9</i>	361.2	448.7	583.3	648.4
142.5°	<i>342.2</i>	368.2	448.7	566.9	622.9
145°	<i>356.0</i>	378.7	445.8	542.3	584.7
147.5°	<i>369.9</i>	392.0	445.8	521.8	556.9
150°	<i>379.2</i>	399.0	445.8	510.1	538.4
152.5°	<i>388.5</i>	403.8	445.8	500.7	522.2
155°	<i>402.4</i>	413.7	445.8	489.5	503.7
157.5°	<i>412.8</i>	423.5	445.8	479.6	489.8
160°	<i>419.7</i>	428.2	445.8	474.9	480.5
162.5°	<i>426.7</i>	432.9	445.8	470.2	475.9
165°	<i>434.2</i>	439.9	445.8	463.3	468.9
167.5°	<i>441.2</i>	444.0	448.7	460.3	462.6
170°	<i>445.8</i>	448.6	448.7	460.3	460.3
172.5°	<i>448.1</i>	448.7	448.7	457.9	455.6
175°	<i>451.6</i>	451.6	448.7	454.5	454.5
177.5°	<i>451.6</i>	451.6	449.3	453.8	451.6
180°	<i>451.6</i>	451.6	451.6	451.6	451.6

(END OF REPORT)