

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: P518774

Luminaire Tested: **SQ4-BB-100U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518774
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

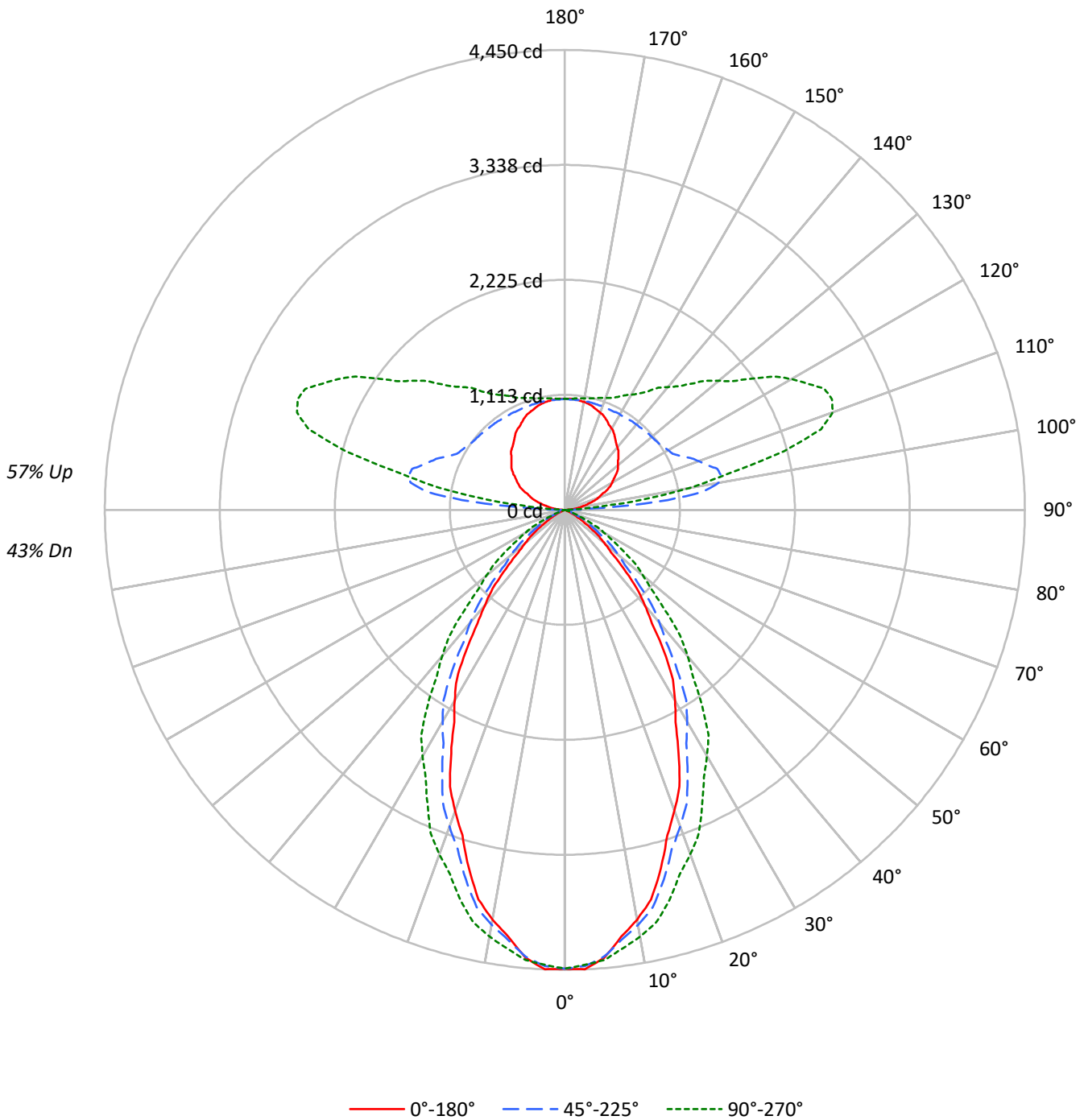
Lumens per Lamp: N/A
Luminaire Lumens: 12277.8 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43		
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39		
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36		
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32		
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29		
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26		
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24		
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22		
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20		
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19		
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20480	20480	20480
5°	20151	20101	20251
10°	18855	19106	19639
15°	17141	17684	18669
20°	15215	16006	17408
25°	13250	14300	15994
30°	11350	12597	14656
35°	9410	10693	13039
40°	7231	8549	11111
45°	5227	6474	8940
50°	3561	4825	7091
55°	2315	3490	5511
60°	1328	2457	3983
65°	351	1501	2016
70°	174	464	580
75°	77	37	0
80°	56	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.2	3.3
10°-20°	1036.1	8.4
20°-30°	1297.1	10.6
30°-40°	1198.1	9.8
40°-50°	805.1	6.6
50°-60°	415.8	3.4
60°-70°	130.2	1.1
70°-80°	8.2	0.1
80°-90°	2.4	0.0
90°-100°	503.0	4.1
100°-110°	1388.8	11.3
110°-120°	1432.3	11.7
120°-130°	1150.9	9.4
130°-140°	904.5	7.4
140°-150°	693.7	5.7
150°-160°	498.6	4.1
160°-170°	304.9	2.5
170°-180°	102.8	0.8
0°-30°	2738.4	22.3
0°-40°	3936.6	32.1
0°-60°	5157.5	42.0
0°-90°	5298.3	43.2
90°-120°	3324.1	27.1
90°-150°	6073.2	49.5
90°-180°	6979.0	56.8
0°-180°	12277.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4440	4440	4440	4440	4440	
5°	4352	4308	4341	4356	4373	403
15°	3589	3576	3703	3827	3909	1000
25°	2603	2624	2809	3002	3142	1193
35°	1671	1713	1899	2122	2315	1035
45°	801	850	992	1186	1370	629
55°	288	336	434	557	685	269
65°	32	62	138	166	185	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	3	7	14	16	17	5
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4439.6	4439.6	4439.6	4439.6	4439.6
2.5°	4450.0	4407.9	4419.0	4418.8	4407.0
5°	4351.6	4307.5	4340.8	4356.3	4373.1
7.5°	4167.7	4133.3	4197.4	4245.4	4280.3
10°	4025.1	3995.7	4078.8	4144.3	4192.6
12.5°	3860.1	3837.5	3937.9	4027.8	4089.5
15°	3589.1	3576.5	3702.9	3827.2	3909.1
17.5°	3298.7	3298.3	3442.6	3596.9	3695.6
20°	3099.4	3105.7	3260.5	3430.6	3546.1
22.5°	2900.1	2914.8	3080.0	3257.5	3389.8
25°	2603.2	2624.2	2809.4	3001.6	3142.3
27.5°	2318.0	2348.6	2543.5	2743.3	2914.7
30°	2130.7	2166.4	2364.8	2575.0	2751.4
32.5°	1946.8	1989.2	2182.7	2405.0	2584.7
35°	1671.0	1713.0	1898.7	2122.2	2315.4
37.5°	1386.2	1427.4	1608.8	1828.7	2037.5
40°	1200.7	1246.9	1419.7	1632.9	1845.0
42.5°	1032.3	1078.5	1241.0	1450.5	1650.9
45°	801.2	849.5	992.3	1185.5	1370.3
47.5°	609.6	662.1	787.4	962.2	1130.6
50°	496.2	548.7	672.3	826.3	988.0
52.5°	405.1	455.9	567.5	712.6	860.9
55°	287.8	336.1	433.9	557.1	685.2
57.5°	198.9	240.5	328.2	431.0	531.4
60°	143.9	183.8	266.3	349.8	431.7
62.5°	95.8	132.3	213.1	277.0	332.1
65°	32.2	61.6	137.5	165.8	184.7
67.5°	16.3	19.7	72.2	76.2	82.5
70°	12.9	12.9	34.4	36.7	43.0
72.5°	9.5	9.5	13.7	17.6	18.9
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	1.4	2.7	3.1	3.4
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)