

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521235

Luminaire Tested: **SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521235
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

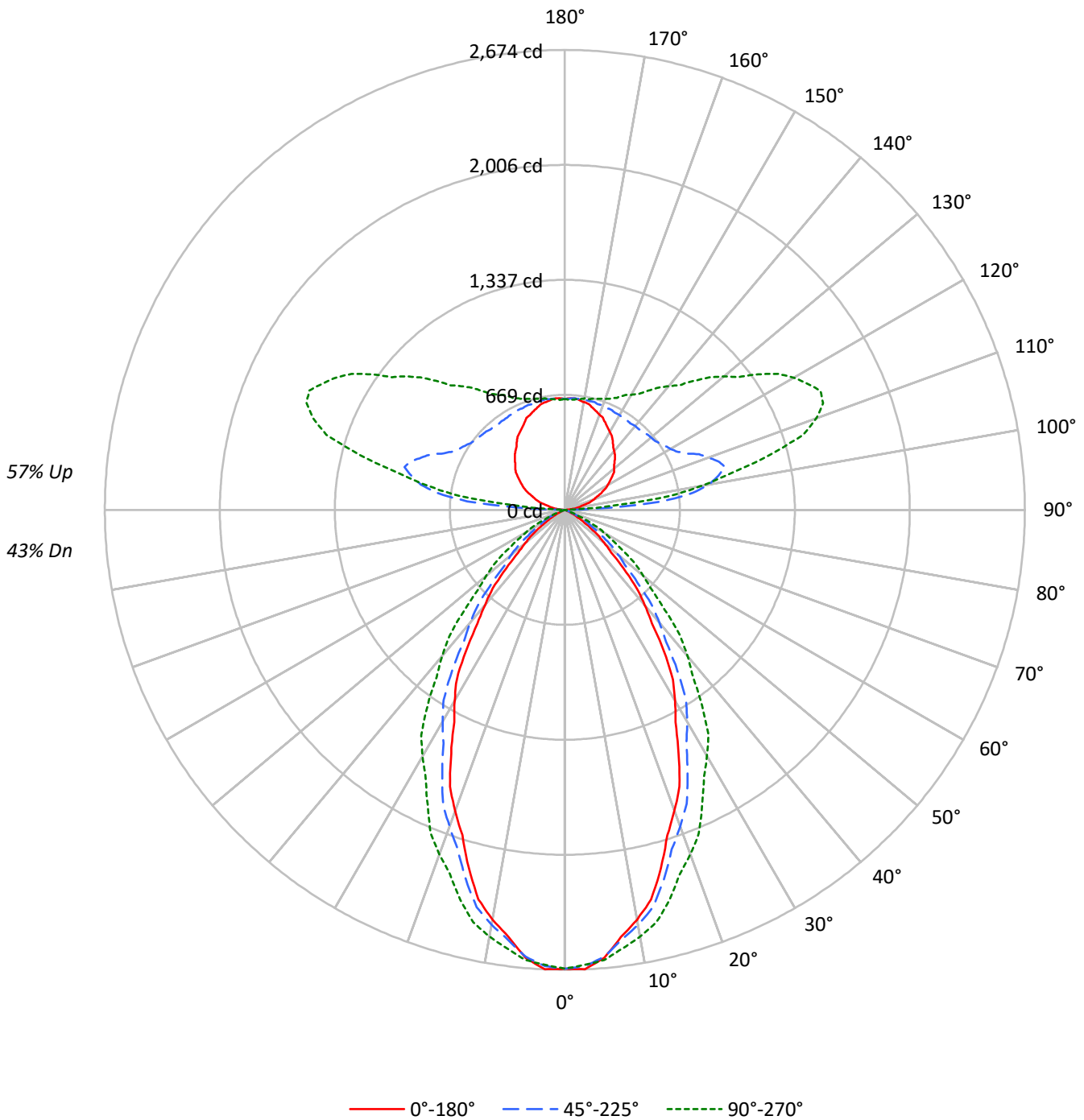
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7355.1 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.7
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	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	58	56	46	46	45	40
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	46	45	42	39	36	34	33	29
5	72	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	32	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	33	35	31	29	29	27	25	22
8	58	47	40	35	53	43	37	33	38	33	29	32	29	26	27	25	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	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24614	24614	24614
5°	24217	24158	24336
10°	22660	22961	23602
15°	20600	21253	22437
20°	18286	19236	20922
25°	15925	17186	19222
30°	13640	15139	17613
35°	11309	12850	15670
40°	8690	10275	13353
45°	6281	7780	10744
50°	4279	5799	8522
55°	2781	4193	6622
60°	1596	2952	4787
65°	424	1803	2423
70°	208	558	696
75°	93	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.5	3.3
10°-20°	622.6	8.5
20°-30°	779.4	10.6
30°-40°	719.9	9.8
40°-50°	483.8	6.6
50°-60°	249.9	3.4
60°-70°	78.3	1.1
70°-80°	5.0	0.1
80°-90°	0.1	0.0
90°-100°	332.2	4.5
100°-110°	802.9	10.9
110°-120°	856.3	11.6
120°-130°	693.6	9.4
130°-140°	537.0	7.3
140°-150°	409.7	5.6
150°-160°	296.5	4.0
160°-170°	182.6	2.5
170°-180°	61.8	0.8
0°-30°	1645.5	22.4
0°-40°	2365.5	32.2
0°-60°	3099.1	42.1
0°-90°	3182.4	43.3
90°-120°	1991.5	27.1
90°-150°	3631.7	49.4
90°-180°	4173.0	56.7
0°-180°	7355.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2668	2668	2668	2668	2668	
5°	2615	2588	2608	2618	2628	242
15°	2157	2149	2225	2300	2349	601
25°	1564	1577	1688	1804	1888	717
35°	1004	1029	1141	1275	1391	622
45°	481	510	596	712	823	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	



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CATALOG NUMBER: SQ4-BB-100U-125D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2667.8	2667.8	2667.8	2667.8	2667.8
2.5°	2674.0	2648.7	2655.4	2655.2	2648.1
5°	2614.8	2588.3	2608.4	2617.7	2627.7
7.5°	2504.4	2483.7	2522.2	2551.0	2572.0
10°	2418.7	2401.0	2450.9	2490.3	2519.3
12.5°	2319.5	2305.9	2366.3	2420.3	2457.4
15°	2156.7	2149.1	2225.1	2299.8	2349.0
17.5°	1982.2	1981.9	2068.6	2161.4	2220.7
20°	1862.4	1866.2	1959.2	2061.4	2130.9
22.5°	1742.6	1751.5	1850.8	1957.4	2036.9
25°	1564.3	1576.9	1688.2	1803.7	1888.2
27.5°	1392.9	1411.3	1528.4	1648.4	1751.4
30°	1280.3	1301.8	1421.0	1547.3	1653.3
32.5°	1169.8	1195.3	1311.6	1445.1	1553.2
35°	1004.1	1029.4	1140.9	1275.2	1391.3
37.5°	833.0	857.7	966.7	1098.9	1224.3
40°	721.5	749.2	853.1	981.2	1108.7
42.5°	620.3	648.0	745.7	871.6	992.0
45°	481.4	510.4	596.3	712.4	823.4
47.5°	366.3	397.8	473.1	578.2	679.4
50°	298.1	329.7	404.0	496.5	593.7
52.5°	243.4	274.0	341.0	428.2	517.3
55°	172.9	202.0	260.7	334.7	411.7
57.5°	119.5	144.5	197.2	259.0	319.3
60°	86.5	110.5	160.0	210.2	259.4
62.5°	57.6	79.5	128.0	166.5	199.5
65°	19.4	37.0	82.6	99.6	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)