

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: P521193

Luminaire Tested: **SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521193
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-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

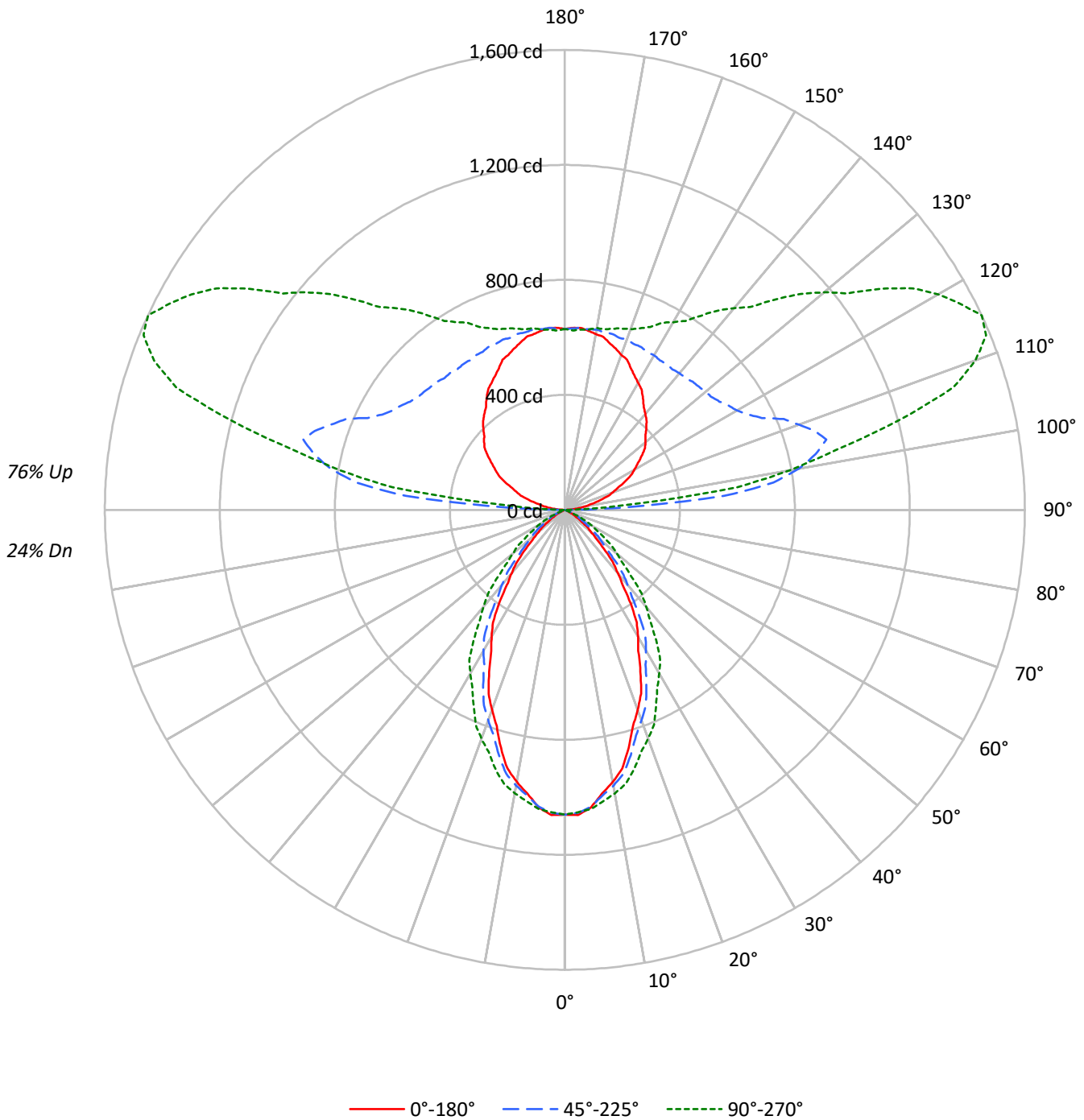
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5337.0 lumens
Efficiency: N/A
Efficacy: 100.3 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: Semi-Indirect

Input Watts (W): 53.2
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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	29	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	54	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9783	9783	9783
5°	9626	9602	9674
10°	9007	9127	9382
15°	8189	8447	8918
20°	7269	7647	8316
25°	6330	6831	7640
30°	5422	6017	7001
35°	4495	5108	6229
40°	3454	4084	5308
45°	2497	3092	4271
50°	1701	2305	3387
55°	1105	1666	2633
60°	635	1174	1902
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	1.8
10°-20°	247.5	4.6
20°-30°	309.8	5.8
30°-40°	286.2	5.4
40°-50°	192.3	3.6
50°-60°	99.3	1.9
60°-70°	31.1	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	324.2	6.1
100°-110°	783.5	14.7
110°-120°	835.7	15.7
120°-130°	676.8	12.7
130°-140°	524.0	9.8
140°-150°	399.8	7.5
150°-160°	289.4	5.4
160°-170°	178.2	3.3
170°-180°	60.4	1.1
0°-30°	654.1	12.3
0°-40°	940.2	17.6
0°-60°	1231.9	23.1
0°-90°	1265.0	23.7
90°-120°	1943.4	36.4
90°-150°	3544.1	66.4
90°-180°	4072.0	76.3
0°-180°	5337.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1039	1029	1037	1040	1044	96
15°	857	854	884	914	934	239
25°	622	627	671	717	750	285
35°	399	409	454	507	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



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CATALOG NUMBER: SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1062.9	1052.8	1055.5	1055.4	1052.6
5°	1039.4	1028.8	1036.8	1040.5	1044.5
7.5°	995.5	987.2	1002.5	1014.0	1022.3
10°	961.4	954.4	974.2	989.9	1001.4
12.5°	922.0	916.6	940.6	962.0	976.8
15°	857.3	854.2	884.4	914.1	933.7
17.5°	787.9	787.8	822.3	859.1	882.7
20°	740.3	741.8	778.8	819.4	847.0
22.5°	692.7	696.2	735.7	778.0	809.6
25°	621.8	626.8	671.0	716.9	750.5
27.5°	553.7	561.0	607.5	655.2	696.2
30°	508.9	517.4	564.8	615.0	657.2
32.5°	465.0	475.1	521.3	574.4	617.4
35°	399.1	409.2	453.5	506.9	553.0
37.5°	331.1	340.9	384.3	436.8	486.7
40°	286.8	297.8	339.1	390.0	440.7
42.5°	246.6	257.6	296.4	346.5	394.3
45°	191.4	202.9	237.0	283.2	327.3
47.5°	145.6	158.1	188.1	229.8	270.1
50°	118.5	131.0	160.6	197.4	236.0
52.5°	96.8	108.9	135.5	170.2	205.6
55°	68.7	80.3	103.6	133.1	163.7
57.5°	47.5	57.4	78.4	102.9	126.9
60°	34.4	43.9	63.6	83.6	103.1
62.5°	22.9	31.6	50.9	66.2	79.3
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)