

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: P521104

Luminaire Tested: **SQ4-BB-075U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521104
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-075U-075D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

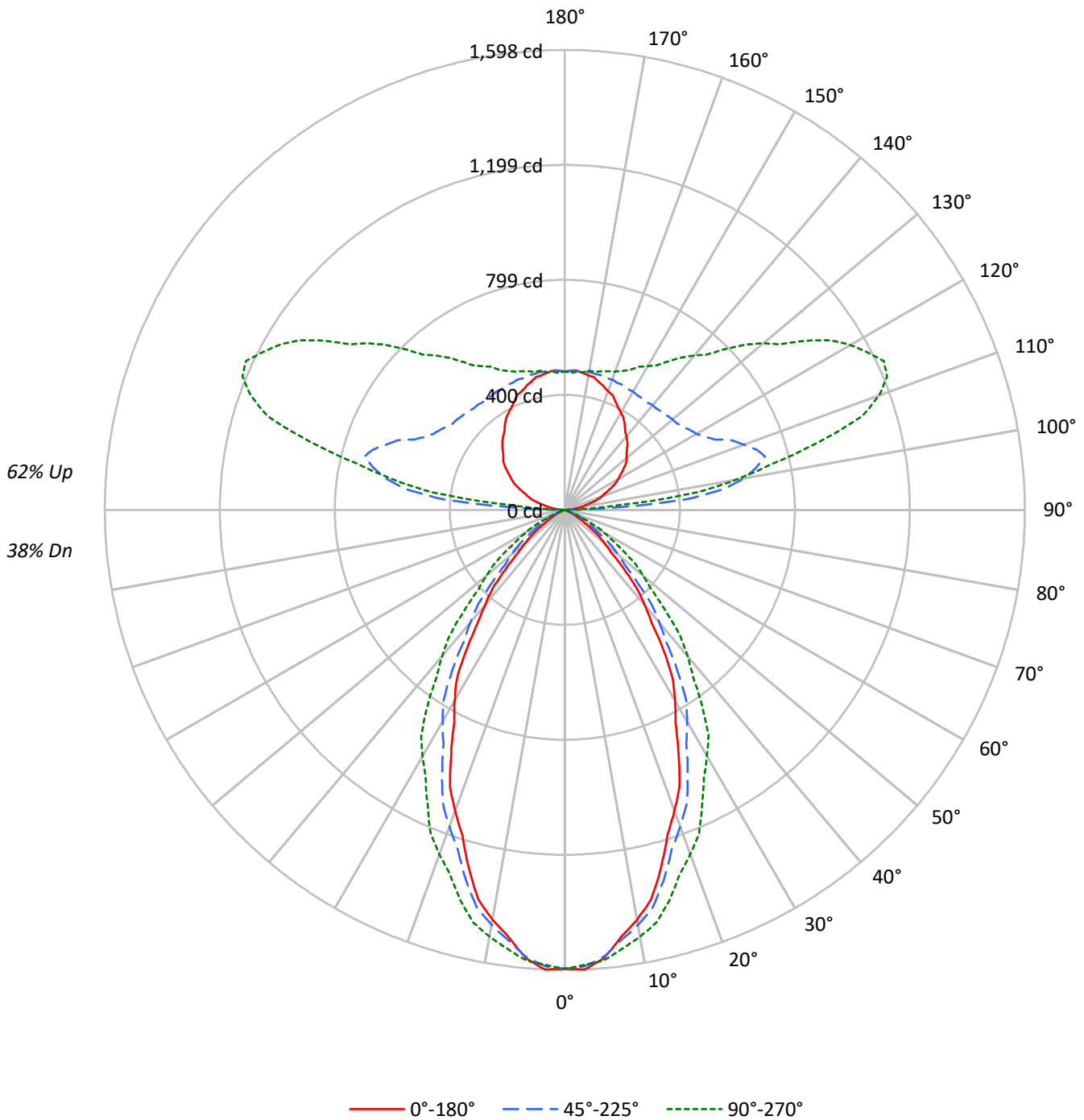
Lumens per Lamp: N/A
Luminaire Lumens: 5013.6 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.2
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	39	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14711	14711	14711
5°	14475	14439	14546
10°	13543	13724	14107
15°	12312	12703	13411
20°	10929	11497	12505
25°	9517	10272	11489
30°	8152	9048	10528
35°	6760	7680	9366
40°	5193	6141	7980
45°	3754	4650	6422
50°	2558	3466	5093
55°	1663	2506	3959
60°	954	1766	2862
65°	253	1078	1447
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.5	2.9
10°-20°	372.1	7.4
20°-30°	465.9	9.3
30°-40°	430.3	8.6
40°-50°	289.1	5.8
50°-60°	149.4	3.0
60°-70°	46.8	0.9
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	247.7	4.9
100°-110°	598.7	11.9
110°-120°	638.5	12.7
120°-130°	517.2	10.3
130°-140°	400.4	8.0
140°-150°	305.5	6.1
150°-160°	221.1	4.4
160°-170°	136.2	2.7
170°-180°	46.1	0.9
0°-30°	983.5	19.6
0°-40°	1413.8	28.2
0°-60°	1852.3	36.9
0°-90°	1902.1	37.9
90°-120°	1485.0	29.6
90°-150°	2708.0	54.0
90°-180°	3111.0	62.1
0°-180°	5013.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1563	1547	1559	1565	1571	145
15°	1289	1284	1330	1374	1404	359
25°	935	942	1009	1078	1129	429
35°	600	615	682	762	832	372
45°	288	305	356	426	492	226
55°	103	121	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	124	424	276	193	27
105°	96	165	720	931	919	101
115°	175	224	578	1096	1222	173
125°	249	287	502	872	1024	222
135°	306	342	481	687	791	237
145°	362	389	472	584	630	226
155°	415	433	478	518	536	192
165°	459	466	484	492	499	130
175°	486	484	486	481	480	46
180°	480	480	480	480	480	



TEST NUMBER: P521104

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.2	1583.1	1587.1	1587.0	1582.8
5°	1562.9	1547.0	1559.0	1564.6	1570.6
7.5°	1496.8	1484.5	1507.5	1524.7	1537.3
10°	1445.6	1435.1	1464.9	1488.4	1505.8
12.5°	1386.4	1378.2	1414.3	1446.6	1468.8
15°	1289.0	1284.5	1329.9	1374.5	1404.0
17.5°	1184.7	1184.6	1236.4	1291.8	1327.3
20°	1113.1	1115.4	1171.0	1232.1	1273.6
22.5°	1041.6	1046.8	1106.2	1169.9	1217.4
25°	934.9	942.5	1009.0	1078.0	1128.6
27.5°	832.5	843.5	913.5	985.3	1046.8
30°	765.2	778.1	849.3	924.8	988.2
32.5°	699.2	714.4	783.9	863.7	928.3
35°	600.2	615.2	681.9	762.2	831.6
37.5°	497.9	512.7	577.8	656.8	731.8
40°	431.2	447.8	509.9	586.5	662.6
42.5°	370.7	387.3	445.7	520.9	592.9
45°	287.7	305.1	356.4	425.8	492.2
47.5°	218.9	237.8	282.8	345.6	406.1
50°	178.2	197.1	241.5	296.8	354.8
52.5°	145.5	163.7	203.8	255.9	309.2
55°	103.4	120.7	155.8	200.1	246.1
57.5°	71.4	86.4	117.9	154.8	190.8
60°	51.7	66.0	95.7	125.6	155.1
62.5°	34.4	47.5	76.5	99.5	119.3
65°	11.6	22.1	49.4	59.6	66.3
67.5°	5.9	7.1	25.9	27.4	29.6
70°	4.6	4.6	12.3	13.2	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	8.1	67.1	158.0	76.8	52.1
95°	24.4	123.9	424.4	276.0	193.4
97.5°	43.4	137.3	559.0	538.5	462.3
100°	58.0	145.6	633.1	668.3	605.6
102.5°	71.9	153.1	681.9	776.3	739.1
105°	95.7	165.3	719.6	931.0	919.1
107.5°	119.1	179.8	697.4	1055.1	1083.1
110°	135.4	192.1	661.6	1108.5	1161.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	204.4	629.8	1121.6	1211.8
115°	175.1	223.8	578.1	1096.0	1222.4
117.5°	198.3	244.2	547.8	1037.0	1185.1
120°	213.7	256.5	528.2	990.8	1146.0
122.5°	230.0	269.6	516.0	943.5	1096.4
125°	249.4	287.2	501.8	871.6	1023.9
127.5°	268.5	304.1	491.8	810.8	944.5
130°	279.9	314.7	488.5	768.4	899.7
132.5°	290.5	326.9	483.7	737.8	849.2
135°	306.4	342.2	481.4	687.3	790.8
137.5°	321.4	357.4	474.3	653.2	731.2
140°	332.8	365.7	474.3	628.6	700.2
142.5°	344.2	377.1	470.2	607.2	667.7
145°	362.3	389.2	472.3	584.2	630.0
147.5°	379.2	405.3	471.0	557.8	595.6
150°	389.8	412.7	474.3	546.2	576.1
152.5°	401.2	423.3	473.5	533.9	560.6
155°	415.3	433.2	478.4	517.5	536.4
157.5°	432.2	447.5	477.3	511.2	522.3
160°	438.7	451.6	481.4	503.0	510.9
162.5°	449.3	460.6	479.8	500.5	505.2
165°	459.0	466.0	484.5	491.7	498.7
167.5°	471.0	475.6	483.2	491.2	491.4
170°	474.3	477.3	486.5	485.6	490.6
172.5°	480.0	482.2	484.1	486.2	483.2
175°	485.5	483.5	485.5	481.4	480.4
177.5°	484.5	484.5	482.8	481.1	477.1
180°	480.4	480.4	480.4	480.4	480.4

(END OF REPORT)