

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: P520998

Luminaire Tested: **SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P520998
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-025U-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

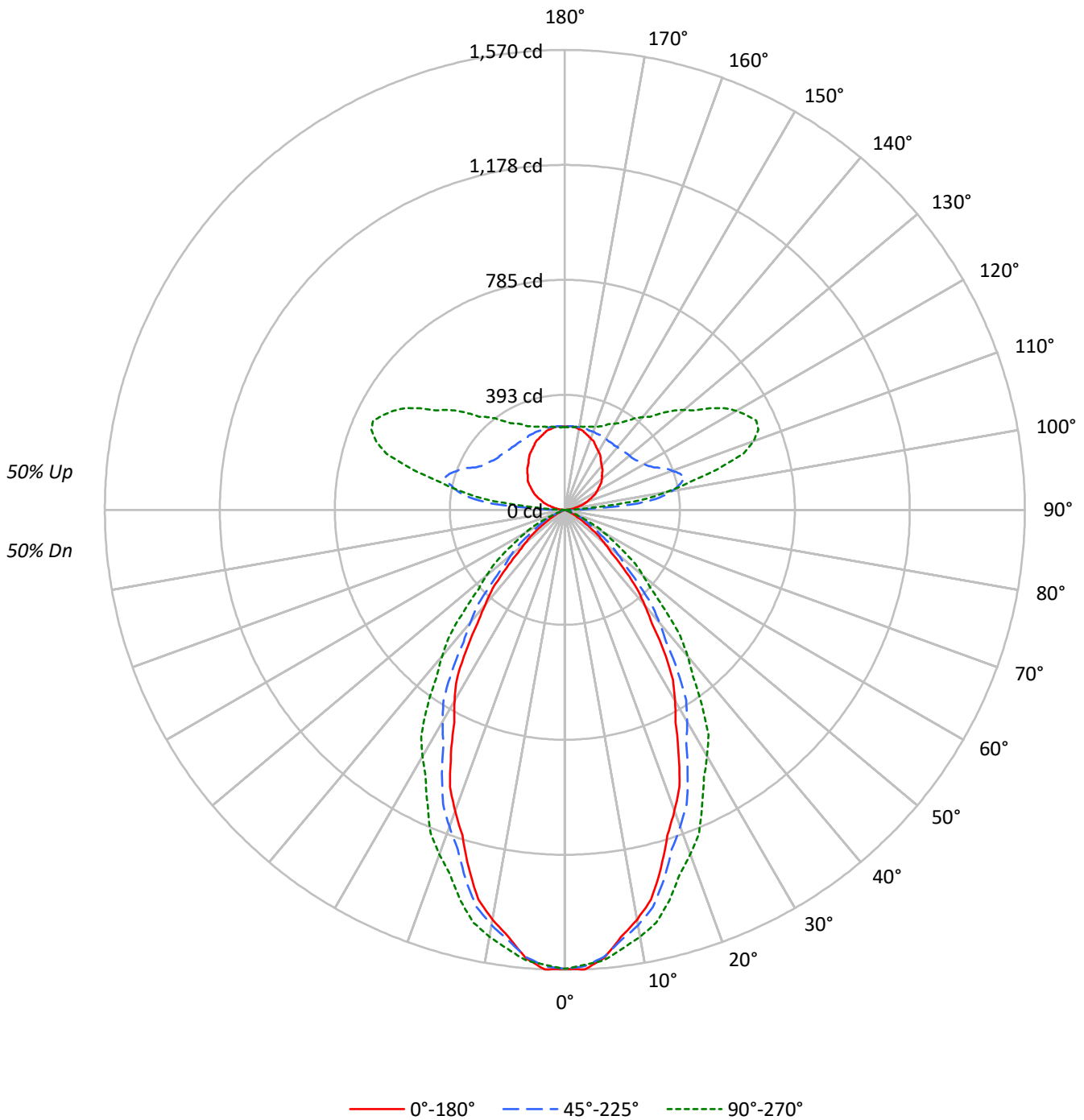
Lumens per Lamp: N/A
Luminaire Lumens: 3704.5 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.9
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14454	14454	14454
5°	14222	14187	14291
10°	13307	13484	13861
15°	12097	12481	13176
20°	10738	11296	12286
25°	9351	10092	11289
30°	8010	8890	10343
35°	6642	7546	9202
40°	5103	6034	7842
45°	3689	4569	6310
50°	2513	3405	5004
55°	1634	2463	3889
60°	937	1735	2810
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	3.9
10°-20°	365.6	9.9
20°-30°	457.7	12.4
30°-40°	422.8	11.4
40°-50°	284.1	7.7
50°-60°	146.7	4.0
60°-70°	46.0	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	146.1	3.9
100°-110°	353.2	9.5
110°-120°	376.7	10.2
120°-130°	305.1	8.2
130°-140°	236.2	6.4
140°-150°	180.2	4.9
150°-160°	130.4	3.5
160°-170°	80.3	2.2
170°-180°	27.2	0.7
0°-30°	966.3	26.1
0°-40°	1389.1	37.5
0°-60°	1820.0	49.1
0°-90°	1868.9	50.4
90°-120°	876.1	23.6
90°-150°	1597.6	43.1
90°-180°	1836.0	49.6
0°-180°	3704.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1520	1532	1537	1543	142
15°	1266	1262	1307	1350	1379	353
25°	919	926	991	1059	1109	421
35°	590	604	670	749	817	365
45°	283	300	350	418	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	14	73	250	163	114	16
105°	56	98	424	549	542	60
115°	103	132	341	647	721	102
125°	147	169	296	514	604	131
135°	181	202	284	406	466	140
145°	214	230	279	345	372	134
155°	245	256	282	305	316	113
165°	271	275	286	290	294	76
175°	286	285	286	284	283	27
180°	283	283	283	283	283	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1570.3	1555.5	1559.4	1559.3	1555.1
5°	1535.6	1520.0	1531.8	1537.2	1543.1
7.5°	1470.7	1458.5	1481.1	1498.1	1510.4
10°	1420.4	1410.0	1439.3	1462.4	1479.5
12.5°	1362.2	1354.1	1389.6	1421.3	1443.1
15°	1266.5	1262.1	1306.7	1350.5	1379.4
17.5°	1164.0	1163.9	1214.8	1269.3	1304.1
20°	1093.7	1095.9	1150.5	1210.6	1251.3
22.5°	1023.4	1028.5	1086.9	1149.5	1196.2
25°	918.6	926.0	991.4	1059.2	1108.9
27.5°	818.0	828.8	897.5	968.0	1028.5
30°	751.9	764.5	834.5	908.7	970.9
32.5°	687.0	702.0	770.2	848.7	912.1
35°	589.7	604.5	670.0	748.9	817.0
37.5°	489.2	503.7	567.7	645.3	719.0
40°	423.7	440.0	501.0	576.2	651.1
42.5°	364.3	380.6	437.9	511.8	582.5
45°	282.7	299.8	350.2	418.3	483.6
47.5°	215.1	233.6	277.9	339.5	399.0
50°	175.1	193.6	237.2	291.6	348.6
52.5°	142.9	160.9	200.2	251.5	303.8
55°	101.6	118.6	153.1	196.6	241.8
57.5°	70.2	84.9	115.8	152.1	187.5
60°	50.8	64.9	94.0	123.4	152.3
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.7	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
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°	4.8	39.6	93.2	45.3	30.7
95°	14.4	73.1	250.4	162.8	114.1
97.5°	25.6	81.0	329.8	317.7	272.7
100°	34.2	85.9	373.5	394.3	357.3
102.5°	42.4	90.3	402.3	458.0	436.0
105°	56.4	97.5	424.5	549.3	542.2
107.5°	70.3	106.1	411.4	622.4	639.0
110°	79.9	113.3	390.3	654.0	685.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	89.5	120.6	371.6	661.7	714.9
115°	103.3	132.0	341.1	646.6	721.1
117.5°	117.0	144.1	323.2	611.8	699.2
120°	126.1	151.3	311.6	584.5	676.1
122.5°	135.7	159.1	304.4	556.6	646.8
125°	147.1	169.4	296.0	514.2	604.1
127.5°	158.4	179.4	290.1	478.3	557.2
130°	165.1	185.7	288.2	453.3	530.8
132.5°	171.4	192.9	285.3	435.3	501.0
135°	180.7	201.9	284.0	405.5	466.5
137.5°	189.6	210.9	279.8	385.3	431.4
140°	196.3	215.7	279.8	370.8	413.1
142.5°	203.1	222.4	277.4	358.2	393.9
145°	213.8	229.6	278.6	344.7	371.7
147.5°	223.7	239.1	277.9	329.1	351.4
150°	230.0	243.5	279.8	322.2	339.9
152.5°	236.7	249.7	279.3	315.0	330.7
155°	245.0	255.6	282.2	305.3	316.4
157.5°	255.0	264.0	281.6	301.6	308.2
160°	258.8	266.4	284.0	296.7	301.4
162.5°	265.0	271.7	283.1	295.2	298.1
165°	270.8	274.9	285.8	290.1	294.2
167.5°	277.9	280.6	285.1	289.8	289.9
170°	279.8	281.6	287.0	286.5	289.4
172.5°	283.2	284.5	285.6	286.9	285.1
175°	286.4	285.2	286.4	284.0	283.4
177.5°	285.8	285.8	284.9	283.8	281.5
180°	283.4	283.4	283.4	283.4	283.4

(END OF REPORT)