

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: METALUX

Report Number: P859880

Luminaire Tested: **SPHB-12SE-W-L950-CD**

Issue Date: 7/11/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P859880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-12SE-W-L950-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

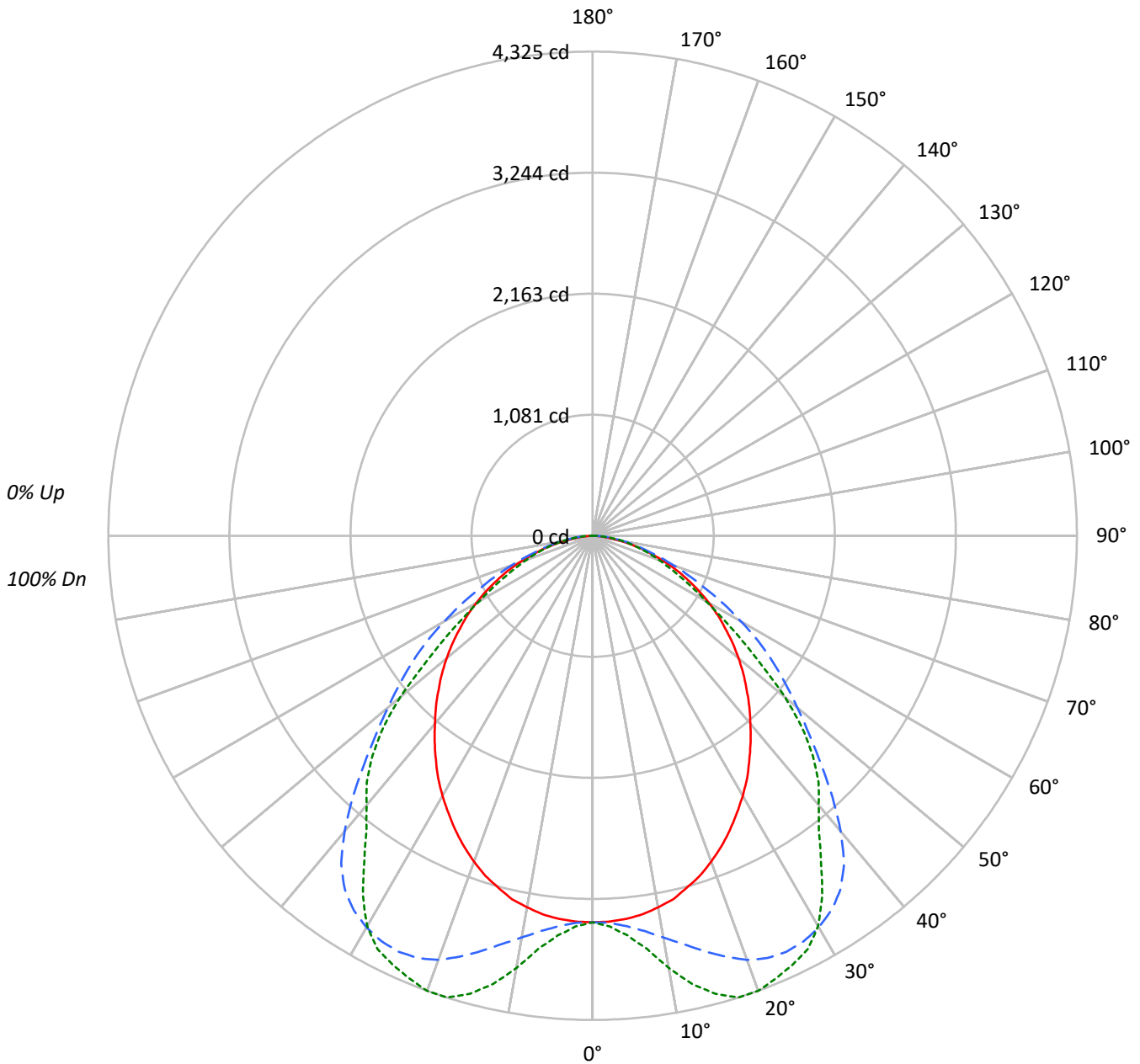
Lumens per Lamp: N/A
Luminaire Lumens: 10864.0 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 76.3
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 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									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62																			
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53																			
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46																			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40																			
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36																			
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29																			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26931	26931	26931
5°	26902	27410	28059
10°	26690	28856	31043
15°	26272	31004	34195
20°	25703	33470	35902
25°	24962	35276	36374
30°	24149	36379	36274
35°	23243	36745	33848
40°	22307	35085	31970
45°	21463	31803	30673
50°	20626	28918	27192
55°	19683	26718	22128
60°	18709	23819	18224
65°	17421	20468	15802
70°	15850	17476	14292
75°	13610	14664	13103
80°	10637	12582	12150
85°	7195	10677	10014



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.0	3.1
10°-20°	1074.9	9.9
20°-30°	1759.2	16.2
30°-40°	2146.1	19.8
40°-50°	2125.5	19.6
50°-60°	1699.7	15.6
60°-70°	1060.3	9.8
70°-80°	519.5	4.8
80°-90°	136.3	1.3
90°-100°	3.6	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3173.1	29.2
0°-40°	5319.2	49.0
0°-60°	9144.3	84.2
0°-90°	10860.4	100.0
90°-120°	3.6	0.0
90°-150°	3.6	0.0
90°-180°	4.0	0.0
0°-180°	10864.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3453	3453	3453	3453	3453	
5°	3436	3451	3501	3562	3584	326
15°	3254	3443	3840	4145	4235	917
25°	2900	3391	4099	4218	4226	1335
35°	2441	3262	3859	3653	3555	1527
45°	1946	3023	2883	2786	2781	1503
55°	1447	2321	1965	1775	1627	1297
65°	944	1302	1109	920	856	936
75°	452	553	487	446	435	479
85°	80	114	119	113	112	100
90°	0	12	21	27	28	5
95°	0	2	2	1	1	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CATALOG NUMBER: SPHB-12SE-W-L950-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3452.7	3452.7	3452.7	3452.7	3452.7
2.5°	3449.3	3448.0	3460.5	3483.4	3493.8
5°	3435.9	3451.0	3500.7	3561.7	3583.7
7.5°	3411.7	3452.3	3562.1	3674.0	3721.6
10°	3369.8	3453.2	3643.3	3840.8	3919.5
12.5°	3326.5	3450.1	3733.7	4013.3	4099.3
15°	3253.5	3442.8	3839.5	4145.1	4234.6
17.5°	3185.6	3434.2	3941.5	4257.0	4324.9
20°	3096.6	3421.6	4032.3	4291.2	4325.3
22.5°	3003.3	3411.7	4082.4	4268.3	4278.7
25°	2900.4	3391.4	4098.9	4217.7	4226.4
27.5°	2790.6	3373.2	4083.3	4155.0	4162.4
30°	2681.3	3340.4	4039.2	4057.4	4027.5
32.5°	2566.8	3307.5	3967.9	3886.2	3816.6
35°	2441.0	3261.7	3859.0	3652.8	3554.7
37.5°	2317.0	3217.6	3689.1	3391.8	3317.9
40°	2190.8	3163.2	3445.8	3148.0	3139.8
42.5°	2071.5	3104.4	3170.5	2958.3	2986.0
45°	1945.7	3022.7	2883.1	2786.3	2780.7
47.5°	1826.4	2909.9	2621.6	2596.1	2538.7
50°	1699.8	2754.3	2383.1	2358.9	2240.9
52.5°	1575.8	2556.0	2170.0	2079.3	1907.2
55°	1447.4	2320.8	1964.7	1775.0	1627.2
57.5°	1328.1	2062.4	1756.0	1510.1	1377.4
60°	1199.3	1800.5	1526.9	1277.5	1168.2
62.5°	1073.1	1542.5	1319.5	1079.6	1007.0
65°	943.9	1302.2	1109.0	919.7	856.2
67.5°	820.3	1094.3	927.0	775.3	733.0
70°	695.0	887.7	766.3	651.3	626.7
72.5°	565.7	709.2	619.8	549.7	531.2
75°	451.6	553.2	486.6	445.6	434.8
77.5°	336.2	411.4	380.3	356.1	353.1
80°	236.8	296.9	280.1	275.3	270.5
82.5°	151.3	194.1	199.2	196.2	192.8
85°	80.4	114.1	119.3	113.2	111.9
87.5°	32.4	49.7	53.6	59.2	60.9
90°	0.4	11.7	21.2	26.8	27.7
92.5°	0.4	2.6	3.0	3.0	2.6
95°	0.4	1.7	1.7	1.3	0.9
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)