

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: P860034

Luminaire Tested: **SPHB-24SE-W-L735-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: P860034
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-24SE-W-L735-CD
Description: 24000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

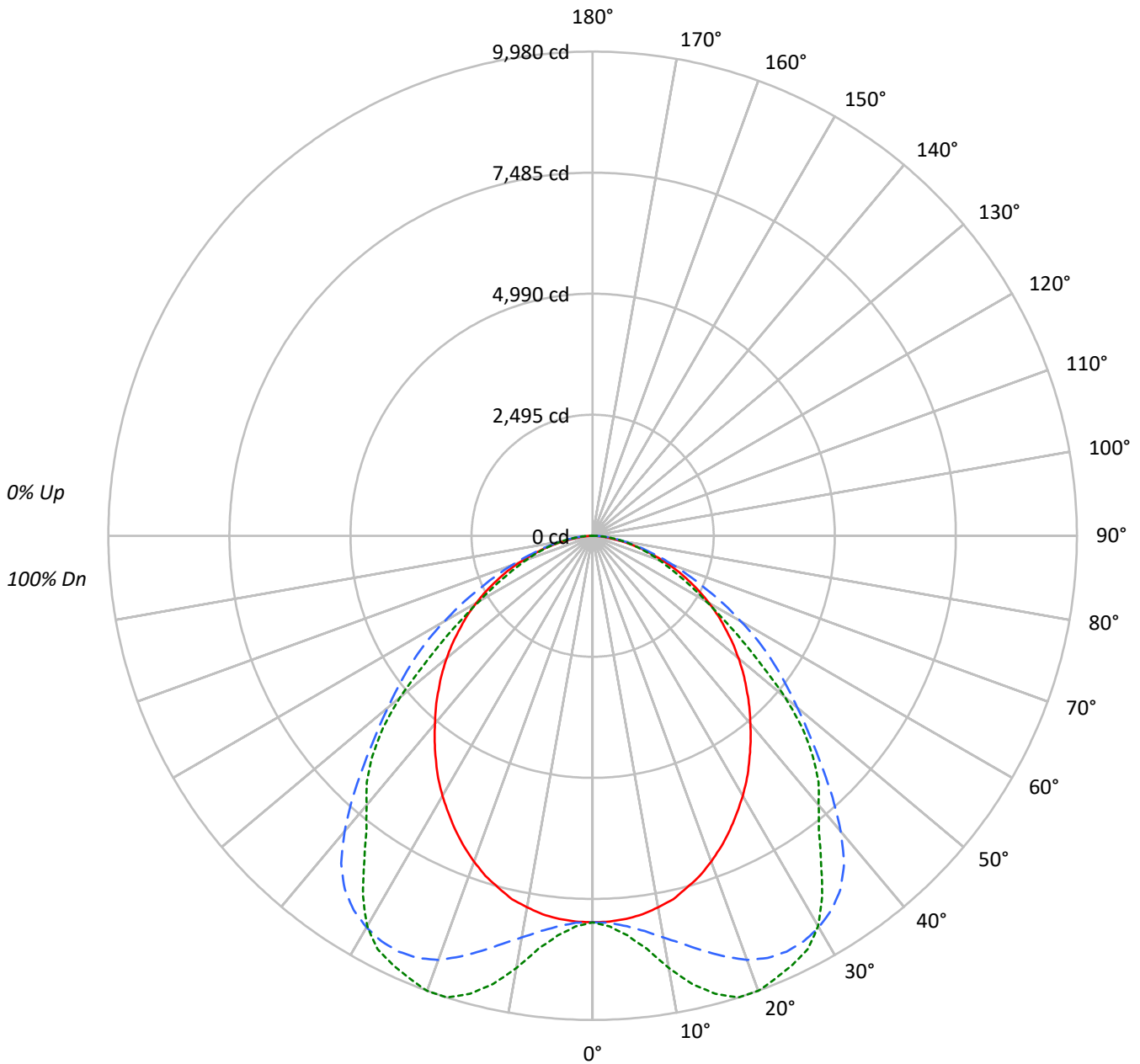
Lumens per Lamp: N/A
Luminaire Lumens: 25068.0 lumens
Efficiency: N/A
Efficacy: 158.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 158.6
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°	62142	62142	62142
5°	62075	63246	64745
10°	61584	66584	71631
15°	60622	71541	78902
20°	59310	77231	82843
25°	57598	81397	83929
30°	55723	83943	83701
35°	53632	84787	78102
40°	51470	80958	73769
45°	49524	73383	70777
50°	47594	66725	62744
55°	45417	61650	51058
60°	43171	54963	42051
65°	40198	47228	36460
70°	36571	40322	32977
75°	31405	33840	30233
80°	24548	29026	28042
85°	16601	24629	23116



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	782.2	3.1
10°-20°	2480.3	9.9
20°-30°	4059.2	16.2
30°-40°	4951.9	19.8
40°-50°	4904.4	19.6
50°-60°	3921.9	15.6
60°-70°	2446.6	9.8
70°-80°	1198.7	4.8
80°-90°	314.4	1.3
90°-100°	8.3	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°	7321.8	29.2
0°-40°	12273.7	49.0
0°-60°	21100.0	84.2
0°-90°	25059.7	100.0
90°-120°	8.3	0.0
90°-150°	8.3	0.0
90°-180°	8.0	0.0
0°-180°	25068.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7967	7967	7967	7967	7967	
5°	7928	7963	8078	8218	8269	752
15°	7507	7944	8860	9565	9771	2116
25°	6692	7825	9458	9732	9752	3080
35°	5632	7526	8904	8429	8202	3523
45°	4490	6975	6653	6429	6416	3468
55°	3340	5355	4534	4096	3755	2992
65°	2178	3005	2559	2122	1976	2160
75°	1042	1276	1123	1028	1003	1106
85°	186	263	275	261	258	230
90°	1	27	49	62	64	11
95°	1	4	4	3	2	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7967.0	7967.0	7967.0	7967.0	7967.0
2.5°	7959.0	7956.0	7984.9	8037.8	8061.7
5°	7928.1	7963.0	8077.7	8218.3	8269.1
7.5°	7872.2	7966.0	8219.3	8477.6	8587.3
10°	7775.5	7968.0	8406.8	8862.5	9044.0
12.5°	7675.8	7961.0	8615.2	9260.4	9458.9
15°	7507.3	7944.0	8859.5	9564.6	9771.0
17.5°	7350.7	7924.1	9094.9	9822.9	9979.4
20°	7145.3	7895.2	9304.3	9901.6	9980.4
22.5°	6929.9	7872.2	9420.0	9848.8	9872.7
25°	6692.5	7825.4	9457.9	9732.1	9752.1
27.5°	6439.2	7783.5	9422.0	9587.5	9604.5
30°	6186.9	7707.7	9320.2	9362.1	9293.3
32.5°	5922.6	7631.9	9155.7	8967.2	8806.7
35°	5632.4	7526.2	8904.4	8428.7	8202.3
37.5°	5346.2	7424.5	8512.5	7826.4	7655.8
40°	5055.0	7298.8	7951.0	7263.9	7245.0
42.5°	4779.8	7163.2	7315.8	6826.1	6890.0
45°	4489.6	6974.7	6652.6	6429.2	6416.3
47.5°	4214.4	6714.4	6049.3	5990.4	5857.8
50°	3922.2	6355.4	5498.8	5443.0	5170.7
52.5°	3636.0	5897.7	5007.2	4797.7	4400.8
55°	3339.8	5355.2	4533.5	4095.7	3754.6
57.5°	3064.5	4758.8	4051.8	3484.4	3178.2
60°	2767.4	4154.5	3523.3	2947.9	2695.6
62.5°	2476.2	3559.2	3044.6	2491.1	2323.6
65°	2178.0	3004.7	2558.9	2122.1	1975.5
67.5°	1892.8	2525.0	2139.1	1789.1	1691.3
70°	1603.6	2048.3	1768.1	1502.8	1446.0
72.5°	1305.4	1636.5	1430.0	1268.5	1225.6
75°	1042.1	1276.5	1122.9	1028.2	1003.2
77.5°	775.9	949.4	877.6	821.7	814.7
80°	546.5	685.1	646.2	635.2	624.3
82.5°	349.0	447.8	459.7	452.7	444.8
85°	185.5	263.3	275.2	261.3	258.3
87.5°	74.8	114.7	123.7	136.6	140.6
90°	1.0	26.9	48.9	61.8	63.8
92.5°	1.0	6.0	7.0	7.0	6.0
95°	1.0	4.0	4.0	3.0	2.0
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)