

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: P860142

Luminaire Tested: **SPHB-36SE-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: P860142
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-36SE-W-L735-CD
Description: 36000 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

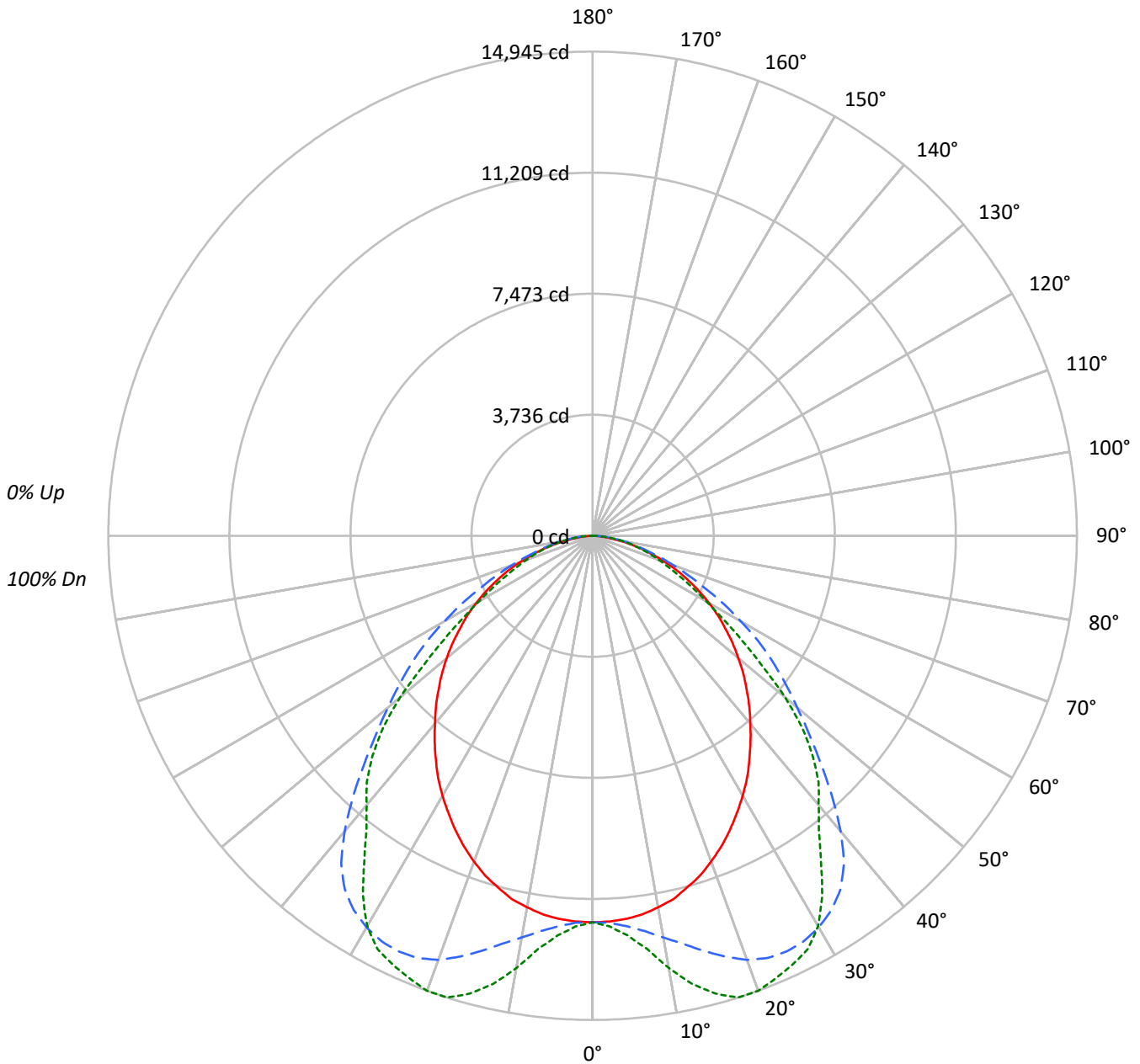
Lumens per Lamp: N/A
Luminaire Lumens: 37537.0 lumens
Efficiency: N/A
Efficacy: 155.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 240.8
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°	62947	62947	62947
5°	62879	64065	65584
10°	62382	67446	72559
15°	61407	72468	79924
20°	60078	78231	83916
25°	58344	82451	85016
30°	56445	85031	84785
35°	54326	85885	79114
40°	52137	82007	74725
45°	50165	74334	71693
50°	48210	67589	63557
55°	46005	62449	51720
60°	43730	55675	42595
65°	40718	47840	36933
70°	37044	40845	33405
75°	31813	34278	30625
80°	24865	29401	28405
85°	16818	24949	23417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1171.3	3.1
10°-20°	3714.1	9.9
20°-30°	6078.3	16.2
30°-40°	7415.1	19.8
40°-50°	7343.8	19.6
50°-60°	5872.7	15.6
60°-70°	3663.6	9.8
70°-80°	1795.0	4.8
80°-90°	470.8	1.3
90°-100°	12.4	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°	10963.7	29.2
0°-40°	18378.8	49.0
0°-60°	31595.3	84.2
0°-90°	37524.6	100.0
90°-120°	12.4	0.0
90°-150°	12.4	0.0
90°-180°	12.0	0.0
0°-180°	37537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11930	11930	11930	11930	11930	
5°	11872	11924	12096	12306	12382	###
15°	11241	11896	13266	14322	14631	3169
25°	10021	11718	14162	14573	14603	4612
35°	8434	11270	13334	12621	12282	5276
45°	6723	10444	9962	9627	9608	5193
55°	5001	8019	6788	6133	5622	4481
65°	3261	4499	3832	3178	2958	3234
75°	1560	1911	1681	1540	1502	1657
85°	278	394	412	391	387	344
90°	2	40	73	93	96	16
95°	2	6	6	4	3	1
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°	11929.8	11929.8	11929.8	11929.8	11929.8
2.5°	11917.9	11913.4	11956.7	12035.8	12071.7
5°	11871.6	11923.8	12095.6	12306.1	12382.3
7.5°	11788.0	11928.3	12307.6	12694.4	12858.6
10°	11643.1	11931.3	12588.4	13270.8	13542.6
12.5°	11493.8	11920.9	12900.5	13866.6	14163.8
15°	11241.4	11895.5	13266.3	14322.1	14631.2
17.5°	11007.0	11865.6	13618.7	14708.8	14943.3
20°	10699.4	11822.3	13932.3	14826.8	14944.8
22.5°	10376.8	11788.0	14105.5	14747.6	14783.5
25°	10021.4	11717.8	14162.3	14572.9	14602.8
27.5°	9642.1	11655.1	14108.5	14356.4	14381.8
30°	9264.3	11541.6	13956.2	14018.9	13915.9
32.5°	8868.6	11428.1	13709.8	13427.6	13187.2
35°	8434.0	11269.8	13333.5	12621.2	12282.2
37.5°	8005.5	11117.5	12746.6	11719.3	11463.9
40°	7569.4	10929.3	11905.9	10877.1	10848.7
42.5°	7157.3	10726.2	10954.7	10221.5	10317.1
45°	6722.7	10444.0	9961.7	9627.2	9607.8
47.5°	6310.6	10054.3	9058.2	8970.1	8771.5
50°	5873.1	9516.7	8233.9	8150.3	7742.7
52.5°	5444.5	8831.3	7497.8	7184.2	6589.8
55°	5001.0	8018.9	6788.5	6132.9	5622.2
57.5°	4588.9	7125.9	6067.2	5217.5	4759.1
60°	4143.9	6221.0	5275.8	4414.1	4036.3
62.5°	3707.8	5329.5	4559.0	3730.2	3479.3
65°	3261.3	4499.3	3831.8	3177.7	2958.2
67.5°	2834.2	3781.0	3203.1	2678.9	2532.6
70°	2401.2	3067.2	2647.6	2250.4	2165.3
72.5°	1954.7	2450.5	2141.4	1899.5	1835.2
75°	1560.5	1911.4	1681.4	1539.6	1502.2
77.5°	1161.8	1421.6	1314.1	1230.5	1220.0
80°	818.3	1025.9	967.6	951.2	934.8
82.5°	522.6	670.5	688.4	677.9	666.0
85°	277.8	394.2	412.1	391.2	386.8
87.5°	112.0	171.7	185.2	204.6	210.6
90°	1.5	40.3	73.2	92.6	95.6
92.5°	1.5	9.0	10.5	10.5	9.0
95°	1.5	6.0	6.0	4.5	3.0
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)