

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: P860077

Luminaire Tested: **SPHB-30SE-M-L940-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: P860077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-30SE-M-L940-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 4000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

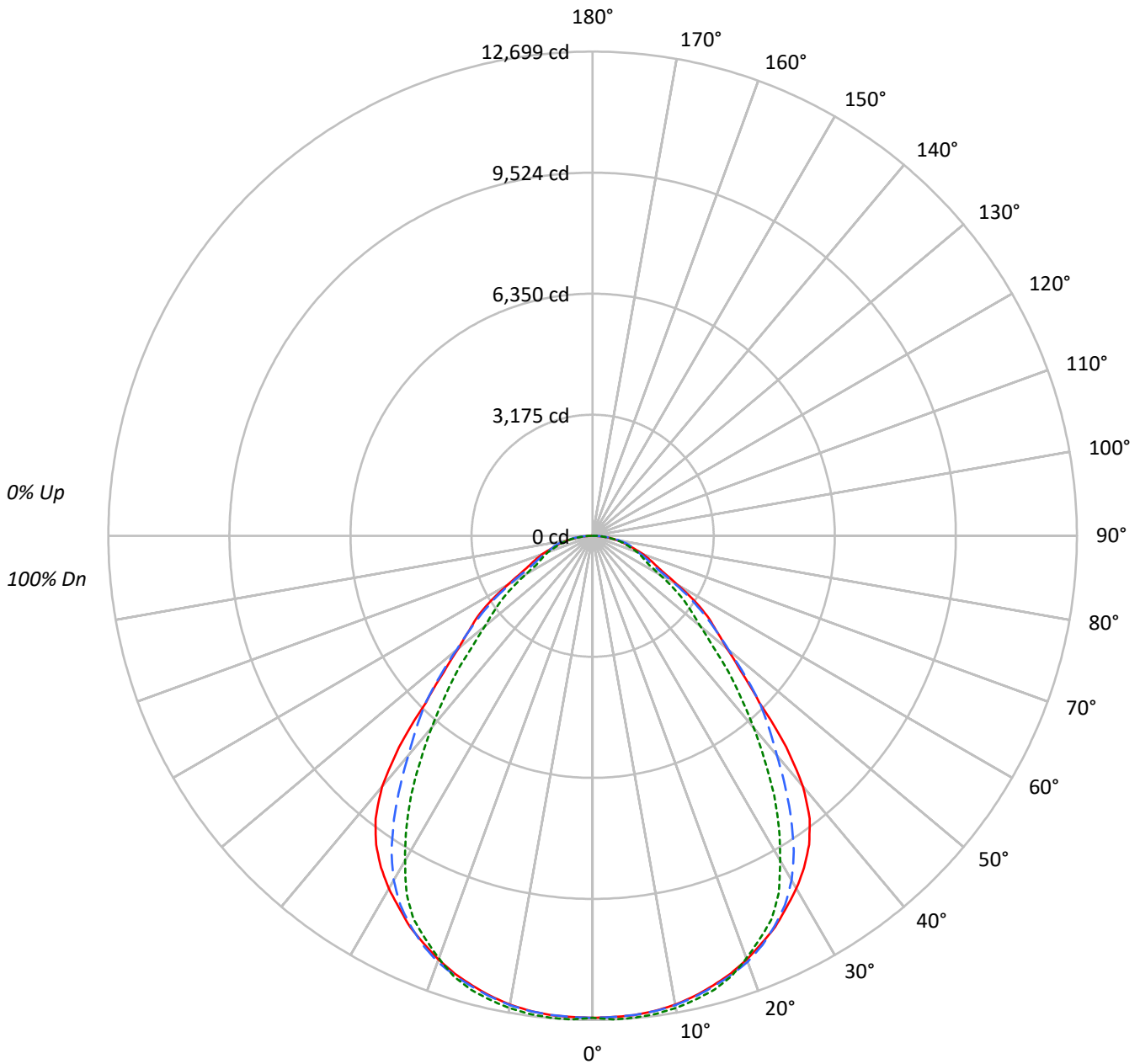
Lumens per Lamp: N/A
Luminaire Lumens: 26241.0 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 195
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

TEST NUMBER: P860077

CATALOG NUMBER: SPHB-30SE-M-L940-CD

Luminous Intensity Polar Plot





TEST NUMBER: P860077

CATALOG NUMBER: SPHB-30SE-M-L940-CD

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	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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	66707	66707	66707
5°	66838	66820	67200
10°	66896	66967	67378
15°	66701	66874	67339
20°	66409	66747	66213
25°	65924	65740	64623
30°	65089	63555	59928
35°	63723	58471	53412
40°	59137	51751	45240
45°	46136	46261	37439
50°	37681	38215	30235
55°	33761	32488	26567
60°	27028	25584	21256
65°	22650	20735	18799
70°	21506	19756	19139
75°	19512	20974	18458
80°	19608	21431	19456
85°	17060	19990	16255



TEST NUMBER: P860077

CATALOG NUMBER: SPHB-30SE-M-L940-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1202.1	4.6
10°-20°	3457.1	13.2
20°-30°	5160.9	19.7
30°-40°	5631.5	21.5
40°-50°	4606.8	17.6
50°-60°	3029.0	11.5
60°-70°	1737.8	6.6
70°-80°	1053.1	4.0
80°-90°	353.6	1.3
90°-100°	9.2	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°	9820.1	37.4
0°-40°	15451.6	58.9
0°-60°	23087.3	88.0
0°-90°	26231.8	100.0
90°-120°	9.2	0.0
90°-150°	9.2	0.0
90°-180°	9.0	0.0
0°-180°	26241.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12642	12642	12642	12642	12642	
5°	12619	12599	12616	12667	12687	###
15°	12211	12209	12242	12321	12327	3447
25°	11324	11350	11292	11155	11100	5209
35°	9893	9669	9078	8459	8292	6131
45°	6183	6645	6200	5472	5017	4908
55°	3670	3570	3532	3035	2888	3232
65°	1814	1788	1661	1616	1506	1855
75°	957	1036	1029	987	905	1036
85°	282	320	330	288	268	306
90°	2	23	47	55	58	13
95°	2	3	5	5	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



TEST NUMBER: P860077

CATALOG NUMBER: SPHB-30SE-M-L940-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12642.4	12642.4	12642.4	12642.4	12642.4
2.5°	12634.1	12615.7	12632.4	12684.1	12699.1
5°	12619.1	12599.1	12615.7	12667.4	12687.4
7.5°	12567.4	12555.7	12572.4	12624.1	12649.1
10°	12485.7	12472.3	12499.0	12544.0	12575.7
12.5°	12364.0	12359.0	12384.0	12449.0	12462.3
15°	12210.6	12208.9	12242.2	12320.6	12327.3
17.5°	12037.1	12035.5	12077.2	12128.8	12110.5
20°	11827.0	11838.7	11887.1	11838.7	11792.0
22.5°	11575.3	11611.9	11623.6	11471.9	11448.5
25°	11323.5	11350.2	11291.8	11155.1	11100.0
27.5°	10998.3	11030.0	10921.6	10726.5	10569.8
30°	10683.2	10653.2	10431.4	10054.6	9836.1
32.5°	10321.4	10214.6	9816.1	9295.9	9097.5
35°	9892.8	9669.4	9077.5	8458.8	8292.1
37.5°	9350.9	8942.4	8295.4	7650.1	7398.4
40°	8585.6	8113.7	7513.4	6846.4	6568.0
42.5°	7513.4	7338.3	6841.4	6091.1	5759.3
45°	6182.8	6644.7	6199.5	5472.5	5017.3
47.5°	5292.4	5934.4	5399.1	4873.9	4246.9
50°	4590.4	5032.3	4655.5	4181.9	3683.3
52.5°	4083.5	4216.9	4065.2	3544.9	3261.5
55°	3670.0	3570.0	3531.6	3034.7	2888.0
57.5°	3156.4	3101.4	3003.0	2646.2	2452.8
60°	2561.2	2677.9	2424.4	2322.7	2014.2
62.5°	2104.3	2219.3	1947.6	1940.9	1684.1
65°	1814.2	1787.5	1660.8	1615.7	1505.7
67.5°	1605.7	1522.4	1479.0	1420.6	1382.3
70°	1394.0	1359.0	1280.6	1292.3	1240.6
72.5°	1162.2	1207.2	1128.8	1150.5	1057.1
75°	957.1	1035.5	1028.8	987.1	905.4
77.5°	788.7	872.1	887.1	848.7	782.0
80°	645.3	702.0	705.3	682.0	640.3
82.5°	473.5	506.9	531.9	491.9	465.2
85°	281.8	320.1	330.2	288.5	268.5
87.5°	91.7	128.4	143.4	148.4	150.1
90°	1.7	23.3	46.7	55.0	58.4
92.5°	1.7	6.7	10.0	15.0	16.7
95°	1.7	3.3	5.0	5.0	3.3
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



TEST NUMBER: P860077

CATALOG NUMBER: SPHB-30SE-M-L940-CD

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)