

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P30836

Luminaire Tested: **2GR8-432PB1S-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30836
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8-432PB1S-UNV-EB81
Description: [METALUX 2' X 4' COMMERCIAL TROFFER WITH SILVER PARABOLIC
PB1S, 1/2 X 1/2 X 1/2 SILVER PARABOLIC LOUVER, SHIELDING MEDIA
Light Source: (4) DOUBLE BIPIN T8 LINEAR FLUORESCENT LAMPS 5000K
Ballast/Driver: -
GE432MAX-N/ULTRA

Summary

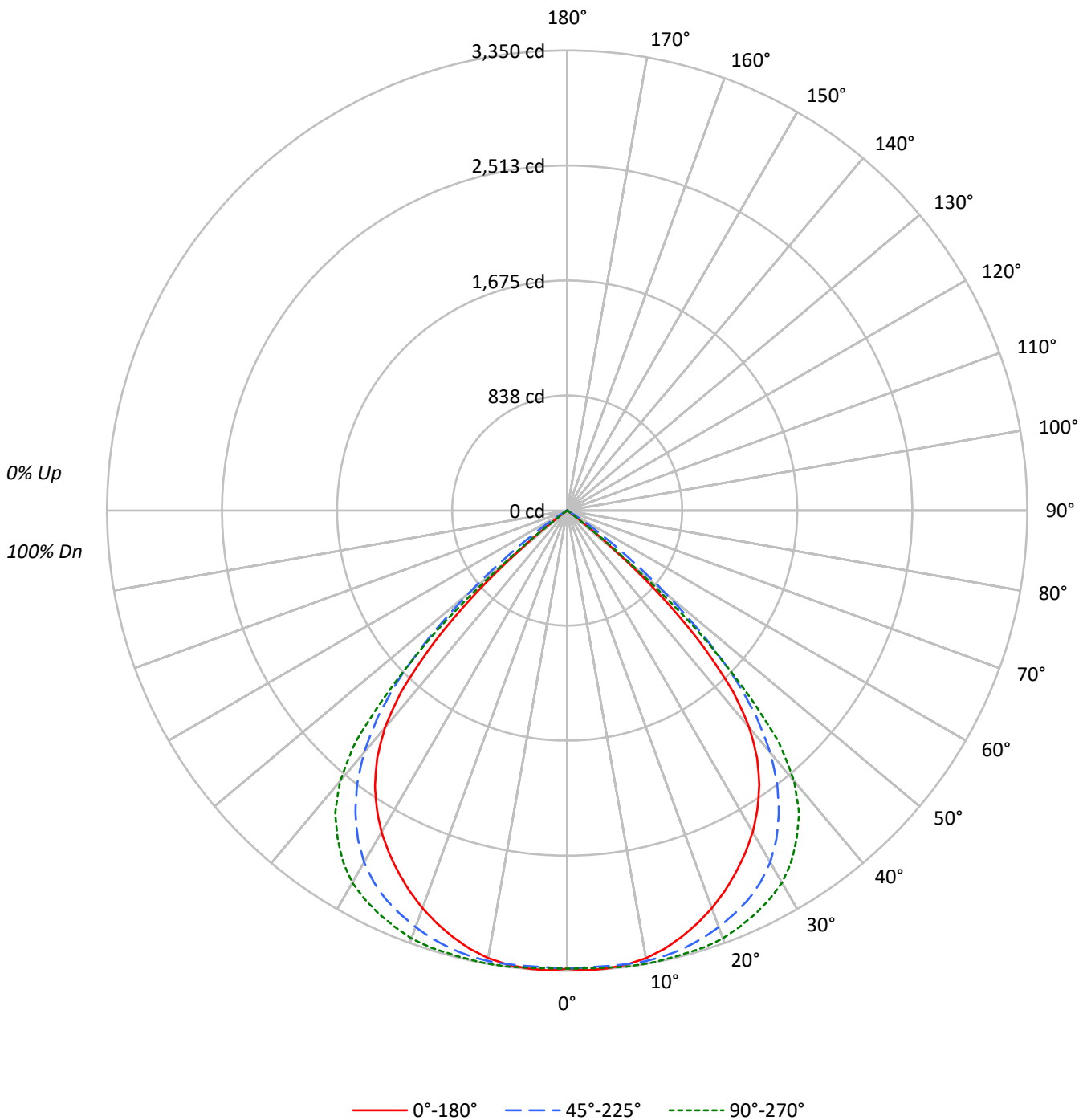
Lumens per Lamp: 3100 (4 lamps)
Luminaire Lumens: 5765.6 lumens
Efficiency: 46.5%
Efficacy: 52.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.36 / 1.29
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 109.5
Input Voltage (V): NR
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: 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				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	55	55	55	55	54	54	54	54	52	52	52	49	49	49	47	47	47	46
1	52	51	50	48	51	50	49	48	48	47	46	46	45	45	45	44	43	43
2	49	47	44	43	48	46	44	42	44	43	41	43	41	40	41	40	39	39
3	46	43	40	38	45	42	39	37	41	39	37	39	38	36	38	37	36	35
4	43	39	36	34	42	38	36	33	37	35	33	36	34	33	35	34	32	31
5	40	36	33	30	40	35	32	30	34	32	30	34	31	29	33	31	29	28
6	38	33	30	27	37	32	29	27	32	29	27	31	29	27	30	28	27	26
7	35	30	27	25	35	30	27	25	29	26	24	29	26	24	28	26	24	23
8	33	28	25	22	33	28	25	22	27	24	22	27	24	22	26	24	22	21
9	31	26	23	21	31	26	23	20	25	22	20	25	22	20	24	22	20	20
10	29	24	21	19	29	24	21	19	23	21	19	23	20	19	23	20	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5351	5351	5351
5°	5389	5362	5380
10°	5390	5426	5457
15°	5339	5477	5543
20°	5259	5509	5659
25°	5145	5529	5736
30°	5006	5477	5796
35°	4778	5263	5706
40°	4321	4820	5383
45°	3184	3919	4044
50°	1203	2304	1490
55°	42	817	34
60°	19	74	16
65°	15	15	11
70°	14	14	9
75°	19	12	6
80°	18	18	9
85°	37	37	18



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	318.0	5.5	2.6	0°	3335	3335	3335	3335	3335	
10°-20°	928.1	16.1	7.5	5°	3346	3331	3329	3330	3340	318
20°-30°	1428.2	24.8	11.5	15°	3214	3238	3297	3328	3337	906
30°-40°	1668.4	28.9	13.5	25°	2906	2986	3123	3226	3240	1338
40°-50°	1232.2	21.4	9.9	35°	2439	2554	2687	2852	2913	1511
50°-60°	181.7	3.2	1.5	45°	1403	1570	1727	1795	1782	1036
60°-70°	4.7	0.1	0.0	55°	15	69	292	49	12	85
70°-80°	2.5	0.0	0.0	65°	4	5	4	4	3	4
80°-90°	1.7	0.0	0.0	75°	3	3	2	2	1	3
90°-100°	0.1	0.0	0.0	85°	2	2	2	1	1	1
100°-110°	0.0	0.0	0.0	90°	1	1	1	1	1	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2674.2	46.4	21.6	165°	0	0	0	0	0	0
0°-40°	4342.6	75.3	35.0	175°	0	0	0	0	0	0
0°-60°	5756.5	99.8	46.4	180°	0	0	0	0	0	0
0°-90°	5765.4	100.0	46.5							
90°-120°	0.1	0.0	0.0							
90°-150°	0.1	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	5765.6	100.0	46.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3335	3335	3335	3335	3335
2.5°	3350	3336	3329	3325	3335
5°	3346	3331	3329	3330	3340
7.5°	3333	3322	3331	3337	3348
10°	3308	3305	3330	3339	3349
12.5°	3268	3277	3318	3337	3344
15°	3214	3238	3297	3328	3337
17.5°	3151	3189	3267	3319	3332
20°	3080	3129	3226	3306	3314
22.5°	2998	3062	3178	3272	3280
25°	2906	2986	3123	3226	3240
27.5°	2809	2901	3050	3172	3191
30°	2702	2802	2956	3094	3128
32.5°	2578	2695	2835	2999	3035
35°	2439	2554	2687	2852	2913
37.5°	2271	2381	2511	2664	2773
40°	2063	2178	2301	2452	2570
42.5°	1790	1916	2041	2172	2275
45°	1403	1570	1727	1795	1782
47.5°	971	1126	1340	1292	1246
50°	482	685	923	793	597
52.5°	126	295	565	326	104
55°	15	69	292	49	12
57.5°	8	9	105	8	6
60°	6	6	23	5	5
62.5°	5	5	6	4	4
65°	4	5	4	4	3
67.5°	4	4	4	3	2
70°	3	4	3	3	2
72.5°	3	3	3	2	2
75°	3	3	2	2	1
77.5°	2	3	2	2	1
80°	2	3	2	2	1
82.5°	2	2	2	2	1
85°	2	2	2	1	1
87.5°	1	2	1	1	1
90°	1	1	1	1	1
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	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
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)