

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: P30821

Luminaire Tested: **2GR8-228T8PB1S-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30821
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8-228T8PB1S-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: (2) DOUBLE BIPIN 28W T8 LINEAR FLUORESCENT LAMPS
Ballast/Driver: (1)GE ELECTRONIC BALLAST
(1)GE232MAX-N/ULTRA

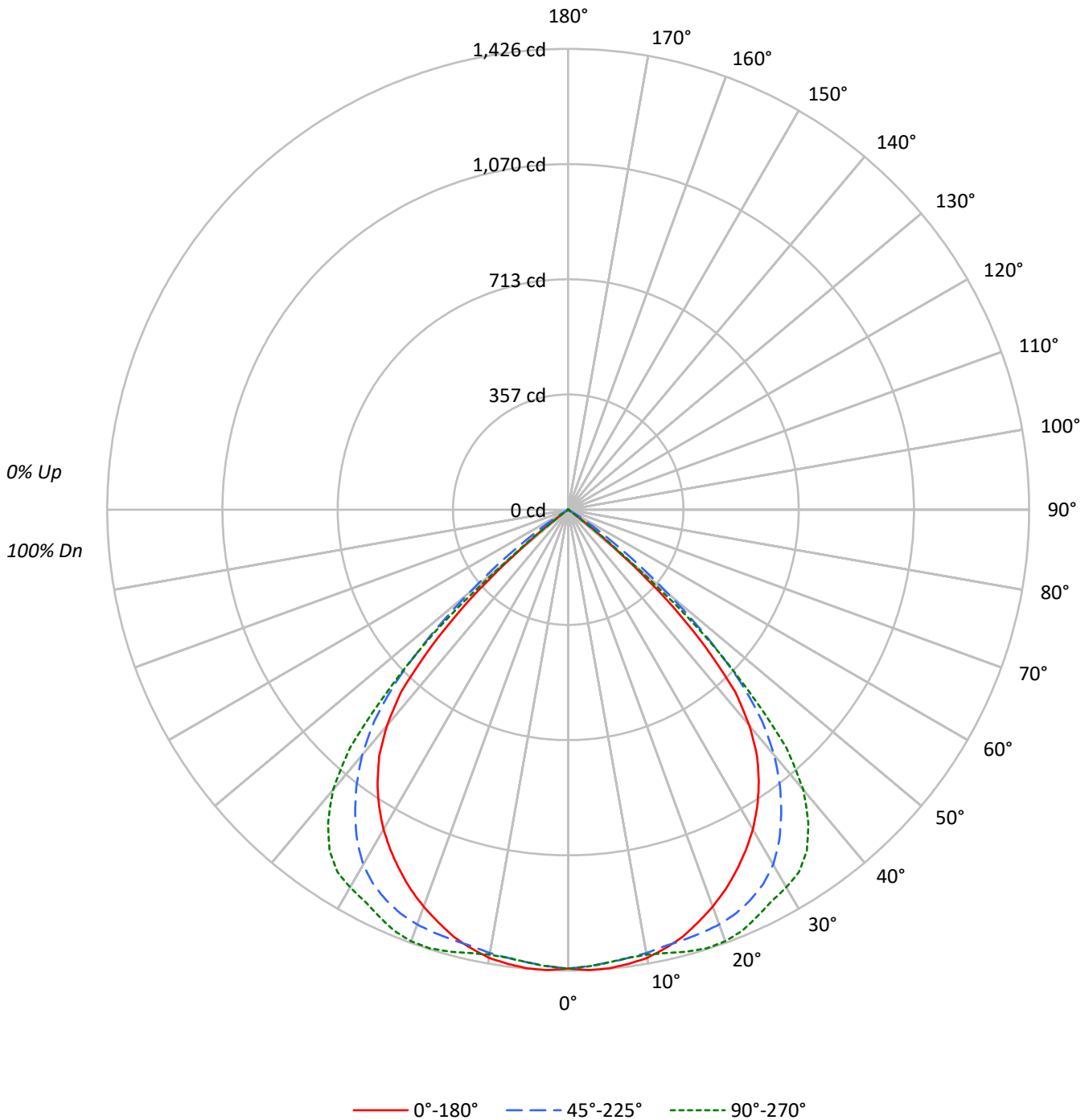
Summary

Lumens per Lamp: 2725 (2 lamps)
Luminaire Lumens: 2466.7 lumens
Efficiency: 45.3%
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.4 / 1.3
Luminous Opening: Rectangular (W 1.88' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 47.3
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	54	54	54	54	53	53	53	53	50	50	50	48	48	48	46	46	46	45
1	51	50	48	47	50	49	47	46	47	46	45	45	44	44	43	43	42	41
2	48	45	43	41	47	44	43	41	43	41	40	42	40	39	40	39	38	37
3	45	41	39	37	44	41	38	36	40	37	36	38	37	35	37	36	35	34
4	42	38	35	33	41	37	35	32	36	34	32	35	33	32	34	33	31	31
5	39	35	32	29	38	34	31	29	33	31	29	33	30	29	32	30	28	28
6	37	32	29	26	36	32	28	26	31	28	26	30	28	26	29	27	26	25
7	34	29	26	24	34	29	26	24	28	26	24	28	25	24	27	25	23	23
8	32	27	24	22	32	27	24	22	26	24	22	26	23	21	25	23	21	21
9	30	25	22	20	30	25	22	20	24	22	20	24	21	20	24	21	20	19
10	29	23	20	18	28	23	20	18	23	20	18	22	20	18	22	20	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2081	2081	2081
5°	2097	2070	2070
10°	2096	2073	2081
15°	2076	2091	2149
20°	2039	2131	2216
25°	1992	2156	2243
30°	1933	2146	2283
35°	1839	2056	2303
40°	1667	1896	2164
45°	1240	1561	1619
50°	486	910	609
55°	23	319	13
60°	9	29	6
65°	7	7	3
70°	9	4	4
75°	6	6	0
80°	8	8	8
85°	17	17	17



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	134.1	5.4	2.5	0°	1420	1420	1420	1420	1420	
10°-20°	391.1	15.9	7.2	5°	1425	1413	1407	1403	1407	135
20°-30°	607.0	24.6	11.1	15°	1368	1358	1378	1405	1416	385
30°-40°	717.2	29.1	13.2	25°	1232	1245	1333	1383	1387	567
40°-50°	533.3	21.6	9.8	35°	1028	1078	1149	1249	1287	638
50°-60°	80.2	3.3	1.5	45°	598	664	753	790	781	442
60°-70°	1.9	0.1	0.0	55°	9	33	125	25	5	40
70°-80°	1.0	0.0	0.0	65°	2	2	2	2	1	2
80°-90°	0.9	0.0	0.0	75°	1	1	1	1	0	1
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	1	1
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1132.2	45.9	20.8							
0°-40°	1849.4	75.0	33.9							
0°-60°	2462.9	99.8	45.2							
0°-90°	2466.7	100.0	45.3							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2466.7	100.0	45.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1420	1420	1420	1420	1420
2.5°	1426	1418	1414	1410	1415
5°	1425	1413	1407	1403	1407
7.5°	1418	1405	1400	1396	1399
10°	1408	1393	1393	1392	1398
12.5°	1390	1378	1383	1395	1405
15°	1368	1358	1378	1405	1416
17.5°	1338	1332	1373	1412	1423
20°	1307	1305	1366	1414	1421
22.5°	1272	1277	1353	1405	1409
25°	1232	1245	1333	1383	1387
27.5°	1189	1213	1306	1358	1365
30°	1142	1178	1268	1328	1349
32.5°	1089	1134	1215	1295	1329
35°	1028	1078	1149	1249	1287
37.5°	960	1009	1076	1178	1220
40°	871	924	991	1078	1131
42.5°	764	812	888	957	999
45°	598	664	753	790	781
47.5°	416	469	579	567	554
50°	213	282	399	354	267
52.5°	67	129	245	149	51
55°	9	33	125	25	5
57.5°	3	5	47	3	3
60°	3	2	10	2	2
62.5°	2	2	2	2	1
65°	2	2	2	2	1
67.5°	2	2	1	1	1
70°	2	1	1	1	1
72.5°	2	1	1	1	1
75°	1	1	1	1	0
77.5°	1	1	1	1	0
80°	1	1	1	1	1
82.5°	1	1	1	1	1
85°	1	1	1	1	1
87.5°	1	1	1	0	0
90°	0	0	0	0	0

(END OF REPORT)