

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: 14322

Luminaire Tested: **2PGX-2BX40S33I**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 14322  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2PGX-2BX40S33I  
Description: 2 X 2 RECESSED FLUORESCENT LUMINAIRE

WHITE INTERIOR AND 4" DEEP 9 CELL SEMI-SPECULAR LOW IRIDESCENT PARABOLIC LOUVER

Light Source: TWO GE 40 WATT BIAX LAMPS

F40BX/SPX35/RS. LUMEN RATING = 6300 LMS.

Ballast/Driver: -

**Summary**

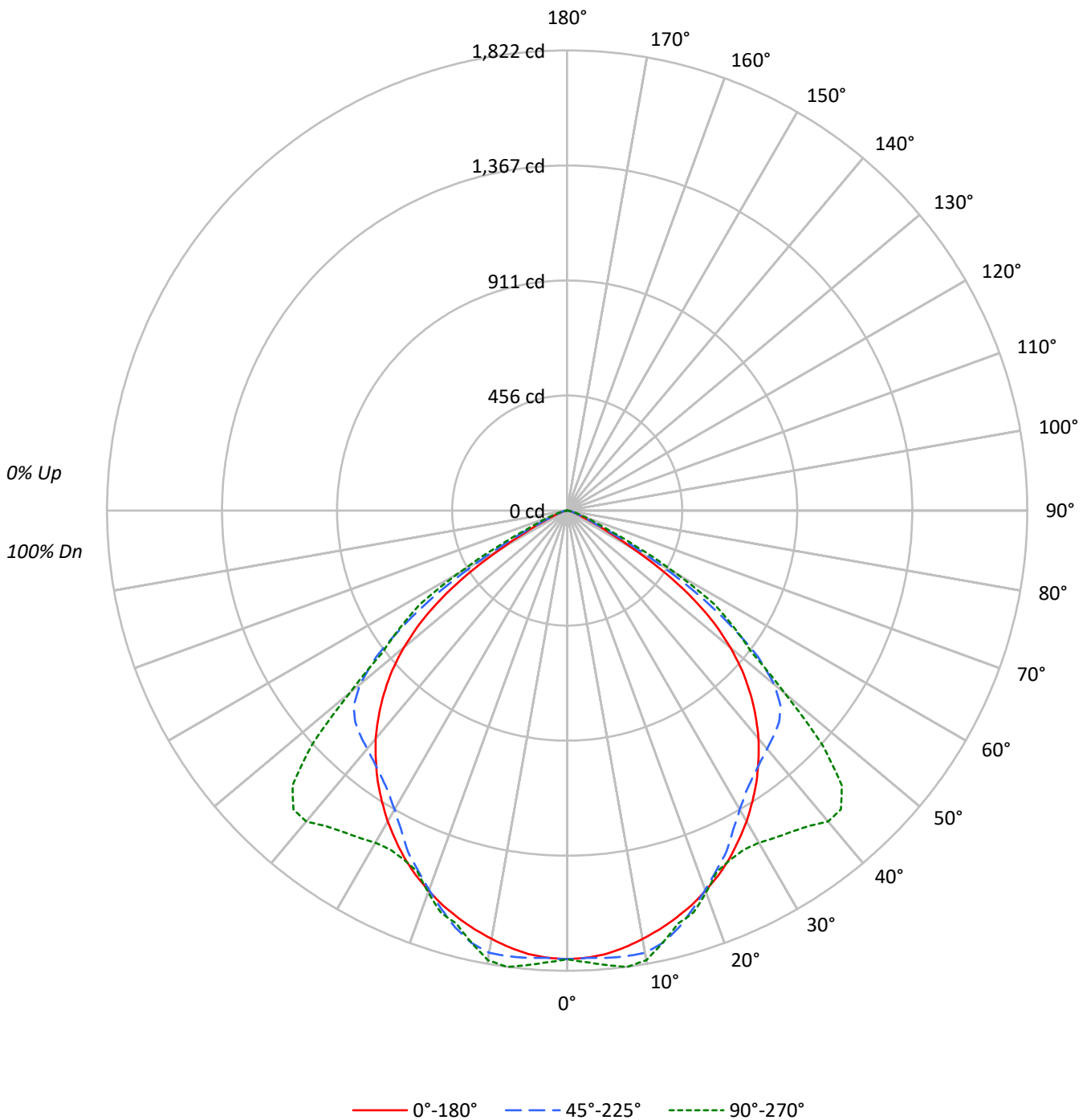
Lumens per Lamp: 6300 (1 lamp)  
Luminaire Lumens: 3979.1 lumens  
Efficiency: 63.2%  
Efficacy: 56.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.33 / 1.39  
Luminous Opening: Rectangular (W 1.75' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 70  
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	75	75	75	75	73	73	73	73	70	70	70		67	67	67		64	64	64	63
1	70	68	66	64	69	67	65	63	64	62	61		61	60	59		59	58	57	56
2	65	61	57	54	63	60	56	54	57	55	52		55	53	51		54	52	50	49
3	60	54	50	47	59	53	49	46	52	48	45		50	47	45		48	46	44	43
4	55	49	44	40	54	48	43	40	46	43	39		45	42	39		44	41	38	37
5	51	44	39	35	50	43	39	35	42	38	35		41	37	34		40	36	34	33
6	47	40	35	31	46	39	34	31	38	34	31		37	33	30		36	33	30	29
7	44	36	31	28	43	36	31	27	35	30	27		34	30	27		33	30	27	26
8	41	33	28	25	40	33	28	25	32	28	24		31	27	24		30	27	24	23
9	38	30	26	22	38	30	25	22	29	25	22		29	25	22		28	25	22	21
10	36	28	23	20	35	28	23	20	27	23	20		27	23	20		26	23	20	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6244	6244	6244
5°	6217	6271	6375
10°	6145	6343	6450
15°	6073	6221	6163
20°	5992	5977	6017
25°	5897	5783	5918
30°	5767	5546	6162
35°	5611	5511	6658
40°	5410	5651	7374
45°	5103	5896	7643
50°	4613	5852	6147
55°	3735	4815	4943
60°	2095	2864	3524
65°	886	1054	1480
70°	446	525	802
75°	296	349	497
80°	208	249	287
85°	125	190	125



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	169.8	4.3	2.7	0°	1776	1776	1776	1776	1776	
10°-20°	478.4	12.0	7.6	5°	1762	1770	1777	1793	1807	167
20°-30°	697.9	17.5	11.1	15°	1669	1706	1710	1686	1694	471
30°-40°	853.8	21.5	13.6	25°	1521	1547	1491	1486	1526	700
40°-50°	923.8	23.2	14.7	35°	1308	1280	1284	1445	1552	816
50°-60°	642.7	16.2	10.2	45°	1027	985	1186	1434	1538	787
60°-70°	176.0	4.4	2.8	55°	610	665	786	747	807	529
70°-80°	31.6	0.8	0.5	65°	106	131	127	173	178	129
80°-90°	5.3	0.1	0.1	75°	22	23	26	32	37	25
90°-100°	0.0	0.0	0.0	85°	3	5	5	3	3	4
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°	1346.1	33.8	21.4							
0°-40°	2199.8	55.3	34.9							
0°-60°	3766.3	94.7	59.8							
0°-90°	3979.1	100.0	63.2							
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°	3979.1	100.0	63.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1776.4	1776.4	1776.4	1776.4	1776.4
2.5°	1772.1	1775.7	1773.2	1779.6	1789.9
5°	1762.2	1770.1	1777.4	1793.3	1807.0
7.5°	1744.7	1759.5	1780.4	1806.7	1822.2
10°	1721.9	1744.6	1777.3	1795.2	1807.3
12.5°	1697.3	1727.6	1753.0	1749.6	1751.6
15°	1669.1	1706.3	1709.7	1686.2	1693.7
17.5°	1638.3	1679.4	1654.2	1643.9	1667.6
20°	1601.9	1641.4	1598.0	1598.8	1608.7
22.5°	1563.8	1598.3	1542.3	1533.7	1547.9
25°	1520.7	1547.1	1491.2	1486.0	1526.1
27.5°	1471.2	1486.4	1423.7	1458.9	1513.7
30°	1420.9	1420.9	1366.6	1443.8	1518.3
32.5°	1365.2	1353.1	1318.4	1441.9	1535.4
35°	1307.8	1279.6	1284.3	1445.3	1551.8
37.5°	1244.4	1203.7	1255.5	1451.4	1573.4
40°	1179.1	1131.2	1231.7	1464.2	1607.2
42.5°	1104.9	1055.2	1210.5	1470.2	1604.8
45°	1026.6	985.2	1186.1	1434.0	1537.6
47.5°	941.9	915.3	1146.7	1326.0	1368.5
50°	843.6	843.4	1070.3	1137.2	1124.2
52.5°	737.2	765.3	953.3	924.5	919.2
55°	609.6	664.6	785.7	747.4	806.7
57.5°	463.6	539.7	604.3	615.9	691.3
60°	298.0	378.2	407.4	452.2	501.3
62.5°	184.4	229.6	242.8	300.2	314.2
65°	106.5	130.7	126.7	173.4	177.9
67.5°	64.5	75.3	74.6	104.6	114.1
70°	43.4	47.6	51.1	69.6	78.0
72.5°	30.5	32.1	35.8	46.4	53.4
75°	21.8	23.4	25.7	32.1	36.6
77.5°	15.0	16.5	17.9	20.6	23.7
80°	10.3	11.9	12.3	13.1	14.2
82.5°	5.9	7.3	8.1	6.9	7.7
85°	3.1	4.7	4.7	3.1	3.1
87.5°	1.0	3.6	1.7	0.5	1.0
90°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)