

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: NEO-RAY

Report Number: BALLABS TEST NO. 12144.0

Luminaire Tested: **S174 1/50BX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12144.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S174 1/50BX
Description: 2/50W BIAX LAMP 1x4'RECESSED GRID LUMINAIRE w/WHITE REFL
Light Source: -
FT50W/2G11/835
Ballast/Driver: ADVANCE BALLAST #ICN-2S54

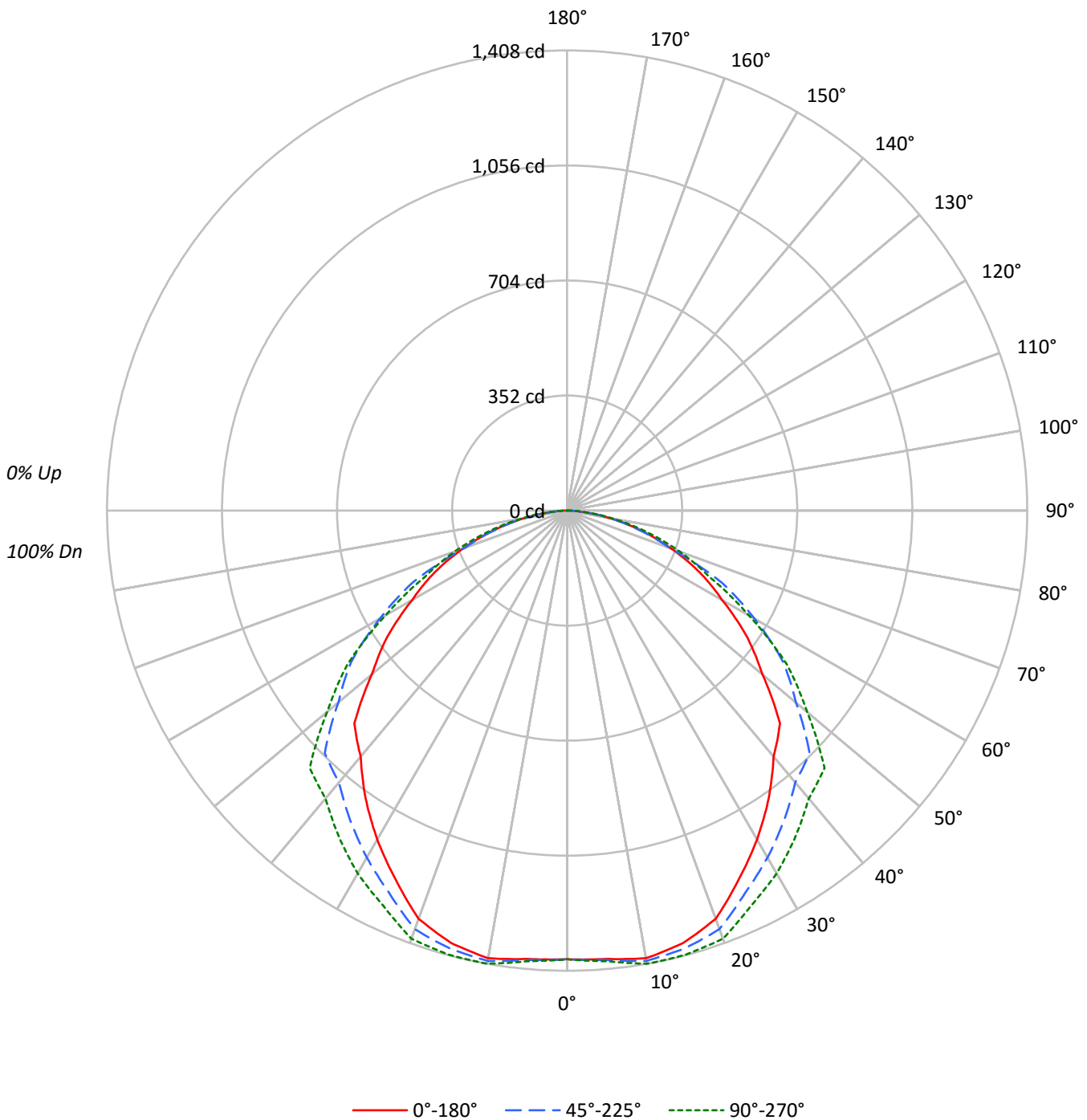
Summary

Lumens per Lamp: 4000 (2 lamps)
Luminaire Lumens: 4112.5 lumens
Efficiency: 51.4%
Efficacy: 39.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.37 / 1.47
Luminous Opening: Rectangular (W 0.91' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 103
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	61	61	61	61	60	60	60	60	57	57	57	55	55	55	52	52	52	51
1	56	54	51	50	55	52	50	49	50	49	47	48	47	46	46	45	44	43
2	51	47	43	40	50	46	43	40	44	41	39	42	40	38	41	39	37	36
3	46	41	37	34	45	40	36	33	39	35	33	37	34	32	36	34	32	30
4	43	36	32	28	41	36	31	28	34	31	28	33	30	27	32	29	27	26
5	39	32	28	24	38	32	28	24	31	27	24	30	26	24	29	26	24	22
6	36	29	25	21	35	29	24	21	28	24	21	27	23	21	26	23	21	20
7	33	26	22	19	33	26	22	19	25	21	19	24	21	18	24	21	18	17
8	31	24	20	17	30	24	20	17	23	19	17	22	19	16	22	19	16	15
9	29	22	18	15	28	22	18	15	21	17	15	21	17	15	20	17	15	14
10	27	20	16	14	27	20	16	14	20	16	13	19	16	13	19	16	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4164	4164	4164
5°	4193	4202	4214
10°	4284	4309	4337
15°	4302	4355	4415
20°	4290	4399	4500
25°	4163	4317	4461
30°	4070	4294	4490
35°	3980	4284	4510
40°	3892	4300	4553
45°	3951	4500	4778
50°	3681	4313	4525
55°	3548	4267	4342
60°	3324	4016	3895
65°	3208	3754	3452
70°	2997	2944	3246
75°	2719	2660	2930
80°	2271	2288	2498
85°	1496	1775	1914



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	132.4	3.2	1.7
10°-20°	392.0	9.5	4.9
20°-30°	596.4	14.5	7.5
30°-40°	721.6	17.5	9.0
40°-50°	779.6	19.0	9.7
50°-60°	687.7	16.7	8.6
60°-70°	485.7	11.8	6.1
70°-80°	254.7	6.2	3.2
80°-90°	62.5	1.5	0.8
90°-100°	0.0	0.0	0.0
100°-110°	0.0	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°	1120.7	27.3	14.0
0°-40°	1842.3	44.8	23.0
0°-60°	3309.6	80.5	41.4
0°-90°	4112.5	100.0	51.4
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°	4112.5	100.0	51.4

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1377	1379	1380	1383	1384	132
15°	1370	1376	1387	1400	1406	386
25°	1244	1259	1290	1322	1333	574
35°	1075	1101	1157	1202	1218	673
45°	921	968	1049	1098	1114	696
55°	671	731	807	823	821	597
65°	447	503	523	467	481	441
75°	232	248	227	244	250	246
85°	43	48	51	52	55	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1373	1373	1373	1373	1373
5°	1377	1379	1380	1383	1384
10°	1391	1394	1399	1406	1408
15°	1370	1376	1387	1400	1406
20°	1329	1340	1363	1385	1394
25°	1244	1259	1290	1322	1333
30°	1162	1182	1226	1268	1282
35°	1075	1101	1157	1202	1218
40°	983	1017	1086	1135	1150
45°	921	968	1049	1098	1114
50°	780	834	914	951	959
55°	671	731	807	823	821
60°	548	607	662	650	642
65°	447	503	523	467	481
70°	338	381	332	359	366
75°	232	248	227	244	250
80°	130	112	131	139	143
85°	43	48	51	52	55
90°	0	0	0	0	0

(END OF REPORT)