

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. 12143.0

Luminaire Tested: **S174 1/40BX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12143.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S174 1/40BX
Description: 2/40W BIAX LAMP 1x4'RECESSED GRID LUMINAIRE w/WHITE REFL
Light Source: -
FT40W/2G11/835
Ballast/Driver: UNIVERSAL BALLAST #C240PUNVHP-B

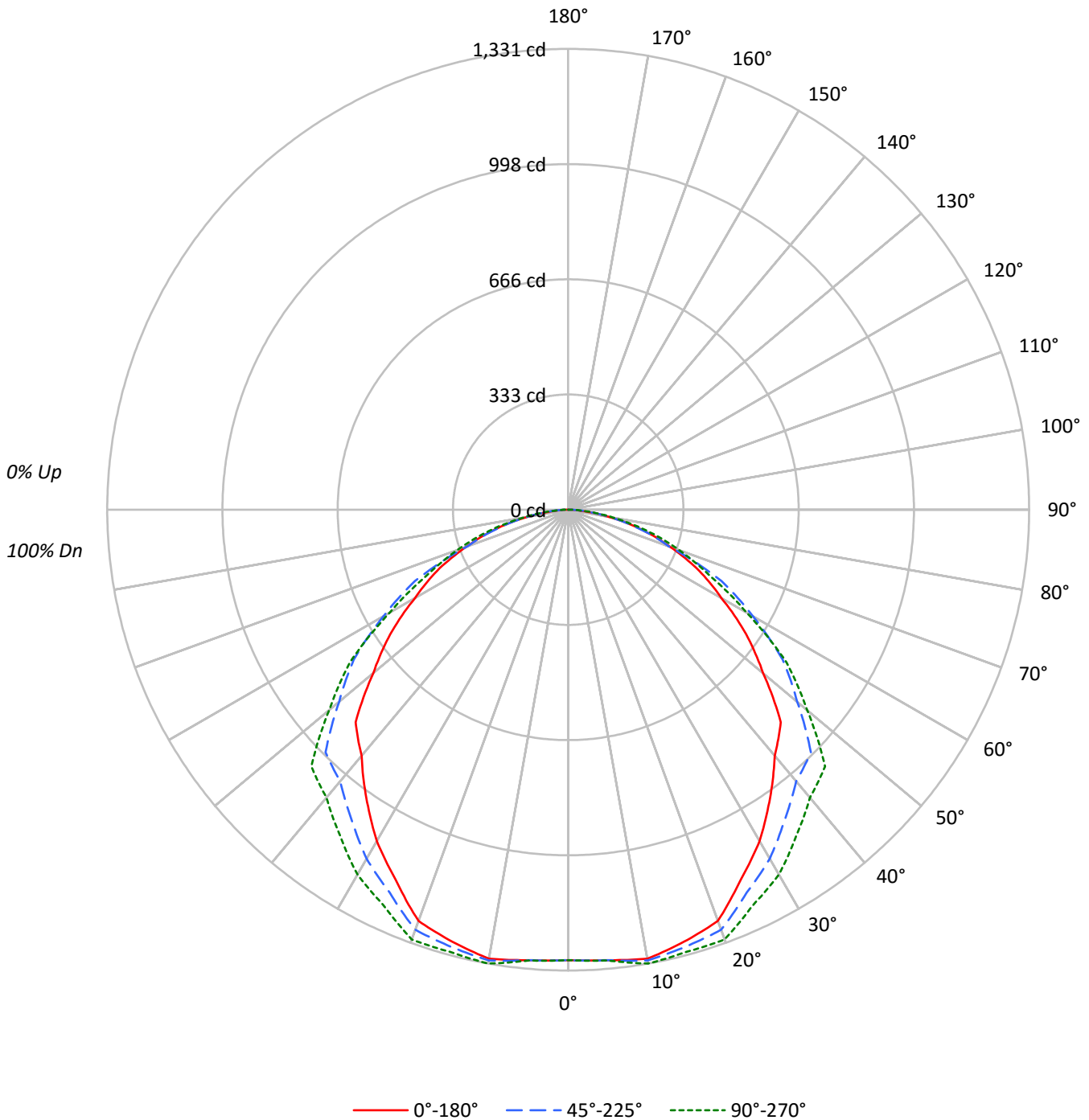
Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 3869.1 lumens
Efficiency: 61.4%
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.37 / 1.46
Luminous Opening: Rectangular (W 0.91' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 69
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	73	73	73	73	71	71	71	71	68	68	68	65	65	65	63	63	63	61
1	67	64	62	59	65	63	60	58	60	58	56	58	56	55	55	54	53	52
2	61	56	52	48	59	55	51	48	53	49	47	51	48	46	49	47	45	43
3	56	49	44	40	54	48	44	40	46	42	39	45	41	38	43	40	38	36
4	51	44	38	34	49	43	38	34	41	37	33	40	36	33	38	35	32	31
5	47	39	33	29	45	38	33	29	37	32	29	36	32	28	35	31	28	27
6	43	35	29	26	42	34	29	25	33	29	25	32	28	25	31	28	25	23
7	40	32	26	22	39	31	26	22	30	26	22	29	25	22	28	25	22	21
8	37	29	24	20	36	28	23	20	28	23	20	27	23	20	26	22	20	18
9	35	26	21	18	34	26	21	18	25	21	18	25	21	18	24	20	18	17
10	33	24	20	16	32	24	19	16	23	19	16	23	19	16	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3946	3946	3946
5°	3976	3976	3979
10°	4056	4072	4099
15°	4057	4104	4151
20°	4080	4167	4264
25°	3946	4083	4220
30°	3870	4077	4262
35°	3762	4040	4254
40°	3674	4054	4300
45°	3723	4251	4500
50°	3468	4072	4252
55°	3316	3998	4072
60°	3100	3737	3609
65°	3000	3502	3237
70°	2776	2749	3015
75°	2543	2496	2766
80°	2096	2114	2306
85°	1357	1636	1740



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	125.2	3.2	2.0
10°-20°	370.0	9.6	5.9
20°-30°	564.6	14.6	9.0
30°-40°	681.5	17.6	10.8
40°-50°	734.9	19.0	11.7
50°-60°	644.5	16.7	10.2
60°-70°	453.1	11.7	7.2
70°-80°	237.6	6.1	3.8
80°-90°	57.6	1.5	0.9
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°	1059.8	27.4	16.8
0°-40°	1741.3	45.0	27.6
0°-60°	3120.8	80.7	49.5
0°-90°	3869.1	100.0	61.4
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°	3869.1	100.0	61.4

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1306	1305	1306	1306	1307	125
15°	1292	1295	1307	1317	1322	365
25°	1179	1190	1220	1247	1261	545
35°	1016	1038	1091	1132	1149	637
45°	868	912	991	1036	1049	656
55°	627	685	756	771	770	559
65°	418	471	488	437	451	411
75°	217	232	213	231	236	229
85°	39	43	47	49	50	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1301	1301	1301	1301	1301
5°	1306	1305	1306	1306	1307
10°	1317	1317	1322	1326	1331
15°	1292	1295	1307	1317	1322
20°	1264	1269	1291	1311	1321
25°	1179	1190	1220	1247	1261
30°	1105	1123	1164	1201	1217
35°	1016	1038	1091	1132	1149
40°	928	958	1024	1069	1086
45°	868	912	991	1036	1049
50°	735	786	863	894	901
55°	627	685	756	771	770
60°	511	567	616	608	595
65°	418	471	488	437	451
70°	313	352	310	331	340
75°	217	232	213	231	236
80°	120	103	121	129	132
85°	39	43	47	49	50
90°	0	0	0	0	0

(END OF REPORT)