

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. 12072.0

Luminaire Tested: **S252 1/40BX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12072.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S252 1/40BX
Description: 1/40W BIAX LAMP 2x2'RECESSED GRID LUMINAIRE
Light Source: -
FT40W/2G11/835
Ballast/Driver: UNIVERSAL BALLAST #C240SI120RH WATTS=41 REFL=94%

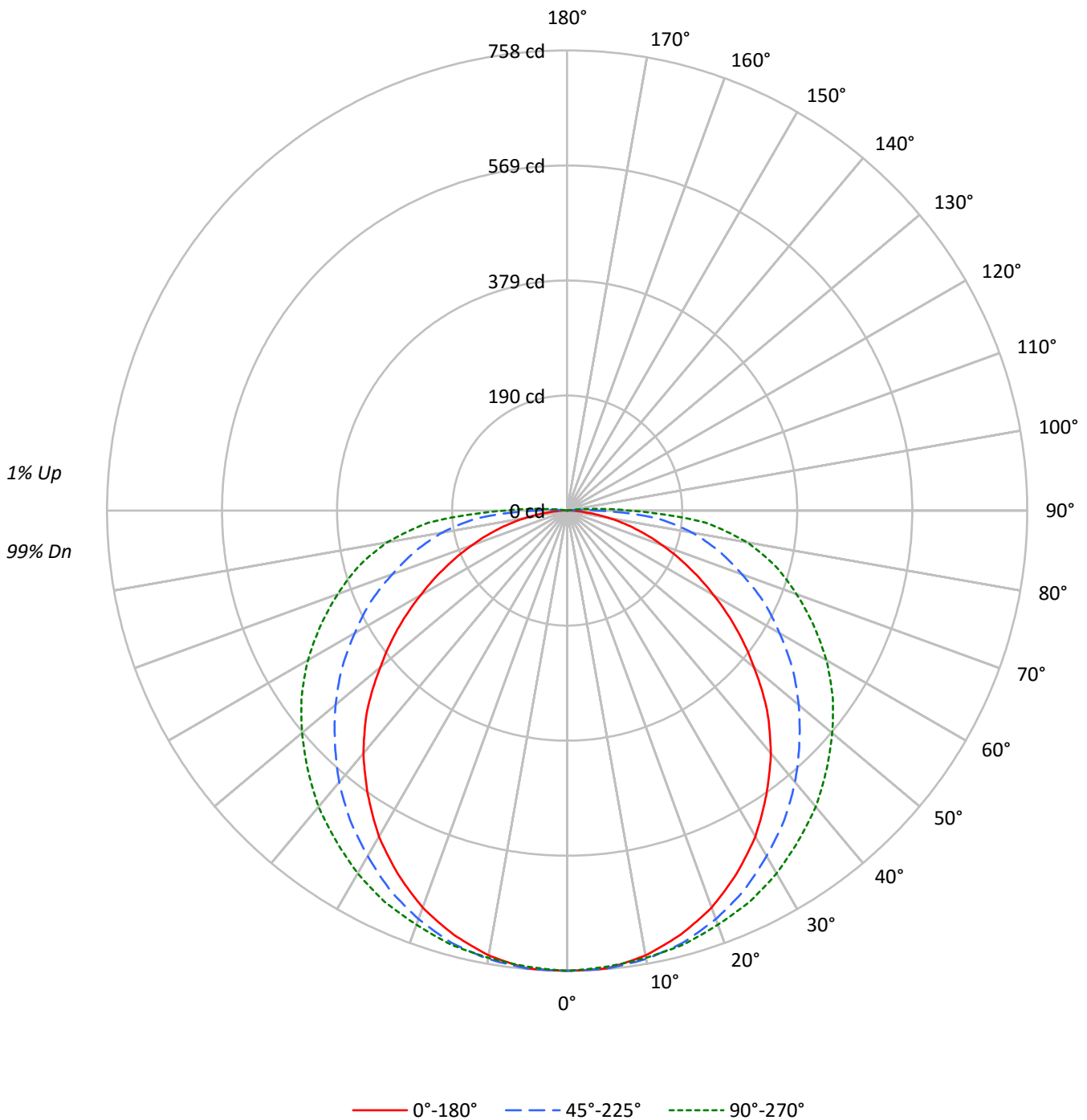
Summary

Lumens per Lamp: 3150 (1 lamp)
Luminaire Lumens: 2558.5 lumens
Efficiency: 81.2%
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 1.96' x H: 0.15')
CIE Type: Direct

Input Watts (W): 41
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	97	97	97	97	94	94	94	94	90	90	90		86	86	86		82	82	82	81
1	86	82	78	74	84	80	76	73	76	73	70		73	70	68		70	68	66	64
2	78	70	64	59	76	69	63	58	66	61	56		63	59	55		60	57	54	52
3	71	61	54	48	68	60	53	48	57	51	47		55	50	46		53	48	45	43
4	64	54	46	40	62	53	45	40	50	44	39		48	43	39		47	42	38	36
5	59	48	40	34	57	47	40	34	45	39	34		43	38	33		42	37	33	31
6	54	43	35	30	53	42	35	30	41	34	29		39	33	29		38	33	29	27
7	50	39	31	26	49	38	31	26	37	30	26		36	30	26		34	29	25	24
8	47	35	28	23	46	35	28	23	34	27	23		33	27	23		32	26	23	21
9	44	32	26	21	43	32	25	21	31	25	21		30	24	20		29	24	20	19
10	41	30	23	19	40	29	23	19	29	23	19		28	22	19		27	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2214	2207	2204
10°	2186	2191	2197
15°	2152	2174	2200
20°	2114	2150	2203
25°	2063	2125	2220
30°	2012	2094	2236
35°	1946	2073	2254
40°	1880	2050	2289
45°	1798	2025	2324
50°	1684	2013	2379
55°	1575	2007	2456
60°	1449	1996	2547
65°	1322	2017	2663
70°	1188	2024	2839
75°	1037	2092	3125
80°	819	2190	3525
85°	472	2261	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	71.9	2.8	2.3
10°-20°	207.0	8.1	6.6
20°-30°	316.8	12.4	10.1
30°-40°	388.5	15.2	12.3
40°-50°	415.0	16.2	13.2
50°-60°	397.7	15.5	12.6
60°-70°	341.5	13.3	10.8
70°-80°	259.6	10.1	8.2
80°-90°	142.0	5.5	4.5
90°-100°	18.5	0.7	0.6
100°-110°	0.1	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°	595.6	23.3	18.9
0°-40°	984.1	38.5	31.2
0°-60°	1796.8	70.2	57.0
0°-90°	2539.9	99.3	80.6
90°-120°	18.7	0.7	0.6
90°-150°	18.7	0.7	0.6
90°-180°	19.0	0.7	0.6
0°-180°	2558.5	100.0	81.2

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	757	755	757	755	754	72
15°	723	725	737	738	740	204
25°	660	667	690	705	711	304
35°	572	587	623	654	664	358
45°	466	489	541	584	604	358
55°	341	378	453	511	534	305
65°	221	263	358	422	448	220
75°	117	162	259	328	356	124
85°	26	72	150	207	229	31
90°	1	13	48	76	101	4
95°	0	3	8	18	23	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758	758	758	758	758
5°	757	755	757	755	754
10°	744	744	750	749	748
15°	723	725	737	738	740
20°	696	704	716	722	726
25°	660	667	690	705	711
30°	620	631	657	680	690
35°	572	587	623	654	664
40°	522	539	584	623	637
45°	466	489	541	584	604
50°	402	433	498	549	570
55°	341	378	453	511	534
60°	279	322	404	468	493
65°	221	263	358	422	448
70°	167	211	306	376	402
75°	117	162	259	328	356
80°	69	116	209	273	301
85°	26	72	150	207	229
90°	1	13	48	76	101
95°	0	3	8	18	23
100°	0	0	1	1	0
105°	0	0	0	0	0
110°	0	0	0	0	0
115°	0	0	0	0	0
120°	0	0	0	0	0
125°	0	0	0	0	0
130°	0	0	0	0	0
135°	0	0	0	0	0
140°	0	0	0	0	0
145°	0	0	0	0	0
150°	0	0	0	0	0
155°	0	0	0	0	0
160°	0	0	0	0	0
165°	0	0	0	0	0
170°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)