

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. 11728.0

Luminaire Tested: **301IP/4BX55**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 11728.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 301IP/4BX55
Description: 4/55W BIAX LAMP 2'DIR/INDIRECT PENDANT MNT LUMINAIRE
WHITE STRIP WIREWAY ASSEMBLY w/WHITE PERF BASKET & OVERLAY
Light Source: -
FT55W/2G11/835
Ballast/Driver: -
2 UNIVERSAL BALLAST #B254PUNV-D WATTS=221

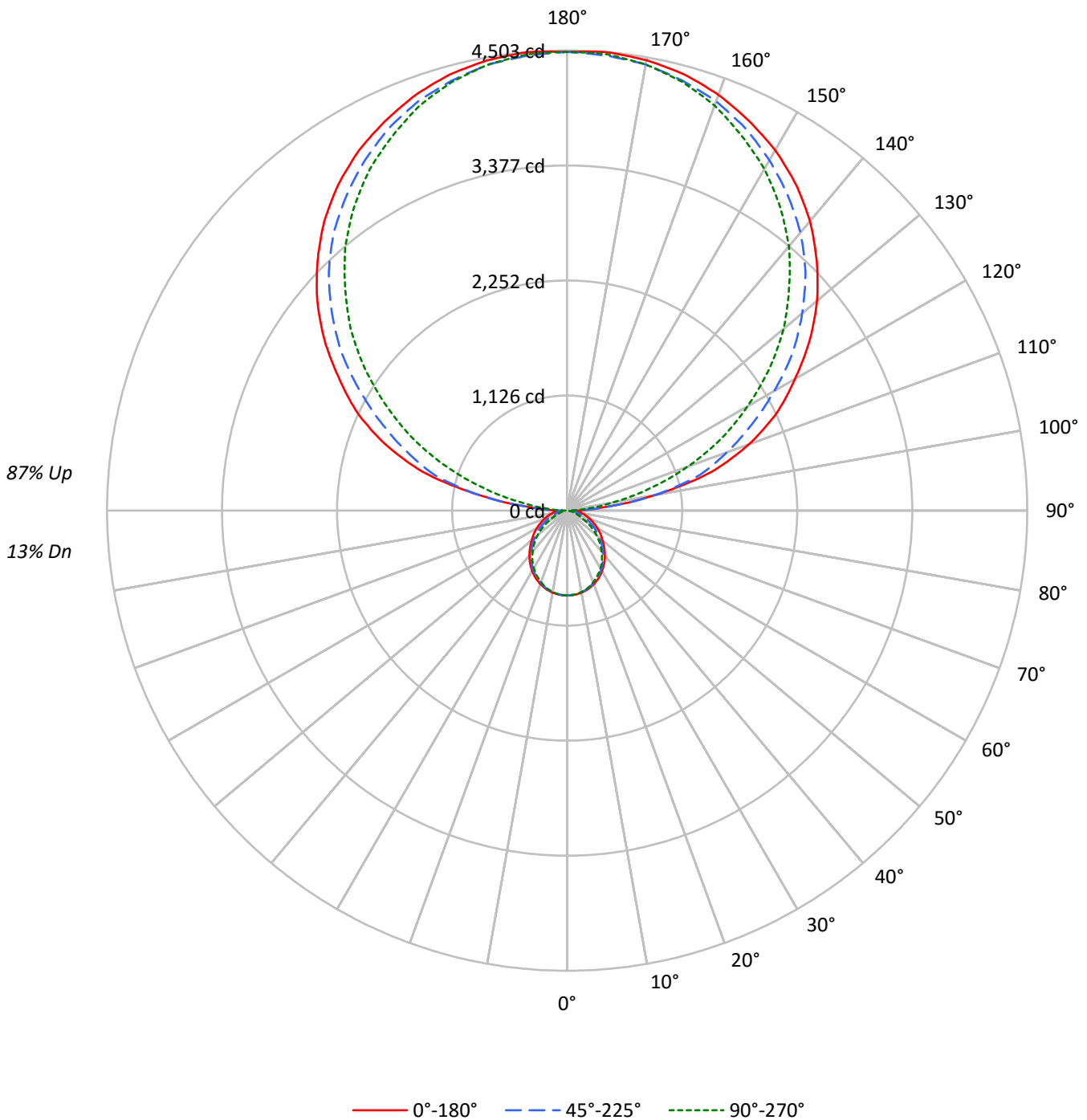
Summary

Lumens per Lamp: 4800 (4 lamps)
Luminaire Lumens: 16593.9 lumens
Efficiency: 86.4%
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.18 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 1.84' x H: 0.38')
CIE Type: Semi-Indirect

Input Watts (W): 221
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	85	85	85	85	74	74	74	74	54	54	54	36	36	36	19	19	19	11
1	77	74	71	68	67	64	62	60	47	46	44	31	30	29	17	16	16	9
2	70	64	59	55	61	56	52	49	41	39	36	27	26	25	15	14	13	8
3	64	56	51	46	56	49	45	41	36	33	31	24	22	21	13	12	11	7
4	59	50	43	39	51	44	38	34	32	29	26	22	19	18	12	11	10	6
5	54	44	38	33	47	39	33	29	29	25	22	19	17	15	10	9	8	5
6	49	39	33	28	43	35	29	25	26	22	19	17	15	13	9	8	7	4
7	45	35	29	24	39	31	26	22	23	19	17	16	13	12	9	7	7	4
8	42	32	26	21	36	28	23	19	21	17	15	14	12	10	8	7	6	3
9	39	29	23	19	34	26	20	17	19	15	13	13	11	9	7	6	5	3
10	36	26	21	17	32	23	18	15	17	14	11	12	10	8	7	5	5	3

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2906	2906	2906
5°	2860	2828	2847
10°	2801	2737	2770
15°	2737	2646	2684
20°	2658	2524	2573
25°	2573	2414	2455
30°	2475	2296	2337
35°	2365	2148	2197
40°	2245	1997	2015
45°	2111	1832	1835
50°	1982	1661	1615
55°	1878	1475	1372
60°	1761	1309	1078
65°	1639	1130	799
70°	1563	944	614
75°	1461	756	463
80°	1367	623	284
85°	1354	522	146



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	78.5	0.5	0.4
10°-20°	222.6	1.3	1.2
20°-30°	329.3	2.0	1.7
30°-40°	381.9	2.3	2.0
40°-50°	372.6	2.2	1.9
50°-60°	310.8	1.9	1.6
60°-70°	219.6	1.3	1.1
70°-80°	130.9	0.8	0.7
80°-90°	70.0	0.4	0.4
90°-100°	391.0	2.4	2.0
100°-110°	1284.6	7.7	6.7
110°-120°	1960.1	11.8	10.2
120°-130°	2387.8	14.4	12.4
130°-140°	2530.2	15.2	13.2
140°-150°	2359.1	14.2	12.3
150°-160°	1904.3	11.5	9.9
160°-170°	1234.4	7.4	6.4
170°-180°	426.3	2.6	2.2
0°-30°	630.3	3.8	3.3
0°-40°	1012.3	6.1	5.3
0°-60°	1695.7	10.2	8.8
0°-90°	2116.2	12.8	11.0
90°-120°	3635.7	21.9	18.9
90°-150°	10912.8	65.8	56.8
90°-180°	14478.0	87.2	75.4
0°-180°	16593.9	100.0	86.4

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	828	829	826	829	826	79
15°	796	796	789	787	785	224
25°	729	726	713	707	702	336
35°	632	626	609	595	595	395
45°	513	505	482	462	454	396
55°	397	381	346	316	297	355
65°	284	267	225	175	143	284
75°	190	168	119	73	63	202
85°	112	95	58	29	13	99
90°	86	72	44	25	16	86
95°	341	329	346	316	174	442
105°	1464	1430	1342	1024	840	1502
115°	2265	2179	1992	1779	1663	2229
125°	2897	2842	2695	2505	2413	2589
135°	3455	3400	3299	3153	3072	2668
145°	3901	3864	3765	3686	3632	2442
155°	4208	4179	4128	4076	4045	1943
165°	4420	4396	4356	4341	4343	1249
175°	4503	4487	4468	4472	4481	429
180°	4488	4488	4488	4488	4488	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	830	830	830	830	830
5°	828	829	826	829	826
10°	816	817	811	812	810
15°	796	796	789	787	785
20°	766	763	752	750	747
25°	729	726	713	707	702
30°	684	680	667	655	653
35°	632	626	609	595	595
40°	575	566	548	536	524
45°	513	505	482	462	454
50°	452	442	415	386	376
55°	397	381	346	316	297
60°	340	321	285	240	214
65°	284	267	225	175	143
70°	238	215	169	113	97
75°	190	168	119	73	63
80°	146	126	84	47	32
85°	112	95	58	29	13
90°	86	72	44	25	16
95°	341	329	346	316	174
100°	869	850	878	668	451
105°	1464	1430	1342	1024	840
110°	1893	1872	1660	1411	1254
115°	2265	2179	1992	1779	1663
120°	2573	2514	2340	2149	2037
125°	2897	2842	2695	2505	2413
130°	3193	3142	3003	2839	2764
135°	3455	3400	3299	3153	3072
140°	3697	3646	3552	3442	3376
145°	3901	3864	3765	3686	3632
150°	4072	4035	3958	3891	3860
155°	4208	4179	4128	4076	4045
160°	4330	4308	4261	4228	4218
165°	4420	4396	4356	4341	4343
170°	4474	4456	4431	4425	4432
175°	4503	4487	4468	4472	4481
180°	4488	4488	4488	4488	4488

(END OF REPORT)