

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. 14770.0

Luminaire Tested: **234ISL-3T5 ALL LAMPS ON**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 14770.0
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 234ISL-3T5 ALL LAMPS ON
Description: 3/28W T5 LAMP 2a4'DIRECT RECESSED LUMINAIRE w/WHITE REFL
PERF DIFFUSER/OVERLAY w/OPEN CENTER 3.6"WHITE BLADE BAFFLE
LUTRON #ECO-T528-277-1 & ECO-T528-277-2 WATTS=95
Light Source: -
FP28T5/835
Ballast/Driver: -

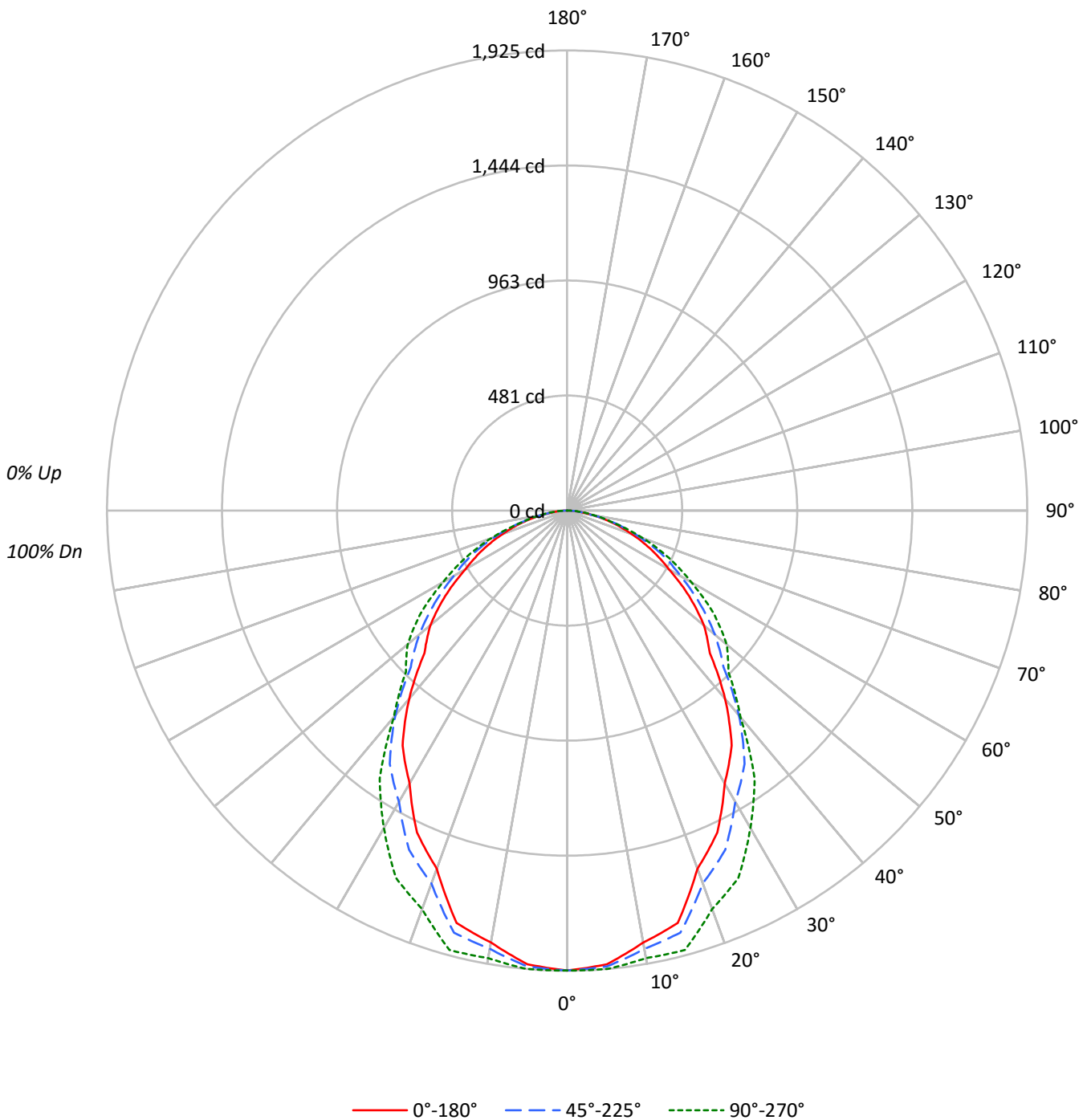
Summary

Lumens per Lamp: 2900 (3 lamps)
Luminaire Lumens: 4231.8 lumens
Efficiency: 48.6%
Efficacy: 44.5 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.19 / 1.21
Luminous Opening: Rectangular (W 1.94' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 95
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

TEST NUMBER: BALLABS TEST NO. 14770.0
CATALOG NUMBER: 234ISL-3T5 ALL LAMPS ON

Luminous Intensity Polar Plot





TEST NUMBER: BALLABS TEST NO. 14770.0
 CATALOG NUMBER: 234ISL-3T5 ALL LAMPS ON

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	58	58	58	58	57	57	57	57	54	54	54	52	52	52	50	50	50	49
1	53	51	49	48	52	50	48	47	48	47	45	46	45	44	44	44	43	42
2	49	45	42	39	48	44	41	39	43	40	38	41	39	37	40	38	36	35
3	45	40	36	33	44	39	36	33	38	35	32	37	34	32	35	33	31	30
4	41	36	32	29	40	35	31	28	34	31	28	33	30	28	32	29	27	26
5	38	32	28	25	37	32	28	25	31	27	25	30	27	24	29	26	24	23
6	35	29	25	22	34	29	25	22	28	24	22	27	24	22	26	24	21	20
7	33	27	23	20	32	26	22	20	26	22	19	25	22	19	24	21	19	18
8	31	24	20	18	30	24	20	18	23	20	18	23	20	17	22	19	17	16
9	29	23	19	16	28	22	19	16	22	18	16	21	18	16	21	18	16	15
10	27	21	17	15	26	21	17	15	20	17	15	20	17	15	19	16	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2728	2728	2728
5°	2712	2724	2740
10°	2642	2681	2737
15°	2622	2683	2794
20°	2405	2505	2677
25°	2325	2449	2652
30°	2158	2304	2510
35°	2077	2240	2366
40°	1903	2069	2088
45°	1692	1855	1913
50°	1648	1780	1921
55°	1538	1674	1847
60°	1392	1554	1702
65°	1309	1480	1580
70°	1190	1327	1401
75°	1057	1161	1123
80°	857	849	947
85°	667	732	781



TEST NUMBER: BALLABS TEST NO. 14770.0
 CATALOG NUMBER: 234ISL-3T5 ALL LAMPS ON

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	181.0	4.3	2.1
10°-20°	508.2	12.0	5.8
20°-30°	718.2	17.0	8.3
30°-40°	795.6	18.8	9.1
40°-50°	715.9	16.9	8.2
50°-60°	606.9	14.3	7.0
60°-70°	430.8	10.2	5.0
70°-80°	221.2	5.2	2.5
80°-90°	54.0	1.3	0.6
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°	1407.5	33.3	16.2
0°-40°	2203.1	52.1	25.3
0°-60°	3525.8	83.3	40.5
0°-90°	4231.8	100.0	48.6
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°	4231.8	100.0	48.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1905	1906	1914	1922	1925	180
15°	1786	1795	1828	1872	1903	493
25°	1486	1502	1565	1640	1695	678
35°	1200	1225	1294	1350	1367	743
45°	844	868	925	926	954	668
55°	622	645	677	717	747	555
65°	390	417	441	461	471	386
75°	193	211	212	197	205	205
85°	41	40	45	46	48	51
90°	0	0	0	0	0	



TEST NUMBER: BALLABS TEST NO. 14770.0
CATALOG NUMBER: 234ISL-3T5 ALL LAMPS ON

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924	1924	1924	1924	1924
5°	1905	1906	1914	1922	1925
10°	1835	1840	1862	1886	1901
15°	1786	1795	1828	1872	1903
20°	1594	1608	1660	1725	1774
25°	1486	1502	1565	1640	1695
30°	1318	1339	1407	1479	1533
35°	1200	1225	1294	1350	1367
40°	1028	1056	1118	1135	1128
45°	844	868	925	926	954
50°	747	766	807	836	871
55°	622	645	677	717	747
60°	491	518	548	578	600
65°	390	417	441	461	471
70°	287	308	320	334	338
75°	193	211	212	197	205
80°	105	116	104	112	116
85°	41	40	45	46	48
90°	0	0	0	0	0

(END OF REPORT)