

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. 10649.0

Luminaire Tested: **CATALOG NO. : 601IP/2T5HO**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 10649.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: CATALOG NO. : 601IP/2T5HO  
Description: 2/54W T5HO 4'DIR/INDIRECT PENDANT w/ PERF BODY & OVERLAY  
Light Source: -  
LAMP CODE : FP54T5/835  
Ballast/Driver: -

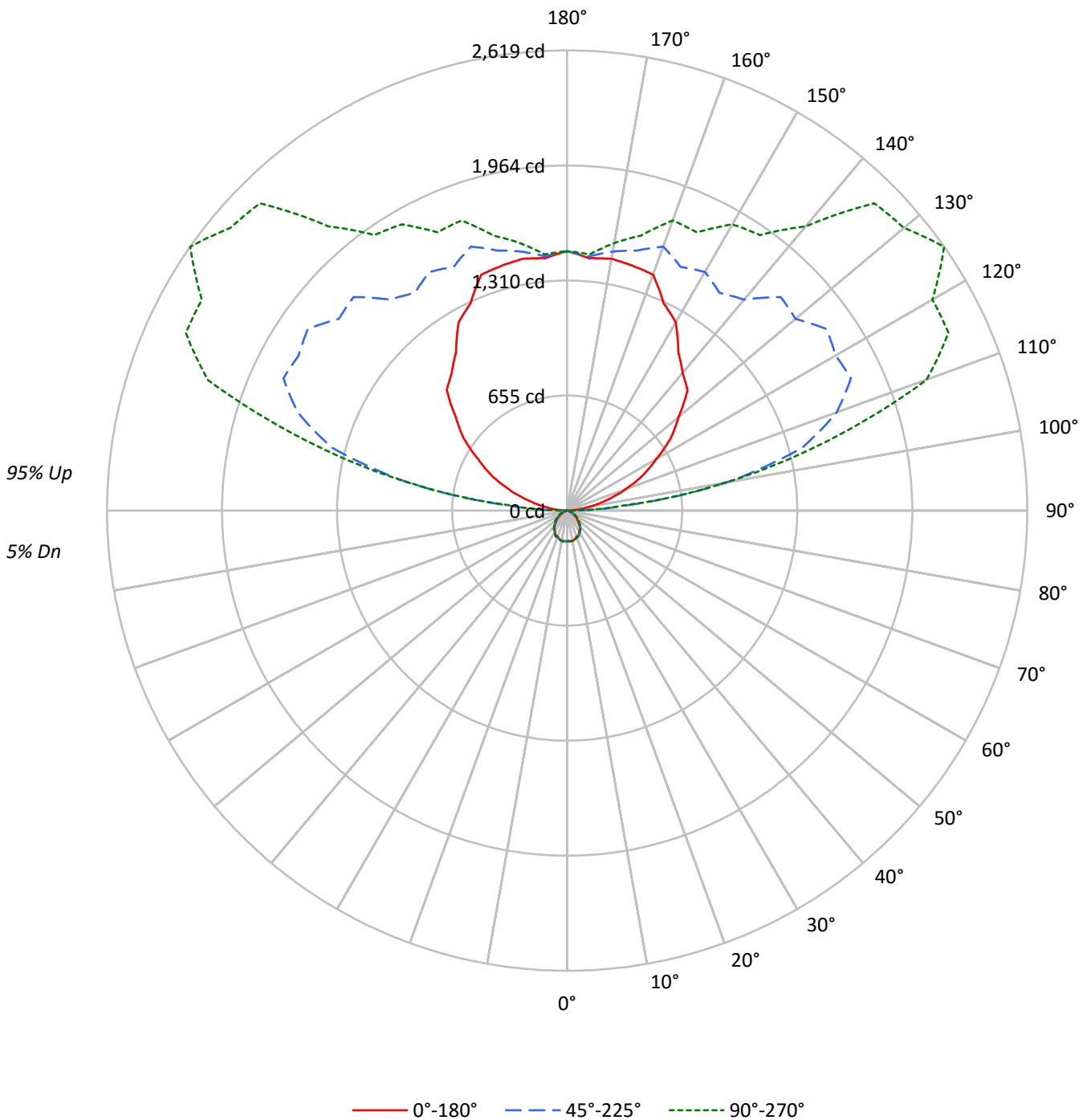
**Summary**

Lumens per Lamp: 5000 (2 lamps)  
Luminaire Lumens: 8598.1 lumens  
Efficiency: 86.0%  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.69' x L: 3.84' x H: 0.06')  
CIE Type: Indirect

Input Watts (W): 120  
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	83	83	83	83	71	71	71	71	50	50	50	30	30	30	12	12	12	4
1	75	72	69	66	65	62	60	57	44	42	41	27	26	25	11	11	10	3
2	69	63	58	54	59	54	50	47	38	36	34	23	22	21	10	9	9	3
3	63	55	49	45	54	48	43	39	34	31	28	21	19	18	9	8	8	3
4	57	49	42	38	49	42	37	33	30	27	24	18	17	15	8	7	6	2
5	52	43	37	32	45	37	32	28	26	23	20	16	14	13	7	6	6	2
6	48	38	32	27	41	33	28	24	24	20	18	15	13	11	6	5	5	2
7	44	34	28	24	38	30	25	21	21	18	15	13	11	10	6	5	4	2
8	41	31	25	21	35	27	22	18	19	16	13	12	10	9	5	4	4	1
9	38	28	22	18	32	24	19	16	17	14	12	11	9	8	5	4	3	1
10	35	25	20	16	30	22	17	14	16	13	10	10	8	7	4	4	3	1

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	712	712	712
5°	710	706	705
10°	725	718	716
15°	705	698	699
20°	680	674	683
25°	691	685	685
30°	642	639	634
35°	624	618	612
40°	561	564	562
45°	510	519	522
50°	460	470	485
55°	395	397	427
60°	317	338	372
65°	214	273	330
70°	91	187	276
75°	15	110	223
80°	0	33	139
85°	0	0	114



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	16.7	0.2	0.2
10°-20°	47.6	0.6	0.5
20°-30°	71.1	0.8	0.7
30°-40°	80.2	0.9	0.8
40°-50°	74.3	0.9	0.7
50°-60°	56.5	0.7	0.6
60°-70°	32.6	0.4	0.3
70°-80°	11.1	0.1	0.1
80°-90°	1.8	0.0	0.0
90°-100°	371.2	4.3	3.7
100°-110°	1201.5	14.0	12.0
110°-120°	1556.7	18.1	15.6
120°-130°	1517.1	17.6	15.2
130°-140°	1297.7	15.1	13.0
140°-150°	966.2	11.2	9.7
150°-160°	718.3	8.4	7.2
160°-170°	437.1	5.1	4.4
170°-180°	140.5	1.6	1.4
0°-30°	135.4	1.6	1.4
0°-40°	215.6	2.5	2.2
0°-60°	346.4	4.0	3.5
0°-90°	391.8	4.6	3.9
90°-120°	3129.4	36.4	31.3
90°-150°	6910.4	80.4	69.1
90°-180°	8206.0	95.4	82.1
0°-180°	8598.1	100.0	86.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	175	175	175	175	175	
5°	174	174	174	174	174	17
15°	168	167	169	170	170	47
25°	155	155	158	159	159	70
35°	127	128	131	131	131	78
45°	90	95	97	99	99	70
55°	57	58	62	68	68	51
65°	23	26	33	41	41	23
75°	1	4	9	16	19	3
85°	0	0	0	2	5	0
90°	0	0	0	2	2	8
95°	55	348	338	319	314	66
105°	236	833	1386	1516	1537	253
115°	475	945	1782	2214	2395	467
125°	720	1049	1802	2413	2619	638
135°	969	1208	1719	2242	2473	732
145°	1102	1235	1512	1785	1914	699
155°	1301	1374	1530	1676	1747	607
165°	1442	1467	1532	1590	1620	408
175°	1442	1443	1452	1459	1464	139
180°	1476	1476	1476	1476	1476	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	175	175	175	175	175
5°	174	174	174	174	174
10°	176	174	176	177	176
15°	168	167	169	170	170
20°	158	159	160	163	163
25°	155	155	158	159	159
30°	138	139	142	144	142
35°	127	128	131	131	131
40°	107	110	113	113	114
45°	90	95	97	99	99
50°	74	78	81	85	85
55°	57	58	62	68	68
60°	40	41	47	53	53
65°	23	26	33	41	41
70°	8	12	19	26	29
75°	1	4	9	16	19
80°	0	0	2	8	9
85°	0	0	0	2	5
90°	0	0	0	2	2
95°	55	348	338	319	314
100°	134	707	922	919	915
105°	236	833	1386	1516	1537
110°	353	923	1631	2070	2177
115°	475	945	1782	2214	2395
120°	584	961	1765	2245	2401
125°	720	1049	1802	2413	2619
130°	828	1096	1697	2275	2503
135°	969	1208	1719	2242	2473
140°	1022	1200	1567	1942	2112
145°	1102	1235	1512	1785	1914
150°	1236	1344	1568	1782	1881
155°	1301	1374	1530	1676	1747
160°	1429	1481	1599	1708	1757
165°	1442	1467	1532	1590	1620
170°	1455	1464	1497	1527	1546
175°	1442	1443	1452	1459	1464
180°	1476	1476	1476	1476	1476

(END OF REPORT)