

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. 12343.0

Luminaire Tested: **801 BSL 2T5HO S28B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 12343.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 801 BSL 2T5HO S28B  
Description: 2/54W T5HO 4'DIR/INDIRECT PENDANT LUMINAIRE w/SEMI-SPEC REF  
WHITE ACRYLIC SIDED CLEAR TEXTURED RIBBED PLASTIC PANEL  
Light Source: -  
FP54T5HO/835/RS  
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-C WATTS=119

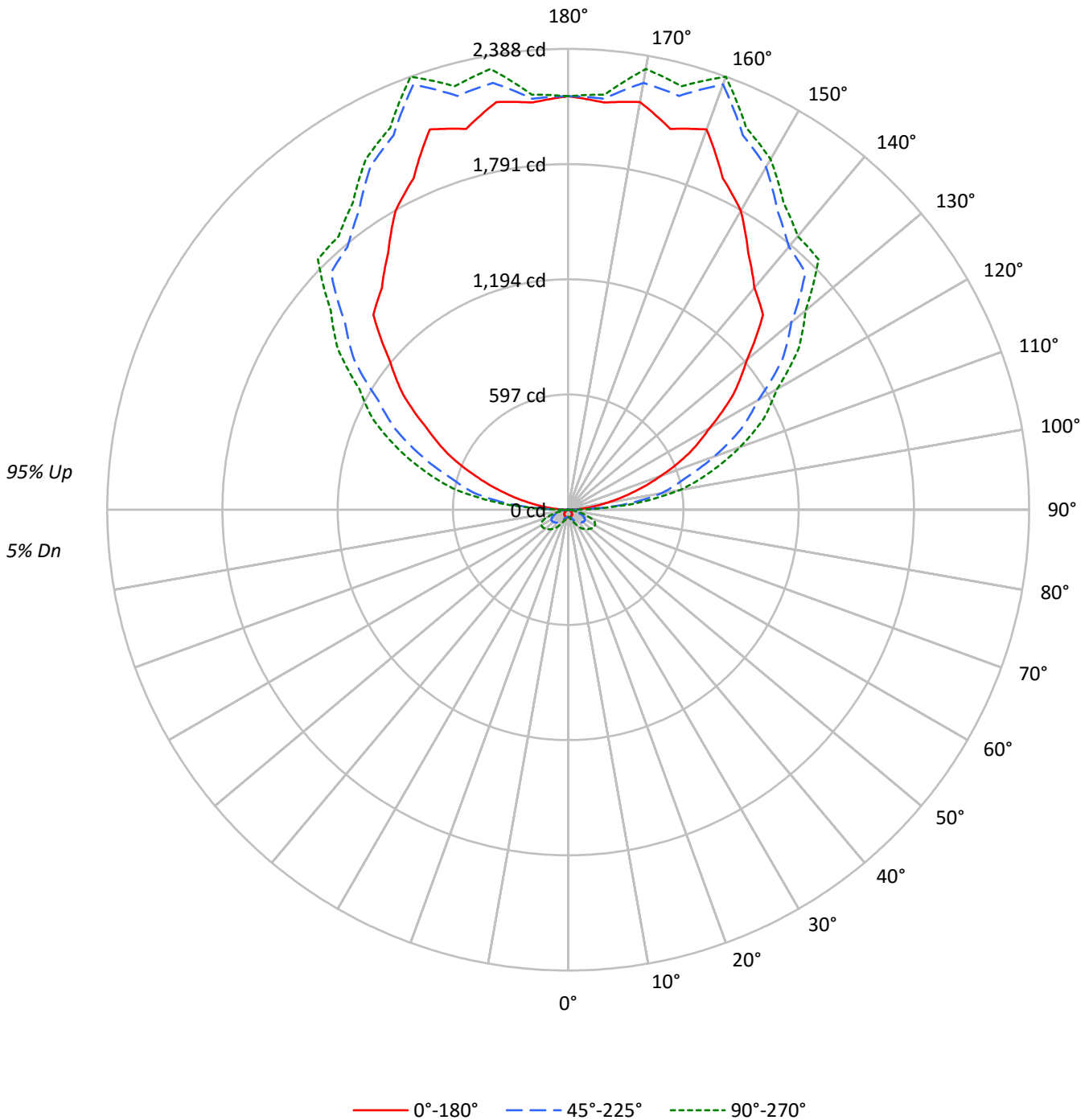
**Summary**

Lumens per Lamp: 5000 (2 lamps)  
Luminaire Lumens: 7668.5 lumens  
Efficiency: 76.7%  
Efficacy: 64.4 lumens/watt  
Spacing Criteria (0/90/45): 1.41 / 3.54 / 2.76  
Luminous Opening: Rectangular (W 0.33' x L: 3.67' x H: 0')  
CIE Type: Indirect

Input Watts (W): 119  
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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																		
0	74	74	74	74	64	64	64	64	45	45	45	27	27	27	11	11	11	4
1	67	64	61	59	58	55	53	51	39	37	36	24	23	22	10	10	9	3
2	61	56	51	48	52	48	45	41	34	32	30	21	19	18	8	8	8	2
3	55	49	44	39	48	42	38	34	30	27	25	18	17	15	7	7	6	2
4	51	43	37	33	43	37	32	29	26	23	21	16	14	13	6	6	5	1
5	46	38	32	28	40	33	28	24	23	20	18	14	12	11	6	5	4	1
6	42	34	28	24	36	29	24	21	21	17	15	13	11	9	5	4	4	1
7	39	30	24	20	33	26	21	18	18	15	13	11	9	8	5	4	3	1
8	36	27	22	18	31	23	19	16	17	14	11	10	8	7	4	3	3	1
9	33	25	19	16	29	21	17	14	15	12	10	9	7	6	4	3	2	1
10	31	22	17	14	26	19	15	12	14	11	9	8	7	5	3	3	2	1

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

	0°	45°	90°
0°	335	335	335
5°	372	354	336
10°	358	349	340
15°	411	392	484
20°	356	422	563
25°	370	554	739
30°	346	672	967
35°	377	861	1259
40°	357	1001	1507
45°	337	1184	1783
50°	315	1358	2084
55°	353	1583	2474
60°	300	1781	2838
65°	271	1898	3170
70°	206	1856	3144
75°	136	1737	2588
80°	51	1523	1523
85°	0	202	506



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	3.7	0.0	0.0
10°-20°	12.7	0.2	0.1
20°-30°	26.1	0.3	0.3
30°-40°	47.9	0.6	0.5
40°-50°	69.4	0.9	0.7
50°-60°	86.7	1.1	0.9
60°-70°	83.6	1.1	0.8
70°-80°	47.8	0.6	0.5
80°-90°	8.2	0.1	0.1
90°-100°	255.0	3.3	2.5
100°-110°	638.5	8.3	6.4
110°-120°	942.4	12.3	9.4
120°-130°	1169.9	15.3	11.7
130°-140°	1282.8	16.7	12.8
140°-150°	1171.6	15.3	11.7
150°-160°	982.3	12.8	9.8
160°-170°	632.0	8.2	6.3
170°-180°	207.7	2.7	2.1
0°-30°	42.6	0.6	0.4
0°-40°	90.5	1.2	0.9
0°-60°	246.6	3.2	2.5
0°-90°	386.1	5.0	3.9
90°-120°	1835.9	23.9	18.4
90°-150°	5460.2	71.2	54.6
90°-180°	7282.0	95.0	72.8
0°-180°	7668.5	100.0	76.7

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	38	38	38	38	38	
5°	42	40	40	39	38	4
15°	45	43	43	50	53	12
25°	38	38	57	73	76	17
35°	35	45	80	110	117	21
45°	27	47	95	133	143	21
55°	23	50	103	148	161	19
65°	13	40	91	133	152	13
75°	4	20	51	69	76	4
85°	0	5	2	4	5	0
90°	0	0	0	2	2	11
95°	83	189	279	312	326	98
105°	344	478	625	736	768	369
115°	689	861	988	1087	1118	677
125°	1046	1240	1354	1439	1458	927
135°	1427	1644	1738	1812	1834	1075
145°	1625	1821	1890	1933	1944	1024
155°	1895	2054	2141	2172	2183	885
165°	2043	2107	2220	2263	2272	590
175°	2118	2122	2138	2153	2159	203
180°	2143	2143	2143	2143	2143	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	38	38	38	38	38
5°	42	40	40	39	38
10°	40	39	39	39	38
15°	45	43	43	50	53
20°	38	36	45	58	60
25°	38	38	57	73	76
30°	34	38	66	90	95
35°	35	45	80	110	117
40°	31	46	87	121	131
45°	27	47	95	133	143
50°	23	47	99	143	152
55°	23	50	103	148	161
60°	17	47	101	146	161
65°	13	40	91	133	152
70°	8	31	72	106	122
75°	4	20	51	69	76
80°	1	13	30	32	30
85°	0	5	2	4	5
90°	0	0	0	2	2
95°	83	189	279	312	326
100°	199	320	491	568	590
105°	344	478	625	736	768
110°	510	666	803	912	946
115°	689	861	988	1087	1118
120°	846	1021	1137	1225	1248
125°	1046	1240	1354	1439	1458
130°	1208	1409	1509	1585	1606
135°	1427	1644	1738	1812	1834
140°	1501	1703	1778	1834	1850
145°	1625	1821	1890	1933	1944
150°	1789	1979	2050	2088	2097
155°	1895	2054	2141	2172	2183
160°	2097	2224	2345	2379	2388
165°	2043	2107	2220	2263	2272
170°	2145	2171	2246	2301	2319
175°	2118	2122	2138	2153	2159
180°	2143	2143	2143	2143	2143

(END OF REPORT)