

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. 12477.0

Luminaire Tested: **S801 BSL 2T5HO S28A PERF TOP**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: BALLABS TEST NO. 12477.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S801 BSL 2T5HO S28A PERF TOP  
Description: 2/54W T5HO LAMPS 4'BIDIRECTIONAL PENDANT MNT LUMINAIRE  
SEMI-SPEC SIDE REFL w/S28A CENTER LENS DOWN & PERF TOP  
Light Source: -  
FP54T5HO/835  
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-D WATTS=117

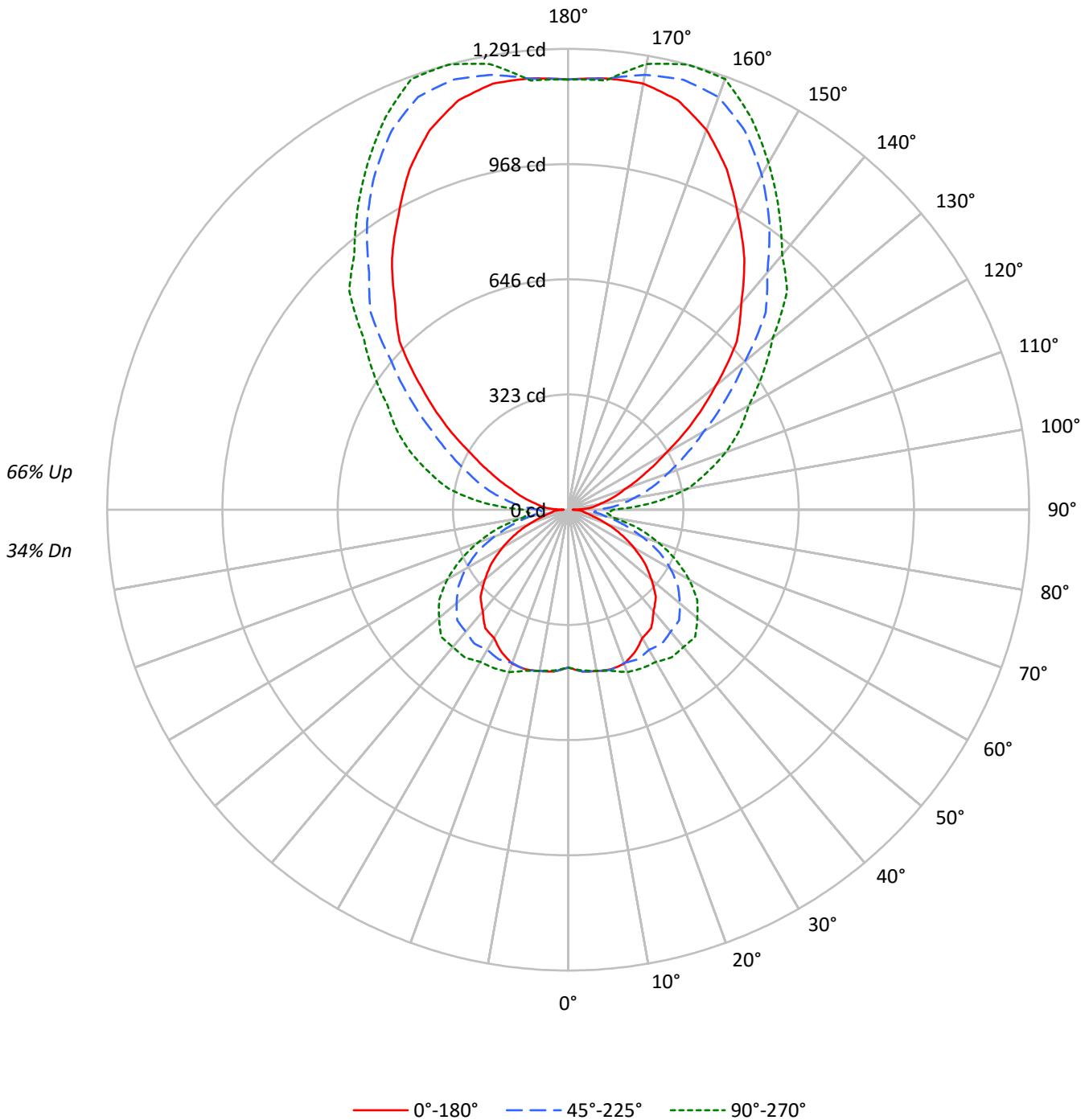
**Summary**

Lumens per Lamp: 5000 (2 lamps)  
Luminaire Lumens: 5324.1 lumens  
Efficiency: 53.2%  
Efficacy: 45.5 lumens/watt  
Spacing Criteria (0/90/45): 1.41 / 1.71 / 1.68  
Luminous Opening: Rectangular w/ Sides (W: 0.8' x L: 4' x H: 0.27')  
CIE Type: Semi-Indirect

Input Watts (W): 117  
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	50	30	10	0	
RCR																						
0	55	55	55	55	50	50	50	50	40	40	40	31	31	31	22	22	22	18				18
1	50	47	45	43	45	43	41	39	34	33	32	26	25	25	19	18	18	15				15
2	45	41	38	35	41	37	34	32	30	28	26	23	21	20	16	16	15	12				12
3	41	36	32	29	37	32	29	26	26	23	21	20	18	17	14	13	12	10				10
4	37	32	27	24	33	29	25	22	23	20	18	18	16	14	13	11	10	8				8
5	34	28	24	20	31	25	21	19	20	17	15	16	14	12	11	10	9	7				7
6	31	25	21	17	28	23	19	16	18	15	13	14	12	10	10	9	8	6				6
7	29	22	18	15	26	20	17	14	16	14	11	13	11	9	9	8	7	5				5
8	27	20	16	13	24	18	15	12	15	12	10	11	9	8	8	7	6	5				5
9	25	18	14	12	22	17	13	11	13	11	9	10	8	7	8	6	5	4				4
10	23	17	13	10	21	15	12	10	12	10	8	10	8	6	7	6	5	4				4

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

	0°	45°	90°
0°	1483	1483	1483
5°	1523	1495	1479
10°	1545	1489	1473
15°	1580	1497	1488
20°	1599	1478	1539
25°	1583	1509	1567
30°	1547	1506	1595
35°	1584	1562	1673
40°	1542	1575	1713
45°	1542	1619	1784
50°	1468	1587	1756
55°	1397	1556	1740
60°	1273	1484	1655
65°	1130	1381	1528
70°	943	1202	1368
75°	745	1002	1170
80°	656	787	848
85°	846	657	863



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	43.4	0.8	0.4
10°-20°	131.4	2.5	1.3
20°-30°	213.5	4.0	2.1
30°-40°	283.1	5.3	2.8
40°-50°	328.6	6.2	3.3
50°-60°	321.8	6.0	3.2
60°-70°	260.1	4.9	2.6
70°-80°	159.6	3.0	1.6
80°-90°	89.5	1.7	0.9
90°-100°	161.9	3.0	1.6
100°-110°	273.9	5.1	2.7
110°-120°	375.6	7.1	3.8
120°-130°	489.3	9.2	4.9
130°-140°	593.6	11.1	5.9
140°-150°	604.2	11.3	6.0
150°-160°	528.5	9.9	5.3
160°-170°	349.8	6.6	3.5
170°-180°	116.3	2.2	1.2
0°-30°	388.3	7.3	3.9
0°-40°	671.4	12.6	6.7
0°-60°	1321.9	24.8	13.2
0°-90°	1831.1	34.4	18.3
90°-120°	811.3	15.2	8.1
90°-150°	2498.4	46.9	25.0
90°-180°	3493.0	65.6	34.9
0°-180°	5324.1	100.0	53.2

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	455	455	455	452	452	43
15°	463	460	464	466	467	131
25°	441	443	462	484	490	203
35°	405	413	458	496	505	250
45°	347	372	439	489	503	265
55°	262	303	375	421	441	233
65°	163	213	281	316	332	161
75°	72	116	160	187	204	80
85°	39	60	73	94	109	32
90°	13	57	81	111	126	18
95°	64	109	139	212	244	52
105°	128	170	243	355	402	136
115°	234	282	362	483	530	235
125°	424	465	539	631	665	380
135°	668	732	782	847	867	507
145°	860	923	982	1020	1028	536
155°	1051	1096	1171	1203	1212	482
165°	1187	1203	1247	1277	1291	333
175°	1213	1203	1212	1209	1207	116
180°	1205	1205	1205	1205	1205	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	442	442	442	442	442
5°	455	455	455	452	452
10°	459	459	459	458	458
15°	463	460	464	466	467
20°	459	459	457	479	484
25°	441	443	462	484	490
30°	415	421	453	483	492
35°	405	413	458	496	505
40°	372	390	446	487	502
45°	347	372	439	489	503
50°	304	335	408	456	472
55°	262	303	375	421	441
60°	212	260	331	369	391
65°	163	213	281	316	332
70°	114	164	219	250	269
75°	72	116	160	187	204
80°	47	76	107	122	128
85°	39	60	73	94	109
90°	13	57	81	111	126
95°	64	109	139	212	244
100°	89	135	187	293	340
105°	128	170	243	355	402
110°	170	218	296	418	469
115°	234	282	362	483	530
120°	313	360	439	548	584
125°	424	465	539	631	665
130°	539	586	646	720	748
135°	668	732	782	847	867
140°	754	822	867	917	932
145°	860	923	982	1020	1028
150°	951	1015	1084	1115	1122
155°	1051	1096	1171	1203	1212
160°	1132	1165	1230	1272	1284
165°	1187	1203	1247	1277	1291
170°	1212	1212	1237	1258	1268
175°	1213	1203	1212	1209	1207
180°	1205	1205	1205	1205	1205

(END OF REPORT)