

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. 11403.0

Luminaire Tested: **CATALOG NO. : 611IP\2T5HO-4'**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 11403.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: CATALOG NO. : 611IP\2T5HO-4'
Description: 2/54W T5HO LAMP 4'DIR/INDIRECT TWIN-BEAM PENDANT LUMINAIRE
Light Source: -
LAMP CODE : FP54T5HO/835
Ballast/Driver: SYLVANIA BALLAST #QT2x54/120PHO WATTS=119 REFL=88%

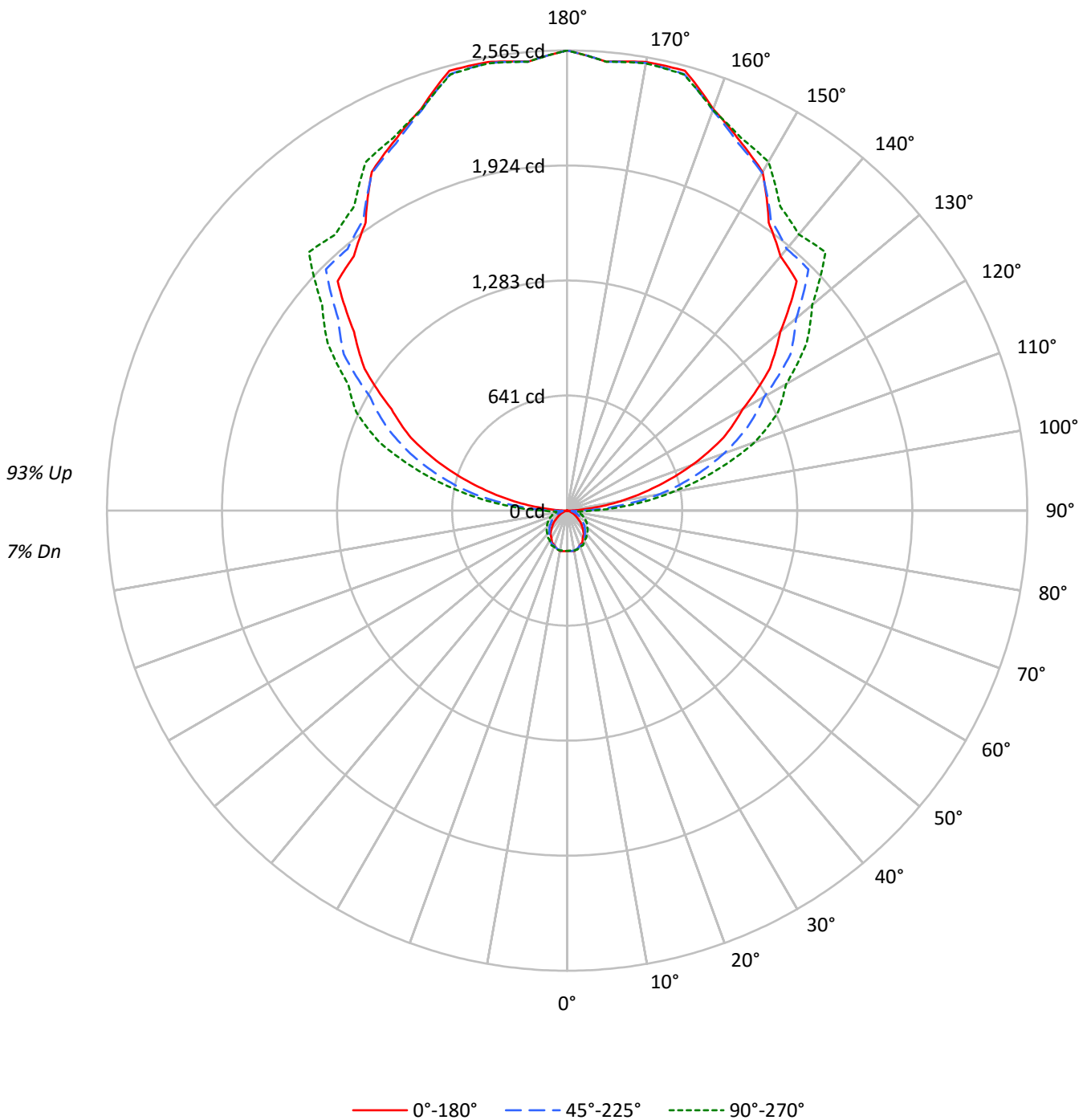
Summary

Lumens per Lamp: 5000 (2 lamps)
Luminaire Lumens: 8793.7 lumens
Efficiency: 87.9%
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.28 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.72' x L: 4' x H: 0.12')
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	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	52	52	52		33	33	33		15	15	15	6
1	77	74	71	68	67	64	61	59	46	44	42		29	28	27		13	13	12	5
2	70	64	59	55	61	56	52	48	40	37	35		25	24	22		11	11	10	4
3	64	56	50	46	55	49	44	40	35	32	29		22	20	19		10	9	9	4
4	59	50	43	38	50	43	38	34	31	27	25		20	18	16		9	8	7	3
5	54	44	37	33	46	38	33	29	27	24	21		17	15	14		8	7	6	3
6	49	39	33	28	42	34	29	25	25	21	18		16	13	12		7	6	6	2
7	45	35	29	24	39	31	25	21	22	18	16		14	12	10		6	6	5	2
8	42	32	25	21	36	28	22	19	20	16	14		13	11	9		6	5	4	2
9	39	29	23	18	33	25	20	16	18	15	12		12	9	8		5	5	4	2
10	36	26	20	16	31	23	18	14	17	13	11		11	9	7		5	4	3	2

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	842	842	842
5°	851	842	825
10°	866	837	833
15°	849	821	829
20°	811	791	802
25°	806	797	810
30°	743	738	758
35°	720	722	754
40°	652	675	729
45°	590	643	726
50°	511	611	709
55°	419	573	711
60°	355	544	708
65°	266	507	703
70°	202	469	704
75°	117	441	710
80°	18	390	695
85°	0	404	848



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	21.6	0.2	0.2
10°-20°	62.1	0.7	0.6
20°-30°	92.7	1.1	0.9
30°-40°	107.5	1.2	1.1
40°-50°	106.8	1.2	1.1
50°-60°	93.6	1.1	0.9
60°-70°	72.4	0.8	0.7
70°-80°	48.3	0.5	0.5
80°-90°	42.5	0.5	0.4
90°-100°	290.3	3.3	2.9
100°-110°	740.6	8.4	7.4
110°-120°	1096.7	12.5	11.0
120°-130°	1326.0	15.1	13.3
130°-140°	1426.2	16.2	14.3
140°-150°	1268.9	14.4	12.7
150°-160°	1052.7	12.0	10.5
160°-170°	703.7	8.0	7.0
170°-180°	241.2	2.7	2.4
0°-30°	176.4	2.0	1.8
0°-40°	283.9	3.2	2.8
0°-60°	484.3	5.5	4.8
0°-90°	647.5	7.4	6.5
90°-120°	2127.5	24.2	21.3
90°-150°	6148.6	69.9	61.5
90°-180°	8146.0	92.6	81.5
0°-180°	8793.7	100.0	87.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	225	225	225	225	225	
5°	227	227	227	226	223	22
15°	221	219	220	224	224	62
25°	198	198	206	210	212	90
35°	161	165	174	182	185	99
45°	115	122	139	155	161	88
55°	67	81	106	129	136	61
65°	32	44	75	101	109	33
75°	9	19	47	71	81	10
85°	0	6	25	47	59	0
90°	0	24	71	113	133	14
95°	101	203	274	325	349	143
105°	510	550	729	831	857	543
115°	961	986	1114	1249	1297	939
125°	1378	1379	1520	1603	1631	1217
135°	1809	1787	1902	2002	2037	1356
145°	1959	1943	1980	2047	2070	1245
155°	2275	2266	2258	2280	2293	1052
165°	2538	2526	2519	2516	2516	707
175°	2512	2512	2512	2509	2511	241
180°	2565	2565	2565	2565	2565	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	225	225	225	225	225
5°	227	227	227	226	223
10°	229	226	226	229	226
15°	221	219	220	224	224
20°	206	205	209	214	214
25°	198	198	206	210	212
30°	175	177	185	192	193
35°	161	165	174	182	185
40°	137	143	155	167	171
45°	115	122	139	155	161
50°	91	101	123	142	147
55°	67	81	106	129	136
60°	50	63	91	113	123
65°	32	44	75	101	109
70°	20	30	60	87	95
75°	9	19	47	71	81
80°	1	11	33	57	64
85°	0	6	25	47	59
90°	0	24	71	113	133
95°	101	203	274	325	349
100°	300	385	521	579	599
105°	510	550	729	831	857
110°	740	773	930	1070	1113
115°	961	986	1114	1249	1297
120°	1131	1143	1269	1367	1409
125°	1378	1379	1520	1603	1631
130°	1551	1541	1666	1760	1783
135°	1809	1787	1902	2002	2037
140°	1850	1829	1904	1984	2009
145°	1959	1943	1980	2047	2070
150°	2179	2165	2174	2224	2244
155°	2275	2266	2258	2280	2293
160°	2382	2382	2374	2372	2376
165°	2538	2526	2519	2516	2516
170°	2539	2539	2533	2531	2531
175°	2512	2512	2512	2509	2511
180°	2565	2565	2565	2565	2565

(END OF REPORT)