

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: 15658

Luminaire Tested: **242/2T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 15658
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 242/2T5
Description: NEORAY 2 LAMP 2 X 2 TROFFER LUMINAIRE
WITH WHITE INTERIOR AND WHITE LENS OVER PERFORATIONS
Light Source: TWO PHILIPS 24 WATT T5 LAMPS

F24T5/841/HO. LUMEN RATING = 1800 LMS.

Ballast/Driver: ONE SYLVANIA QT2X39-24/120PHO BALLAST OPERATING AT 120 VAC AND 54
WATTS

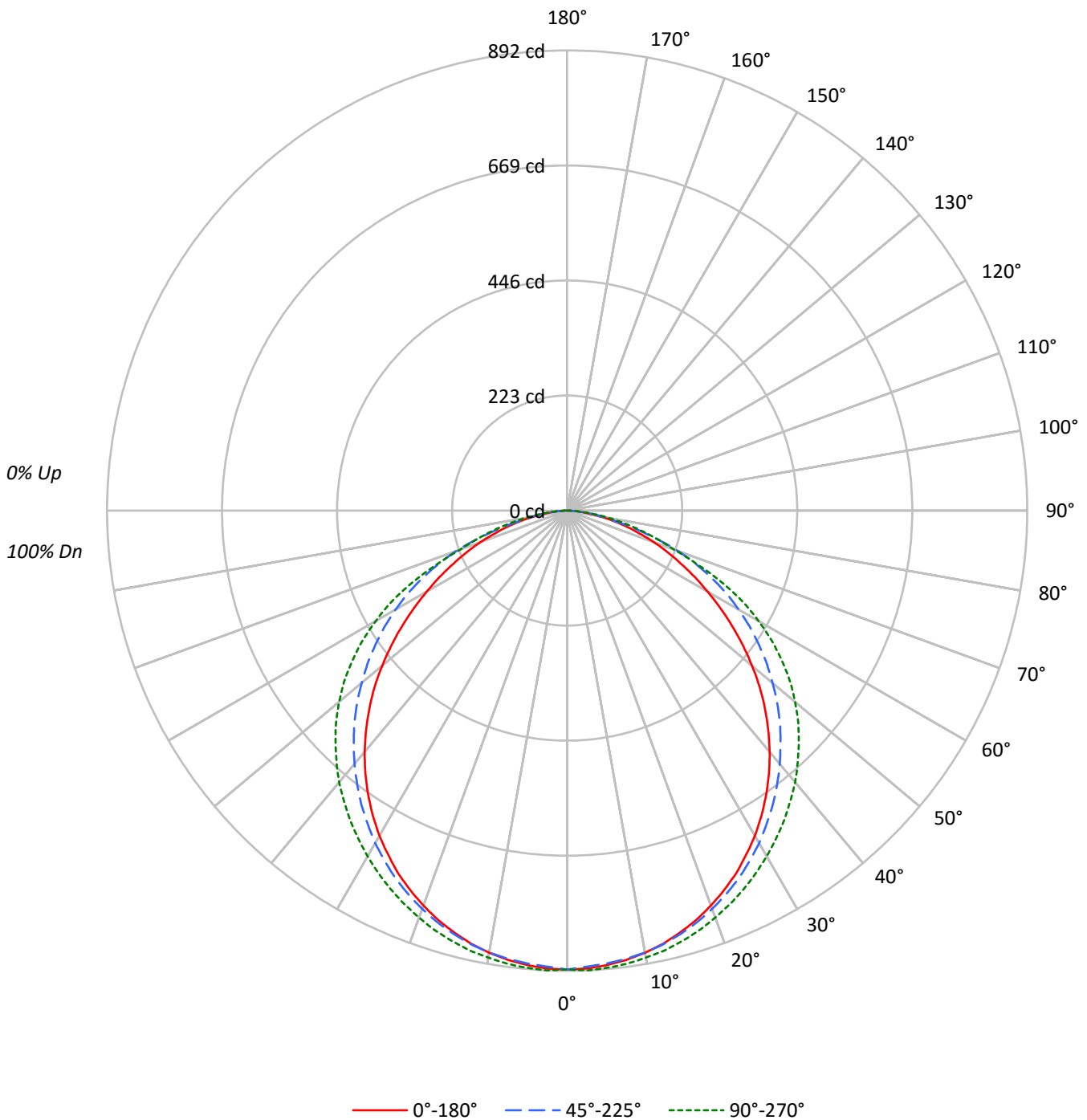
Summary

Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 2450.7 lumens
Efficiency: 68.1%
Efficacy: 45.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.94' x H: 0')
CIE Type: Direct

Input Watts (W): 54
Input Voltage (V): NR
Input Current (A_{in}): 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	81	81	81	81	79	79	79	79	76	76	76	72	72	72	69	69	69	68
1	74	71	68	66	72	70	67	65	67	65	63	64	62	61	62	60	59	58
2	68	62	58	54	66	61	57	53	58	55	52	56	53	51	54	52	50	48
3	62	55	49	45	60	54	49	44	52	47	44	50	46	43	48	45	42	41
4	57	48	43	38	55	48	42	38	46	41	37	44	40	37	43	39	36	35
5	52	43	37	33	51	43	37	33	41	36	32	40	35	32	38	35	32	30
6	48	39	33	29	47	38	33	28	37	32	28	36	31	28	35	31	28	26
7	45	35	29	25	43	35	29	25	34	29	25	33	28	25	32	28	25	23
8	41	32	26	23	40	32	26	22	31	26	22	30	25	22	29	25	22	21
9	39	30	24	20	38	29	24	20	28	24	20	28	23	20	27	23	20	19
10	36	27	22	18	35	27	22	18	26	22	18	26	21	18	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2620	2611	2635
10°	2608	2606	2637
15°	2587	2596	2639
20°	2558	2580	2637
25°	2525	2562	2637
30°	2481	2536	2637
35°	2424	2506	2642
40°	2353	2471	2649
45°	2263	2435	2650
50°	2148	2387	2648
55°	2010	2334	2617
60°	1854	2268	2532
65°	1700	2154	2327
70°	1539	1969	1904
75°	1341	1556	1680
80°	1103	1212	1392
85°	803	904	992



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	84.1	3.4	2.3
10°-20°	240.6	9.8	6.7
20°-30°	363.7	14.8	10.1
30°-40°	437.1	17.8	12.1
40°-50°	451.5	18.4	12.5
50°-60°	403.1	16.4	11.2
60°-70°	293.2	12.0	8.1
70°-80°	144.8	5.9	4.0
80°-90°	32.6	1.3	0.9
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°	688.3	28.1	19.1
0°-40°	1125.5	45.9	31.3
0°-60°	1980.1	80.8	55.0
0°-90°	2450.7	100.0	68.1
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°	2450.7	100.0	68.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	884	885	881	885	890	84
15°	847	849	850	856	864	239
25°	776	779	787	799	810	357
35°	673	680	696	718	733	420
45°	542	554	583	616	635	418
55°	391	410	454	492	509	349
65°	243	264	308	329	333	242
75°	118	130	136	141	147	125
85°	24	24	27	28	29	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.6	889.6	889.6	889.6	889.6
2.5°	888.4	888.4	884.7	887.7	892.3
5°	884.5	884.7	881.2	885.0	889.6
7.5°	878.5	879.3	876.5	880.1	886.1
10°	870.3	871.4	869.7	873.7	879.8
12.5°	859.9	861.4	861.3	866.4	873.2
15°	846.6	848.6	849.7	856.3	863.6
17.5°	832.0	834.5	836.8	845.0	852.9
20°	814.6	817.4	821.6	831.5	839.6
22.5°	795.9	799.6	804.9	816.0	825.3
25°	775.5	779.4	786.7	799.4	809.7
27.5°	751.7	756.9	765.9	780.8	792.3
30°	727.9	733.4	744.3	761.4	773.8
32.5°	700.8	707.0	720.0	739.6	753.8
35°	672.7	680.3	695.5	717.7	733.2
37.5°	642.3	650.8	668.5	693.9	710.4
40°	610.7	620.7	641.5	669.3	687.6
42.5°	577.0	587.7	612.1	643.1	661.7
45°	542.1	554.5	583.4	616.2	635.0
47.5°	506.3	520.4	552.5	588.3	607.7
50°	467.8	483.9	519.8	557.6	576.7
52.5°	429.7	448.1	487.8	525.8	544.9
55°	390.7	409.8	453.7	491.8	508.6
57.5°	352.0	374.0	419.9	456.3	471.2
60°	314.1	335.8	384.2	416.5	428.9
62.5°	278.6	300.4	348.2	375.4	385.0
65°	243.4	263.7	308.4	328.7	333.2
67.5°	210.2	229.4	269.6	279.3	274.4
70°	178.4	196.2	228.2	222.9	220.7
72.5°	146.7	162.1	182.4	174.7	181.9
75°	117.6	130.3	136.5	141.3	147.3
77.5°	90.0	97.7	97.9	108.3	112.3
80°	64.9	68.6	71.3	78.3	81.9
82.5°	41.3	42.7	47.0	50.9	53.0
85°	23.7	23.9	26.7	28.2	29.3
87.5°	9.0	8.9	9.8	10.6	11.2
90°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)