

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: 15721

Luminaire Tested: **701IP-S-P-2-T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 15721
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 701IP-S-P-2-T5
Description: NEORAY 2 LAMP T5 DIRECT/INDIRECT LUMINAIRE - NIMBUS II PERF
WITH WHITE INTERIOR, SPECULAR REFLECTORS AND WHITE LENS OVER PERFORATIONS
Light Source: TWO SYLVANIA 54 WATT T5 LAMPS

FP54/841/HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: ONE SYLVANIA QT2X54/120PHO BALLAST OPERATING AT 120 VAC AND 123 WATTS

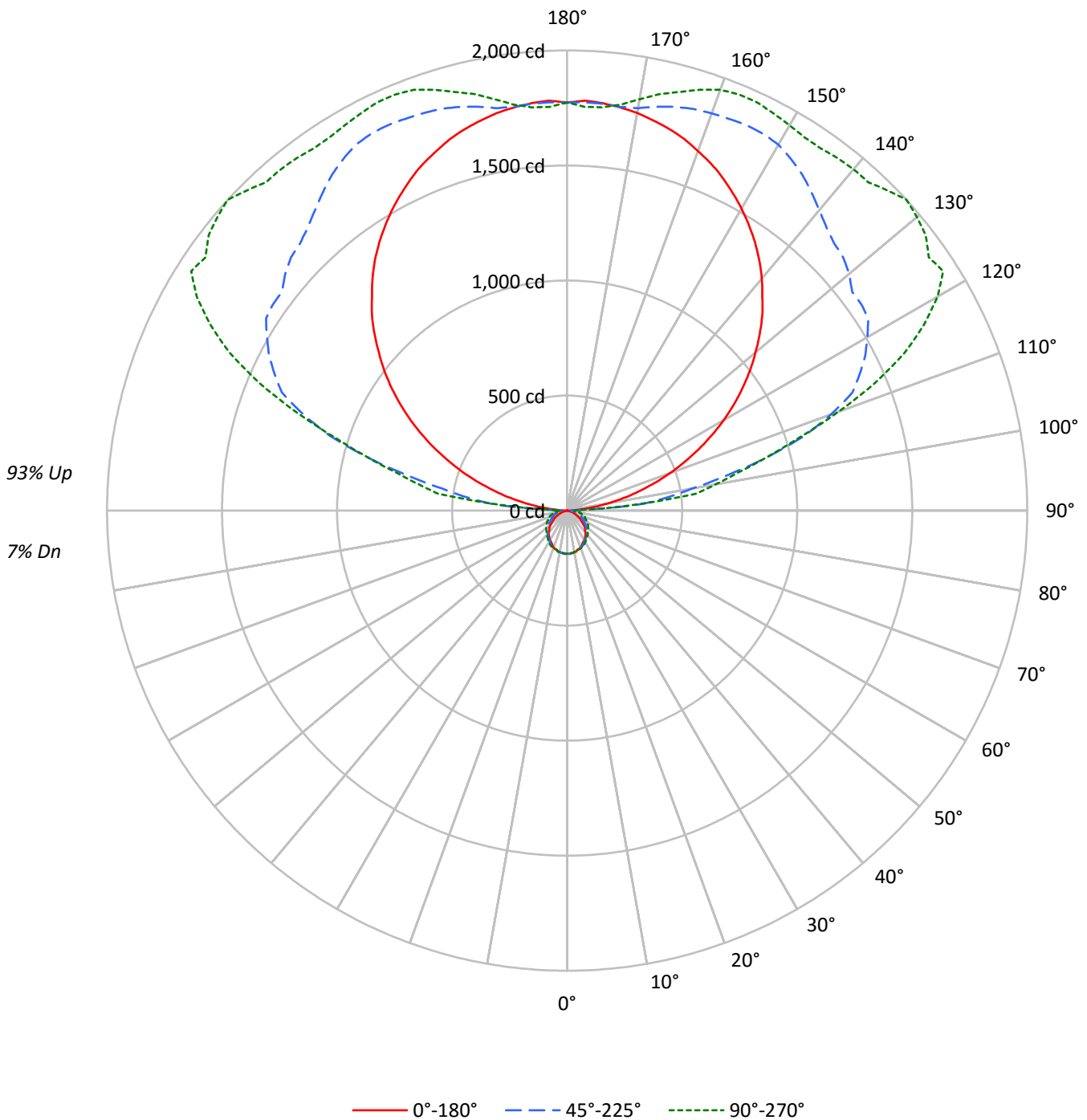
Summary

Lumens per Lamp: 4500 (2 lamps)
Luminaire Lumens: 8106.2 lumens
Efficiency: 90.1%
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.25')
CIE Type: Indirect

Input Watts (W): 123
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	87	87	87	87	75	75	75	75	53	53	53	33	33	33	15	15	15	6
1	79	76	72	69	68	65	63	60	46	45	43	29	28	27	13	13	12	5
2	72	66	61	56	62	57	53	49	41	38	36	25	24	23	11	11	10	4
3	66	58	52	47	56	50	45	41	36	32	30	22	20	19	10	9	9	3
4	60	51	44	39	51	44	39	34	31	28	25	20	18	16	9	8	7	3
5	55	45	38	33	47	39	33	29	28	24	21	18	15	14	8	7	6	2
6	50	40	33	28	43	35	29	25	25	21	18	16	14	12	7	6	5	2
7	46	36	29	25	40	31	26	22	22	19	16	14	12	10	6	5	5	2
8	43	32	26	21	37	28	23	19	20	17	14	13	11	9	6	5	4	2
9	40	29	23	19	34	26	20	17	18	15	12	12	10	8	5	4	4	2
10	37	27	21	17	32	23	18	15	17	13	11	11	9	7	5	4	3	1

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	672	672	672
5°	671	659	648
10°	658	639	628
15°	639	619	606
20°	640	595	592
25°	607	580	579
30°	601	541	548
35°	575	525	521
40°	550	495	506
45°	524	470	483
50°	469	445	473
55°	426	425	471
60°	384	401	461
65°	316	381	440
70°	266	366	454
75°	183	352	435
80°	136	305	405
85°	12	255	381



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	17.6	0.2	0.2
10°-20°	50.3	0.6	0.6
20°-30°	75.3	0.9	0.8
30°-40°	89.3	1.1	1.0
40°-50°	90.8	1.1	1.0
50°-60°	82.9	1.0	0.9
60°-70°	68.5	0.8	0.8
70°-80°	49.6	0.6	0.6
80°-90°	28.0	0.3	0.3
90°-100°	277.0	3.4	3.1
100°-110°	821.5	10.1	9.1
110°-120°	1245.3	15.4	13.8
120°-130°	1349.2	16.6	15.0
130°-140°	1261.5	15.6	14.0
140°-150°	1083.9	13.4	12.0
150°-160°	835.1	10.3	9.3
160°-170°	511.2	6.3	5.7
170°-180°	169.4	2.1	1.9
0°-30°	143.2	1.8	1.6
0°-40°	232.4	2.9	2.6
0°-60°	406.1	5.0	4.5
0°-90°	552.2	6.8	6.1
90°-120°	2343.8	28.9	26.0
90°-150°	6038.4	74.5	67.1
90°-180°	7554.0	93.2	83.9
0°-180°	8106.2	100.0	90.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	187	187	187	187	187	
5°	187	186	187	183	185	18
15°	175	176	179	176	178	50
25°	158	160	166	168	169	73
35°	137	139	143	147	147	86
45°	110	110	118	125	127	84
55°	74	78	95	104	111	67
65°	42	53	72	85	89	42
75°	16	27	52	64	70	20
85°	0	14	26	40	44	3
90°	0	5	16	26	31	3
95°	60	212	328	308	297	76
105°	323	703	904	892	899	343
115°	632	961	1403	1582	1616	624
125°	932	1171	1562	1817	1919	832
135°	1200	1430	1642	1856	1968	924
145°	1424	1590	1782	1878	1921	890
155°	1597	1681	1847	1935	1957	736
165°	1717	1727	1816	1867	1883	485
175°	1777	1776	1775	1761	1759	169
180°	1773	1773	1773	1773	1773	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	187.3	187.3	187.3	187.3	187.3
2.5°	188.8	186.4	187.4	184.0	187.4
5°	187.4	186.4	187.4	182.7	185.1
7.5°	185.1	185.1	185.1	182.7	186.4
10°	182.7	181.4	184.0	182.4	182.4
12.5°	182.7	181.4	182.7	180.4	182.4
15°	175.0	176.3	179.0	176.3	177.7
17.5°	175.3	175.0	175.0	177.7	175.0
20°	171.3	171.6	171.6	172.6	174.0
22.5°	165.2	165.2	168.9	169.3	170.3
25°	157.8	160.2	165.6	167.9	168.9
27.5°	151.8	155.5	157.8	160.5	162.9
30°	150.4	149.4	151.8	158.2	157.8
32.5°	143.0	144.4	146.7	151.8	153.1
35°	137.0	139.3	143.4	146.7	146.7
37.5°	130.9	133.3	138.0	142.0	141.7
40°	123.5	125.9	130.6	135.6	138.3
42.5°	114.8	115.8	124.5	129.6	133.3
45°	109.8	109.8	118.5	124.9	126.9
47.5°	102.4	102.4	112.4	117.2	122.2
50°	90.3	95.0	106.4	113.5	118.5
52.5°	84.2	88.9	100.0	111.1	114.8
55°	74.1	77.8	95.0	103.7	111.1
57.5°	68.1	71.4	86.2	98.7	104.7
60°	59.3	65.4	82.9	94.0	101.4
62.5°	48.2	60.7	76.8	88.9	96.3
65°	42.2	53.3	71.8	85.2	88.9
67.5°	35.8	47.2	66.7	80.5	82.9
70°	29.7	39.5	61.7	75.1	82.9
72.5°	24.7	33.4	57.0	69.1	77.8
75°	16.3	27.4	51.9	64.4	70.4
77.5°	15.0	23.4	44.5	58.0	64.0
80°	8.9	20.0	38.2	53.3	56.6
82.5°	6.6	15.0	32.1	47.2	53.3
85°	0.5	13.6	26.0	39.8	44.5
87.5°	0.5	6.2	22.4	33.4	38.5
90°	0.5	4.9	16.0	26.0	30.8
92.5°	21.0	95.3	72.8	70.4	48.2
95°	60.3	212.0	327.6	308.1	297.0
97.5°	117.5	354.8	437.2	534.7	566.6
100°	181.4	528.6	551.8	650.3	654.0
102.5°	250.3	587.8	714.2	704.8	757.6
105°	322.9	703.1	904.1	891.7	899.1
107.5°	397.9	778.4	1081.6	1068.9	1061.8
110°	476.5	846.3	1219.5	1273.6	1253.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	551.8	900.4	1342.2	1442.0	1447.0
115°	631.8	960.6	1402.7	1582.5	1616.1
117.5°	708.1	1016.1	1460.5	1699.9	1747.6
120°	785.8	1069.2	1506.2	1801.7	1858.5
122.5°	859.8	1140.5	1551.9	1814.1	1937.5
125°	932.4	1171.4	1561.7	1816.8	1918.7
127.5°	1002.6	1257.8	1561.3	1880.4	1964.4
130°	1068.2	1320.3	1599.7	1898.9	1984.3
132.5°	1135.4	1379.5	1628.2	1877.0	2000.1
135°	1199.6	1429.9	1641.7	1855.8	1968.1
137.5°	1256.1	1468.2	1668.6	1858.5	1936.2
140°	1316.6	1506.6	1704.6	1865.9	1936.2
142.5°	1372.1	1545.5	1743.9	1866.9	1931.1
145°	1423.5	1589.9	1782.2	1878.0	1921.4
147.5°	1470.6	1606.1	1811.5	1884.4	1922.4
150°	1516.3	1643.0	1836.3	1910.3	1933.5
152.5°	1557.0	1665.2	1846.1	1925.1	1944.6
155°	1597.3	1681.4	1847.4	1934.8	1957.0
157.5°	1633.3	1697.2	1842.4	1932.5	1957.0
160°	1662.5	1706.9	1837.3	1920.0	1945.9
162.5°	1693.5	1714.3	1830.3	1894.2	1917.7
165°	1717.0	1726.7	1816.5	1867.3	1883.1
167.5°	1736.5	1747.9	1798.0	1827.6	1853.5
170°	1755.0	1754.0	1775.8	1814.1	1815.2
172.5°	1767.4	1771.1	1769.8	1778.2	1779.5
175°	1777.2	1776.2	1774.8	1761.0	1759.0
177.5°	1783.2	1780.9	1776.2	1761.4	1756.3
180°	1773.2	1773.2	1773.2	1773.2	1773.2

(END OF REPORT)