

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: 16060

Luminaire Tested: **244-3T8-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 16060
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 244-3T8-W
Description: NEORAY - 2 X 4 RECESSED DIRECT AMBIENT LUMINAIRE - FENESTRA

WITH WHITE INTERIOR AND WHITE LENS OVER PERFORATED WHITE BASKET
Light Source: THREE PHILIPS 32 WATT T8 LAMPS

F32T8/TL841. LUMEN RATING = 2950 LMS.

Ballast/Driver: TWO SYLVANIA QTP2X32T8/120 RSN-D BALLASTS OPERATING AT 120 VAC AND 90 WATTS

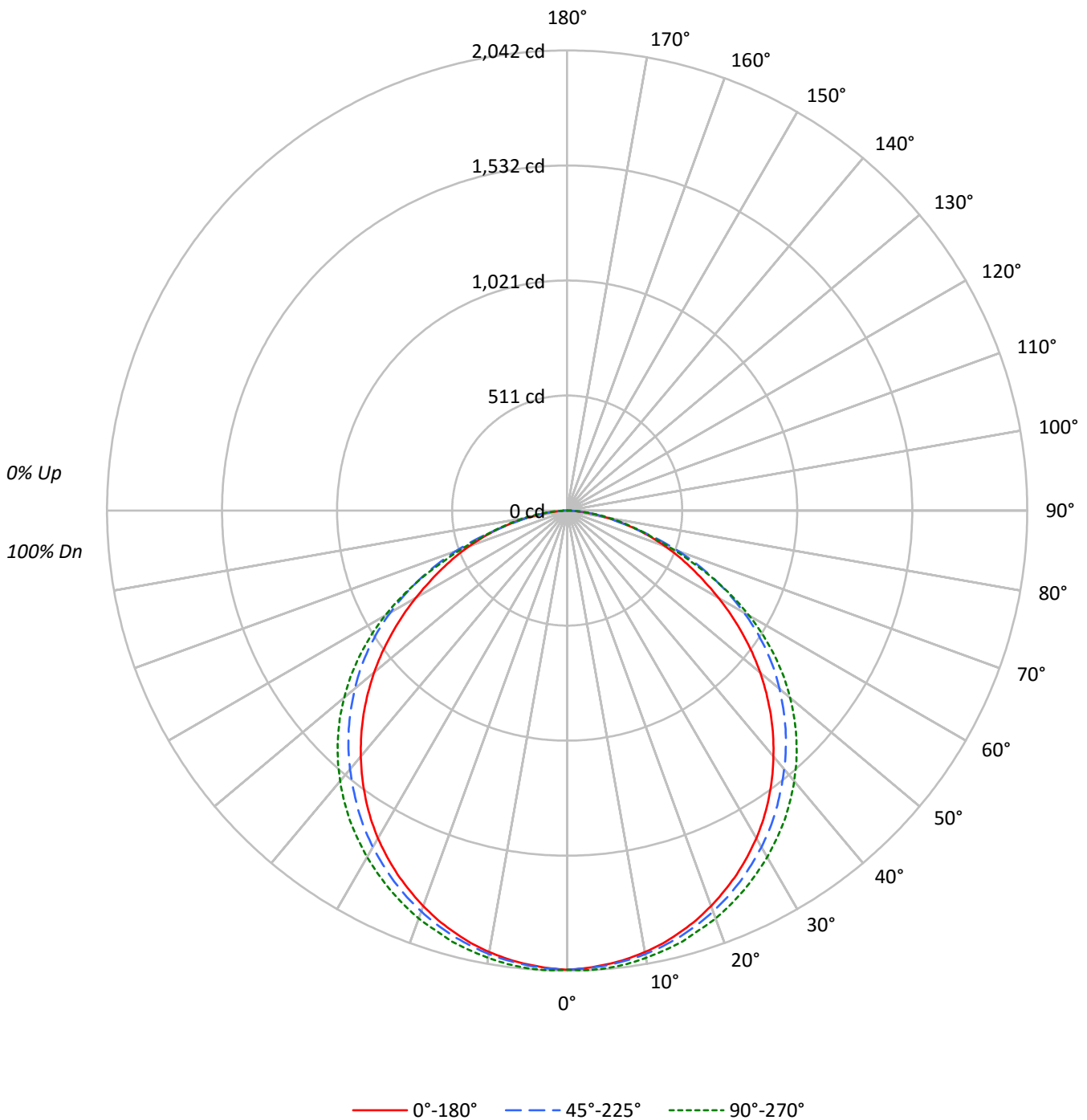
Summary

Lumens per Lamp: 2950 (3 lamps)
Luminaire Lumens: 5712.3 lumens
Efficiency: 64.5%
Efficacy: 63.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 1.96' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 90
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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CATALOG NUMBER: 244-3T8-W

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	77	77	77	77	75	75	75	75	72	72	72	69	69	69	66	66	66	65
1	70	67	65	62	69	66	63	61	63	61	59	61	59	57	58	57	56	54
2	64	59	54	51	62	58	54	50	55	52	49	53	50	48	51	49	47	45
3	58	52	46	42	57	51	46	42	49	45	41	47	43	40	45	42	40	38
4	53	46	40	36	52	45	40	36	43	39	35	42	38	35	40	37	34	33
5	49	41	35	31	48	40	35	31	39	34	30	37	33	30	36	33	30	28
6	45	37	31	27	44	36	31	27	35	30	27	34	30	26	33	29	26	25
7	42	33	28	24	41	33	27	24	32	27	23	31	27	23	30	26	23	22
8	39	30	25	21	38	30	25	21	29	24	21	28	24	21	28	24	21	19
9	37	28	23	19	36	28	22	19	27	22	19	26	22	19	25	22	19	17
10	34	26	21	17	33	25	20	17	25	20	17	24	20	17	24	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2855	2855	2855
5°	2843	2849	2867
10°	2830	2843	2867
15°	2810	2834	2870
20°	2784	2823	2872
25°	2753	2808	2872
30°	2717	2789	2873
35°	2668	2767	2873
40°	2605	2741	2867
45°	2531	2716	2852
50°	2436	2680	2815
55°	2317	2632	2746
60°	2175	2540	2615
65°	2033	2391	2379
70°	1897	2150	2036
75°	1704	1712	1769
80°	1413	1390	1567
85°	971	1122	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	192.7	3.4	2.2
10°-20°	552.1	9.7	6.2
20°-30°	837.1	14.7	9.5
30°-40°	1012.2	17.7	11.4
40°-50°	1050.7	18.4	11.9
50°-60°	942.4	16.5	10.6
60°-70°	689.1	12.1	7.8
70°-80°	351.6	6.2	4.0
80°-90°	84.4	1.5	1.0
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°	1581.9	27.7	17.9
0°-40°	2594.1	45.4	29.3
0°-60°	4587.2	80.3	51.8
0°-90°	5712.3	100.0	64.5
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°	5712.3	100.0	64.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2038	2038	2038	2038	2038	
5°	2022	2023	2026	2032	2039	192
15°	1937	1943	1954	1968	1979	547
25°	1781	1791	1816	1840	1858	820
35°	1560	1582	1618	1659	1680	975
45°	1277	1309	1371	1418	1439	984
55°	949	1003	1078	1108	1124	848
65°	613	683	721	724	718	609
75°	315	357	316	320	327	334
85°	60	67	70	80	75	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2037.8	2037.8	2037.8	2037.8	2037.8
2.5°	2031.5	2032.4	2033.4	2037.8	2041.5
5°	2021.7	2023.4	2025.7	2031.6	2038.8
7.5°	2008.3	2012.0	2014.1	2022.1	2029.3
10°	1989.2	1992.7	1998.5	2007.9	2015.5
12.5°	1966.4	1971.7	1978.1	1991.5	1998.5
15°	1937.3	1942.7	1954.3	1967.7	1978.9
17.5°	1905.6	1913.3	1925.6	1943.6	1951.6
20°	1867.6	1875.6	1893.2	1912.0	1926.6
22.5°	1825.7	1835.5	1857.0	1878.3	1893.1
25°	1781.0	1791.3	1816.3	1840.0	1857.8
27.5°	1731.4	1739.5	1771.2	1796.2	1817.6
30°	1679.6	1693.1	1724.2	1755.1	1775.7
32.5°	1621.6	1636.7	1673.9	1707.3	1728.4
35°	1559.9	1582.3	1618.0	1659.1	1680.1
37.5°	1493.8	1513.5	1558.5	1600.2	1625.6
40°	1424.3	1451.8	1498.8	1546.6	1567.6
42.5°	1352.7	1379.9	1436.2	1481.7	1506.0
45°	1277.3	1309.0	1371.0	1417.5	1439.3
47.5°	1198.6	1234.3	1300.9	1345.2	1368.5
50°	1117.9	1154.0	1229.6	1265.3	1291.6
52.5°	1034.8	1083.0	1157.2	1193.3	1212.0
55°	948.6	1002.6	1077.7	1107.7	1124.1
57.5°	863.7	921.9	995.0	1023.5	1032.1
60°	776.2	839.2	906.6	920.4	933.4
62.5°	691.3	764.2	815.1	831.1	829.0
65°	613.2	683.4	721.3	723.5	717.8
67.5°	537.7	602.1	625.2	612.3	598.9
70°	463.1	522.1	524.8	498.9	497.1
72.5°	390.3	433.7	418.9	384.9	400.2
75°	314.8	357.2	316.2	320.5	326.9
77.5°	243.5	272.9	231.8	251.8	258.6
80°	175.1	189.0	172.3	189.7	194.2
82.5°	113.9	109.4	119.7	129.6	131.3
85°	60.4	66.9	69.8	80.0	75.1
87.5°	21.5	24.5	27.7	30.0	29.0
90°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)