

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: 168p255

Luminaire Tested: **232R-3T8-ETG-2EB-DU-SFB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 168p255
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 232R-3T8-ETG-2EB-DU-SFB
Description: 2'X2' NEORAY FENESTRA RECESSED LUM, 2 LAMP T8, WITH WHITE
PERFORATED BASKET, FROSTED BAFFLE, SIDE LAMPS ON CENTER LAMP
OFF
Light Source: TWO - F17T8/TL841 - 1300 LUMENS - 17 WATTS
Ballast/Driver: B232IUNVHPB

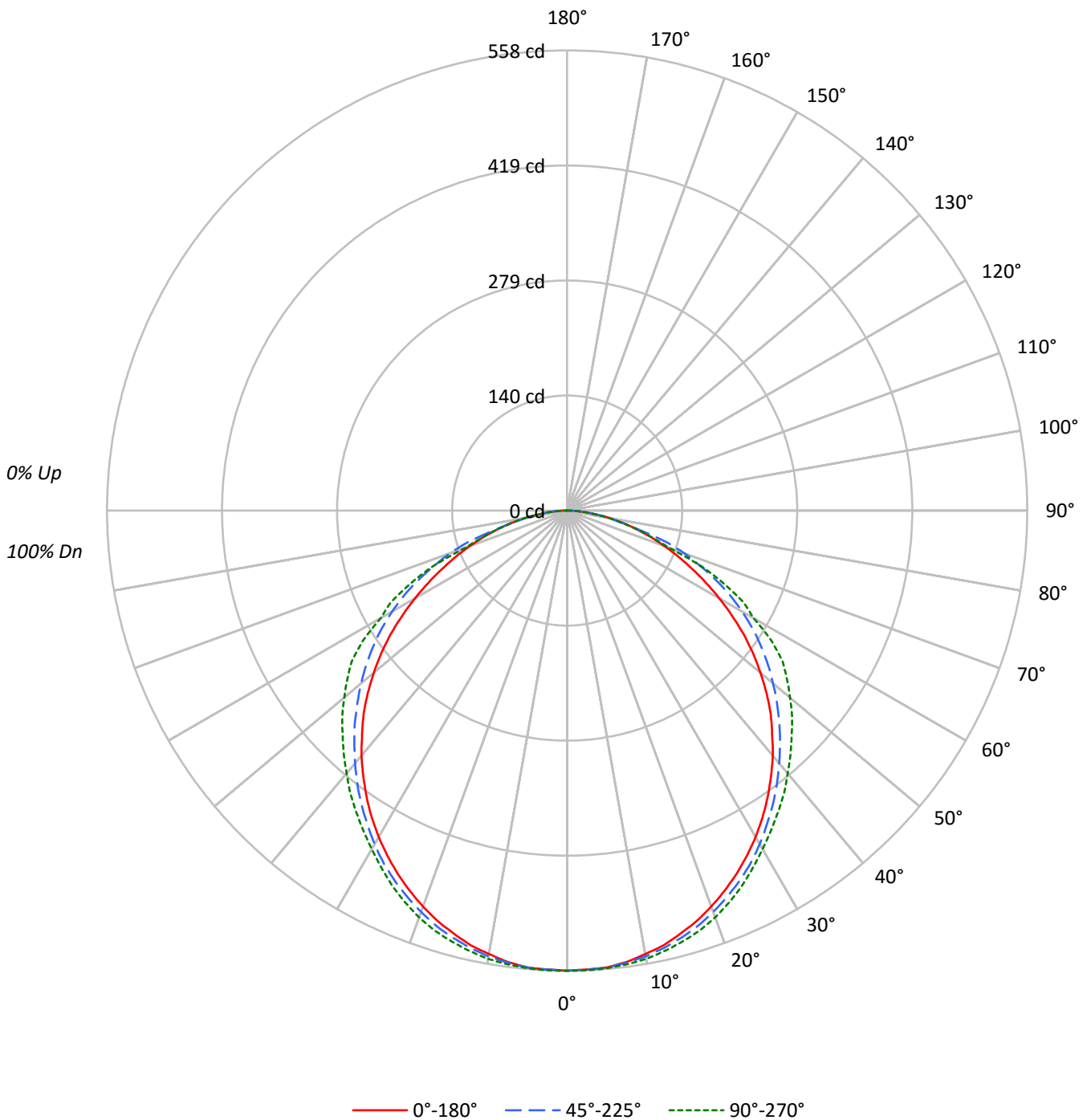
Summary

Lumens per Lamp: 1300 (2 lamps)
Luminaire Lumens: 1555.2 lumens
Efficiency: 59.8%
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1.98' x L: 1.94' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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	71	71	71	71	70	70	70	70	66	66	66	64	64	64	61	61	61	60
1	65	62	60	58	64	61	59	57	58	57	55	56	55	53	54	53	52	50
2	59	54	50	47	58	53	50	46	51	48	45	49	47	44	47	45	43	42
3	54	48	43	39	53	47	42	39	45	41	38	43	40	37	42	39	37	35
4	49	42	37	33	48	42	37	33	40	36	32	39	35	32	37	34	32	30
5	45	38	32	28	44	37	32	28	36	31	28	35	31	28	34	30	27	26
6	42	34	29	25	41	33	28	25	32	28	25	31	27	24	30	27	24	23
7	39	31	26	22	38	30	25	22	29	25	22	29	25	22	28	24	21	20
8	36	28	23	20	35	28	23	19	27	23	19	26	22	19	25	22	19	18
9	34	26	21	18	33	25	21	18	25	20	17	24	20	17	24	20	17	16
10	32	24	19	16	31	24	19	16	23	19	16	22	18	16	22	18	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1566	1566	1566
5°	1567	1567	1569
10°	1556	1565	1573
15°	1543	1558	1572
20°	1526	1547	1568
25°	1505	1533	1555
30°	1481	1514	1536
35°	1453	1491	1528
40°	1422	1466	1524
45°	1385	1445	1528
50°	1336	1424	1542
55°	1277	1405	1561
60°	1196	1375	1465
65°	1109	1322	1395
70°	1026	1239	1067
75°	944	987	944
80°	824	808	824
85°	676	741	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	52.8	3.4	2.0
10°-20°	151.2	9.7	5.8
20°-30°	227.7	14.6	8.8
30°-40°	272.2	17.5	10.5
40°-50°	282.0	18.1	10.8
50°-60°	256.5	16.5	9.9
60°-70°	190.8	12.3	7.3
70°-80°	96.5	6.2	3.7
80°-90°	25.3	1.6	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°	431.8	27.8	16.6
0°-40°	704.0	45.3	27.1
0°-60°	1242.5	79.9	47.8
0°-90°	1555.2	100.0	59.8
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°	1555.2	100.0	59.8

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	556	555	556	556	557	53
15°	531	532	536	540	541	150
25°	486	489	495	500	502	224
35°	424	428	435	442	446	265
45°	349	354	364	377	385	269
55°	261	270	287	305	319	233
65°	167	181	199	208	210	166
75°	87	93	91	86	87	92
85°	21	22	23	21	21	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	558	558	558	558	558
2.5°	557	557	557	558	558
5°	556	555	556	556	557
7.5°	552	552	553	554	555
10°	546	547	549	551	552
12.5°	540	540	543	546	547
15°	531	532	536	540	541
17.5°	522	523	528	532	534
20°	511	513	518	523	525
22.5°	499	501	507	512	514
25°	486	489	495	500	502
27.5°	472	475	482	486	488
30°	457	460	467	471	474
32.5°	441	445	451	457	460
35°	424	428	435	442	446
37.5°	406	411	418	427	432
40°	388	393	400	411	416
42.5°	368	373	382	394	401
45°	349	354	364	377	385
47.5°	328	334	345	360	370
50°	306	313	326	343	353
52.5°	284	292	307	324	336
55°	261	270	287	305	319
57.5°	237	248	267	284	294
60°	213	225	245	259	261
62.5°	190	203	223	232	241
65°	167	181	199	208	210
67.5°	146	158	174	181	176
70°	125	136	151	143	130
72.5°	106	114	125	106	107
75°	87	93	91	86	87
77.5°	69	73	66	68	68
80°	51	53	50	51	51
82.5°	35	34	35	35	35
85°	21	22	23	21	21
87.5°	10	13	12	9	9
90°	0	0	0	0	0

(END OF REPORT)