

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: 168p250

Luminaire Tested: **44DP-2T8-ST4D-1EB-SI-S79**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 168p250  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 44DP-2T8-ST4D-1EB-SI-S79  
Description: NEORAY GEO DIRECT PENDANT MOUNT LUMINAIRE, 2 32T8, WITH  
PARABOLIC BAFFLE  
Light Source: TWO - F032/735 - 2850 LUMENS - 32 WATTS  
Ballast/Driver: B232IUNVHP-B

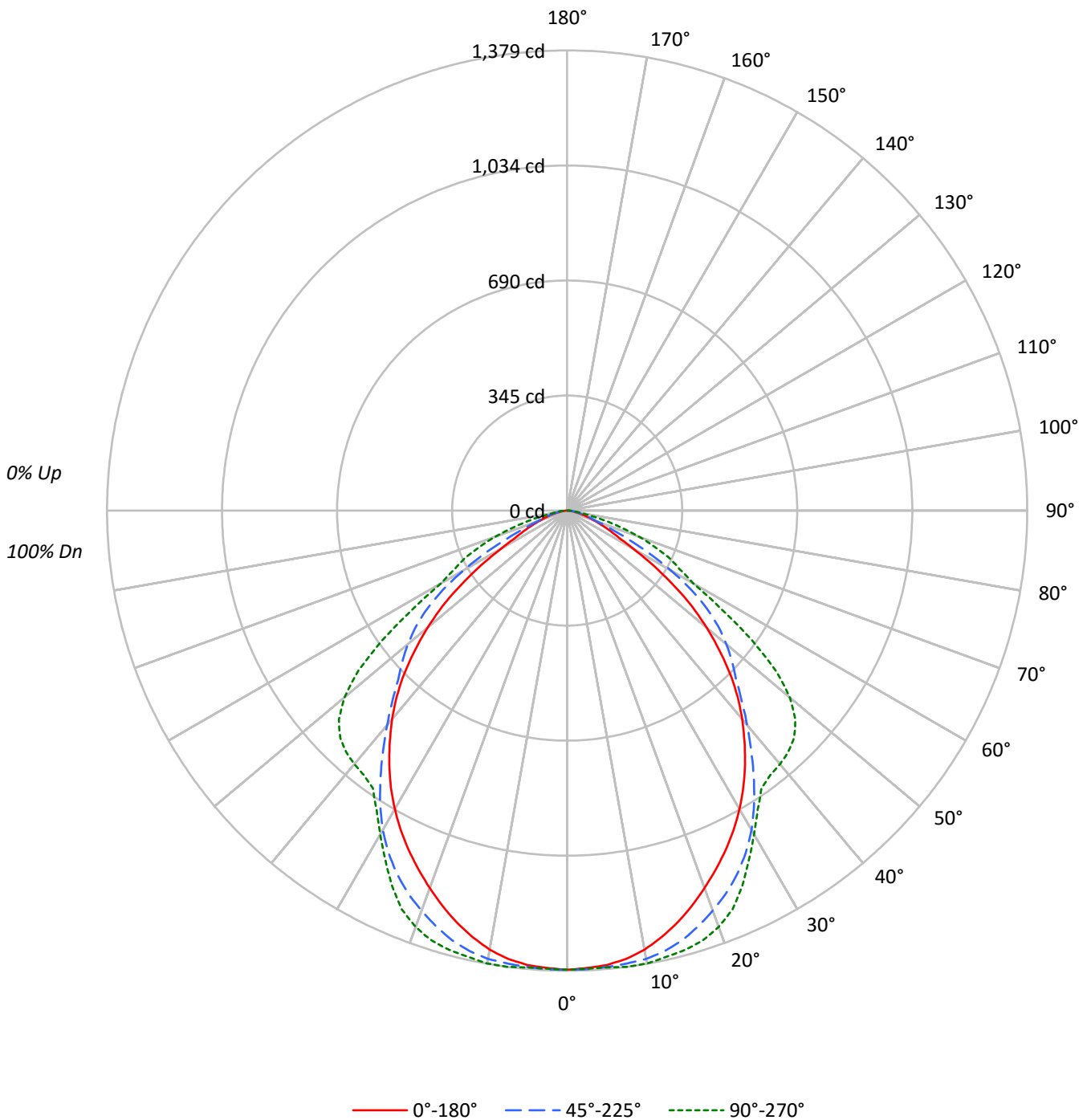
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 3023.2 lumens  
Efficiency: 53.0%  
Efficacy: 54.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.21 / 1.25  
Luminous Opening: Rectangular (W 0.65' x L: 3.94' x H: 0')  
CIE Type: Direct

Input Watts (W): 56  
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	63	63	63	63	62	62	62	62	59	59	59	56	56	56	54	54	54	53
1	59	57	55	53	57	55	54	52	53	52	51	51	50	49	49	48	48	46
2	54	50	47	45	53	49	47	44	48	45	43	46	44	42	44	43	41	40
3	50	45	41	38	49	44	41	38	43	40	37	41	39	37	40	38	36	35
4	46	40	36	33	45	40	36	33	38	35	32	37	34	32	36	34	31	30
5	43	36	32	29	42	36	32	29	35	31	28	34	31	28	33	30	28	27
6	39	33	29	25	39	32	28	25	32	28	25	31	27	25	30	27	25	24
7	37	30	26	23	36	30	26	23	29	25	22	28	25	22	27	24	22	21
8	34	28	23	20	33	27	23	20	27	23	20	26	23	20	25	22	20	19
9	32	25	21	18	31	25	21	18	24	21	18	24	21	18	23	20	18	17
10	30	23	20	17	29	23	19	17	23	19	17	22	19	17	22	19	17	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5824	5824	5824
5°	5808	5834	5838
10°	5742	5863	5923
15°	5600	5841	5973
20°	5423	5748	5982
25°	5245	5623	5796
30°	5049	5401	5474
35°	4800	5038	5245
40°	4509	4636	5481
45°	4130	4286	5759
50°	3595	4103	5736
55°	2871	3771	4974
60°	1922	3048	3691
65°	1392	1973	3405
70°	1052	1200	2846
75°	769	899	1963
80°	536	756	999
85°	340	826	1020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	130.7	4.3	2.3
10°-20°	373.8	12.4	6.6
20°-30°	548.4	18.1	9.6
30°-40°	611.5	20.2	10.7
40°-50°	599.2	19.8	10.5
50°-60°	454.4	15.0	8.0
60°-70°	213.9	7.1	3.8
70°-80°	74.3	2.5	1.3
80°-90°	16.9	0.6	0.3
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°	1052.9	34.8	18.5
0°-40°	1664.4	55.1	29.2
0°-60°	2718.1	89.9	47.7
0°-90°	3023.2	100.0	53.0
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°	3023.2	100.0	53.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1367	1370	1373	1377	1374	129
15°	1278	1295	1333	1359	1363	359
25°	1123	1154	1204	1242	1241	517
35°	929	967	975	984	1015	580
45°	690	723	716	852	962	529
55°	389	416	511	606	674	346
65°	139	145	197	259	340	142
75°	47	51	55	75	120	52
85°	7	12	17	19	21	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1376	1376	1376	1376	1376
2.5°	1372	1374	1376	1377	1374
5°	1367	1370	1373	1377	1374
7.5°	1355	1360	1369	1379	1379
10°	1336	1343	1364	1378	1378
12.5°	1309	1322	1352	1370	1370
15°	1278	1295	1333	1359	1363
17.5°	1242	1264	1306	1345	1351
20°	1204	1230	1276	1323	1328
22.5°	1164	1193	1243	1288	1294
25°	1123	1154	1204	1242	1241
27.5°	1080	1112	1158	1180	1180
30°	1033	1067	1105	1112	1120
32.5°	983	1018	1043	1046	1063
35°	929	967	975	984	1015
37.5°	873	911	906	931	1000
40°	816	853	839	905	992
42.5°	756	790	775	881	981
45°	690	723	716	852	962
47.5°	618	651	670	815	928
50°	546	574	623	762	871
52.5°	471	495	571	692	789
55°	389	416	511	606	674
57.5°	307	336	440	497	545
60°	227	258	360	392	436
62.5°	172	189	276	307	380
65°	139	145	197	259	340
67.5°	110	114	135	211	284
70°	85	89	97	161	230
72.5°	64	68	73	115	173
75°	47	51	55	75	120
77.5°	33	37	42	47	70
80°	22	27	31	32	41
82.5°	13	18	23	24	28
85°	7	12	17	19	21
87.5°	3	7	12	13	13
90°	0	0	0	0	0

(END OF REPORT)