

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: 168p249

Luminaire Tested: **44DP-2T8-ST4D-1EB-SI-S58**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 168p249  
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-S58  
Description: NEORAY GEO DIRECT PENDANT MOUNT LUMINAIRE, 2 32T8, WITH  
ACRYLIC PRISMATIC LENS  
Light Source: TWO - F032/735 - 2850 LUMENS - 32 WATTS  
Ballast/Driver: B232IUNVHP-B

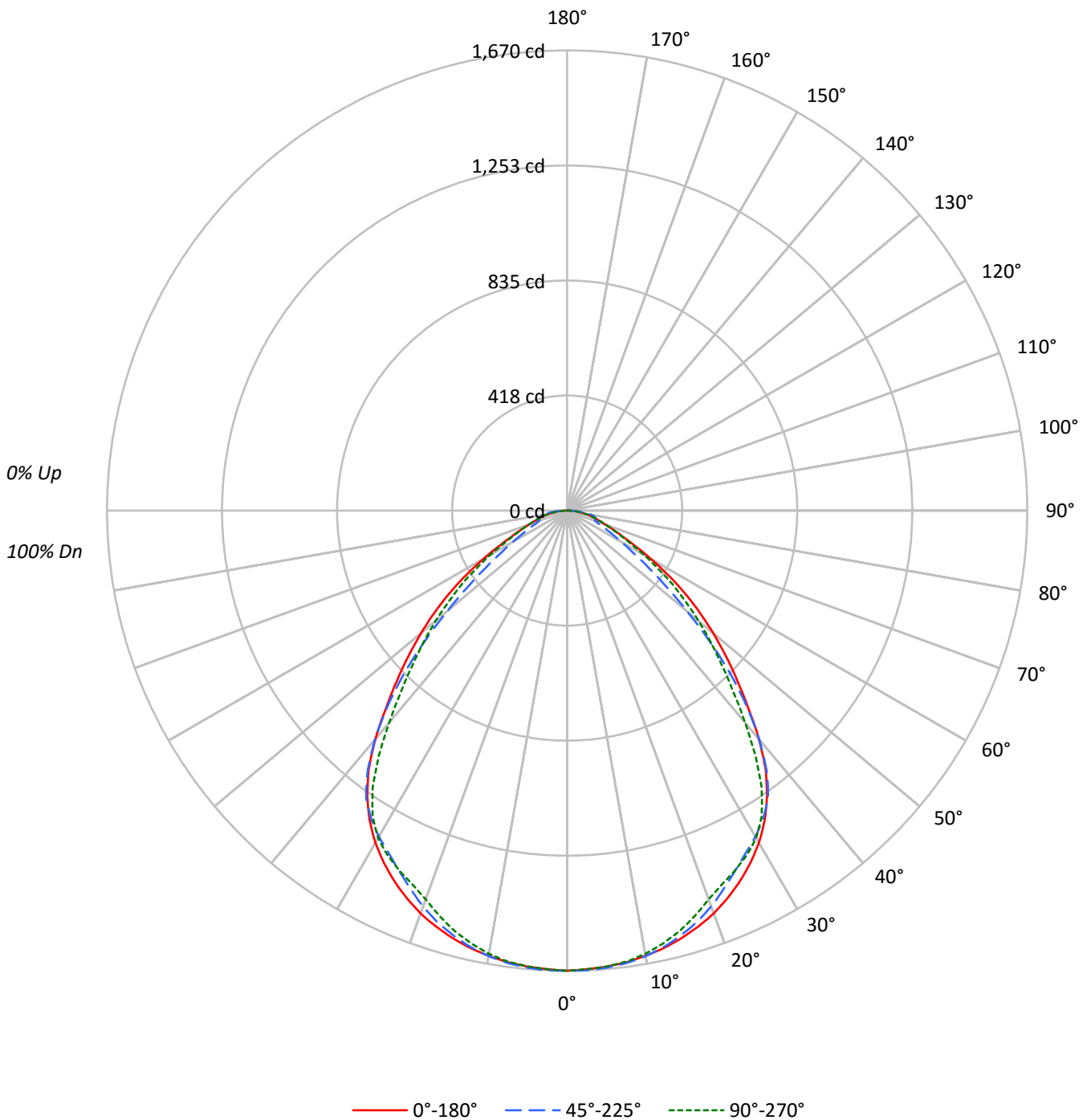
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 3420.9 lumens  
Efficiency: 60.0%  
Efficacy: 62.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.26  
Luminous Opening: Rectangular (W 0.65' x L: 3.94' x H: 0')  
CIE Type: Direct

Input Watts (W): 55  
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	67	67	67		64	64	64		61	61	61	60
1	66	64	62	60	65	63	61	59	60	58	57		58	56	55		56	55	54	52
2	61	57	54	51	60	56	53	50	54	51	49		52	50	48		50	48	47	46
3	57	51	47	44	55	50	46	43	49	45	43		47	44	42		46	43	41	40
4	53	46	42	38	51	45	41	38	44	40	37		43	40	37		41	39	36	35
5	49	42	37	34	48	41	37	33	40	36	33		39	35	33		38	35	32	31
6	45	38	33	30	44	38	33	30	37	33	30		36	32	29		35	32	29	28
7	42	35	30	27	41	35	30	27	34	30	27		33	29	26		32	29	26	25
8	40	32	27	24	39	32	27	24	31	27	24		30	27	24		30	26	24	23
9	37	30	25	22	36	29	25	22	29	25	22		28	24	22		27	24	22	21
10	35	28	23	20	34	27	23	20	27	23	20		26	23	20		26	22	20	19

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

	0°	45°	90°
0°	7069	7069	7069
5°	7058	7075	7053
10°	7053	7058	7019
15°	7038	6994	6919
20°	7009	6887	6761
25°	6931	6735	6730
30°	6804	6677	6706
35°	6537	6573	6361
40°	5984	5995	5548
45°	5232	5016	4759
50°	4557	3734	4096
55°	3830	2649	3446
60°	2963	1905	2717
65°	2223	1502	2123
70°	1795	1324	1819
75°	1684	1734	1701
80°	1487	2194	1536
85°	1991	2137	1554



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	158.1	4.6	2.8
10°-20°	449.5	13.1	7.9
20°-30°	670.1	19.6	11.8
30°-40°	776.9	22.7	13.6
40°-50°	644.9	18.9	11.3
50°-60°	369.2	10.8	6.5
60°-70°	186.3	5.4	3.3
70°-80°	121.6	3.6	2.1
80°-90°	44.4	1.3	0.8
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°	1277.6	37.3	22.4
0°-40°	2054.5	60.1	36.0
0°-60°	3068.6	89.7	53.8
0°-90°	3420.9	100.0	60.0
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°	3420.9	100.0	60.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1670	1670	1670	1670	1670	
5°	1661	1663	1665	1666	1660	158
15°	1606	1604	1596	1589	1579	453
25°	1484	1467	1442	1440	1441	683
35°	1265	1252	1272	1249	1231	785
45°	874	871	838	813	795	677
55°	519	390	359	372	467	463
65°	222	183	150	177	212	229
75°	103	134	106	128	104	108
85°	41	47	44	39	32	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1670	1670	1670	1670	1670
2.5°	1666	1668	1670	1671	1666
5°	1661	1663	1665	1666	1660
7.5°	1653	1655	1656	1656	1651
10°	1641	1642	1642	1639	1633
12.5°	1626	1625	1622	1617	1609
15°	1606	1604	1596	1589	1579
17.5°	1583	1579	1566	1553	1542
20°	1556	1547	1529	1511	1501
22.5°	1522	1510	1486	1472	1468
25°	1484	1467	1442	1440	1441
27.5°	1441	1419	1402	1411	1411
30°	1392	1366	1366	1375	1372
32.5°	1334	1310	1325	1324	1314
35°	1265	1252	1272	1249	1231
37.5°	1183	1190	1190	1153	1123
40°	1083	1113	1085	1050	1004
42.5°	974	1002	967	932	893
45°	874	871	838	813	795
47.5°	781	740	699	698	706
50°	692	614	567	580	622
52.5°	605	492	453	468	541
55°	519	390	359	372	467
57.5°	432	310	284	296	389
60°	350	252	225	241	321
62.5°	278	211	182	202	260
65°	222	183	150	177	212
67.5°	179	164	121	158	176
70°	145	155	107	148	147
72.5°	120	148	106	142	124
75°	103	134	106	128	104
77.5°	83	115	102	108	83
80°	61	95	90	87	63
82.5°	48	70	70	63	46
85°	41	47	44	39	32
87.5°	24	20	17	14	13
90°	0	0	0	0	0

(END OF REPORT)