

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: BALLABS ESTIMATED TEST NO. 4475.2

Luminaire Tested: **77-S10**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS ESTIMATED TEST NO. 4475.2
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 77-S10
Description: 4' CEILING MOUNT, 2-LAMP STAGGERED WITH S10
PARABOLIC BAFFLE LUM. WATTS= 85 REF=.99
ESTIMATED FROM 8' T12 LAMP REPORT #4475.1
Light Source: -
F32T8/835
Ballast/Driver: -

Summary

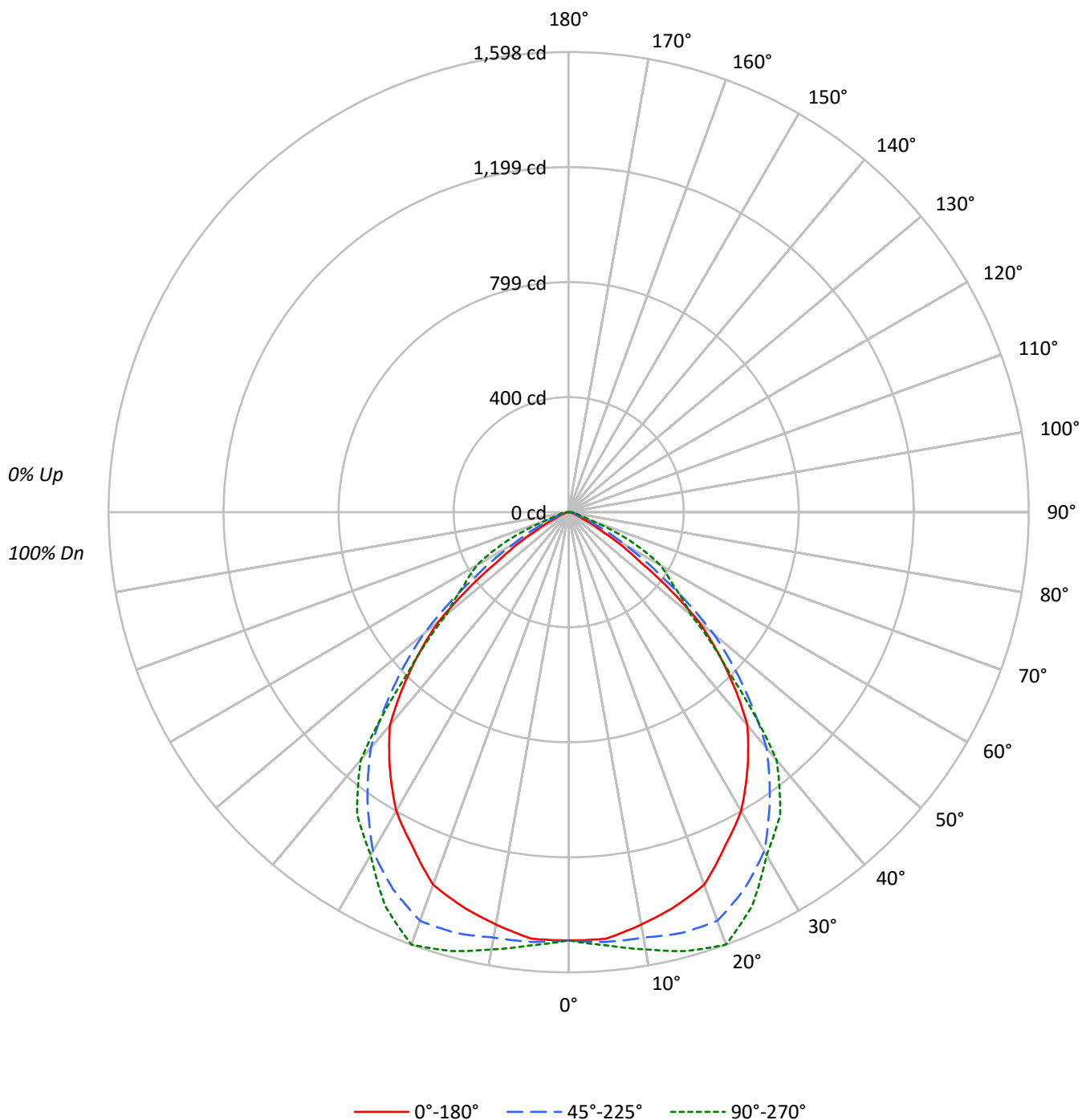
Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 3157.1 lumens
Efficiency: 53.5%
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.34 / 1.31
Luminous Opening: Rectangular (W 0.64' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 85
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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	64	64	64	64	62	62	62	62	59	59	59		57	57	57		54
1	60	58	56	54	58	57	55	53	54	53	52		52	51	50		48
2	55	52	49	47	54	51	48	46	49	47	45		47	46	44		42
3	51	47	43	40	50	46	43	40	44	42	39		43	41	39		37
4	48	42	38	35	47	42	38	35	40	37	35		39	36	34		33
5	44	38	34	31	43	38	34	31	37	33	31		36	33	30		29
6	41	35	31	28	40	34	30	28	34	30	27		33	30	27		26
7	38	32	28	25	38	32	28	25	31	27	25		30	27	24		23
8	36	29	25	22	35	29	25	22	28	25	22		28	24	22		21
9	34	27	23	20	33	27	23	20	26	23	20		26	22	20		19
10	32	25	21	19	31	25	21	19	24	21	19		24	21	18		18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6243	6243	6243
5°	6266	6313	6363
10°	6198	6394	6573
15°	6167	6576	6858
20°	6152	6746	7139
25°	5938	6689	6985
30°	5807	6588	6665
35°	5550	6242	6565
40°	5294	5858	6160
45°	4619	5112	4690
50°	3840	4284	3625
55°	2276	2979	3257
60°	1192	1856	3081
65°	536	1023	2354
70°	307	503	945
75°	227	389	551
80°	169	459	629
85°	289	819	963

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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	142.9	4.5	2.4
10°-20°	425.4	13.5	7.2
20°-30°	652.7	20.7	11.1
30°-40°	752.0	23.8	12.7
40°-50°	644.7	20.4	10.9
50°-60°	366.6	11.6	6.2
60°-70°	130.5	4.1	2.2
70°-80°	29.3	0.9	0.5
80°-90°	13.0	0.4	0.2
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°	1220.9	38.7	20.7
0°-40°	1973.0	62.5	33.4
0°-60°	2984.2	94.5	50.6
0°-90°	3157.1	100.0	53.5
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°	3157.1	100.0	53.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1487	1488	1498	1510	1510	141
15°	1419	1444	1513	1559	1578	401
25°	1282	1348	1444	1489	1508	593
35°	1083	1186	1218	1237	1281	678
45°	778	873	861	805	790	599
55°	311	388	407	415	445	300
65°	54	67	103	183	237	68
75°	14	18	24	30	34	16
85°	6	11	17	19	20	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487	1487	1487	1487	1487
5°	1487	1488	1498	1510	1510
10°	1454	1466	1500	1527	1542
15°	1419	1444	1513	1559	1578
20°	1377	1422	1510	1572	1598
25°	1282	1348	1444	1489	1508
30°	1198	1283	1359	1355	1375
35°	1083	1186	1218	1237	1281
40°	966	1070	1069	1102	1124
45°	778	873	861	805	790
50°	588	680	656	559	555
55°	311	388	407	415	445
60°	142	159	221	307	367
65°	54	67	103	183	237
70°	25	28	41	61	77
75°	14	18	24	30	34
80°	7	13	19	23	26
85°	6	11	17	19	20
90°	0	0	0	0	0

(END OF REPORT)