

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 TEST NO. 12386.0

Luminaire Tested: **7A/2T5-648-STG-1EB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 12386.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 7A/2T5-648-STG-1EB
Description: 2/28W T5 OFFSET LAMPS 4'RECESSED MNT LUMINAIRE
Light Source: -
FP28T5/835
Ballast/Driver: UNIVERSAL BALLAST #B228PUNV-C

Summary

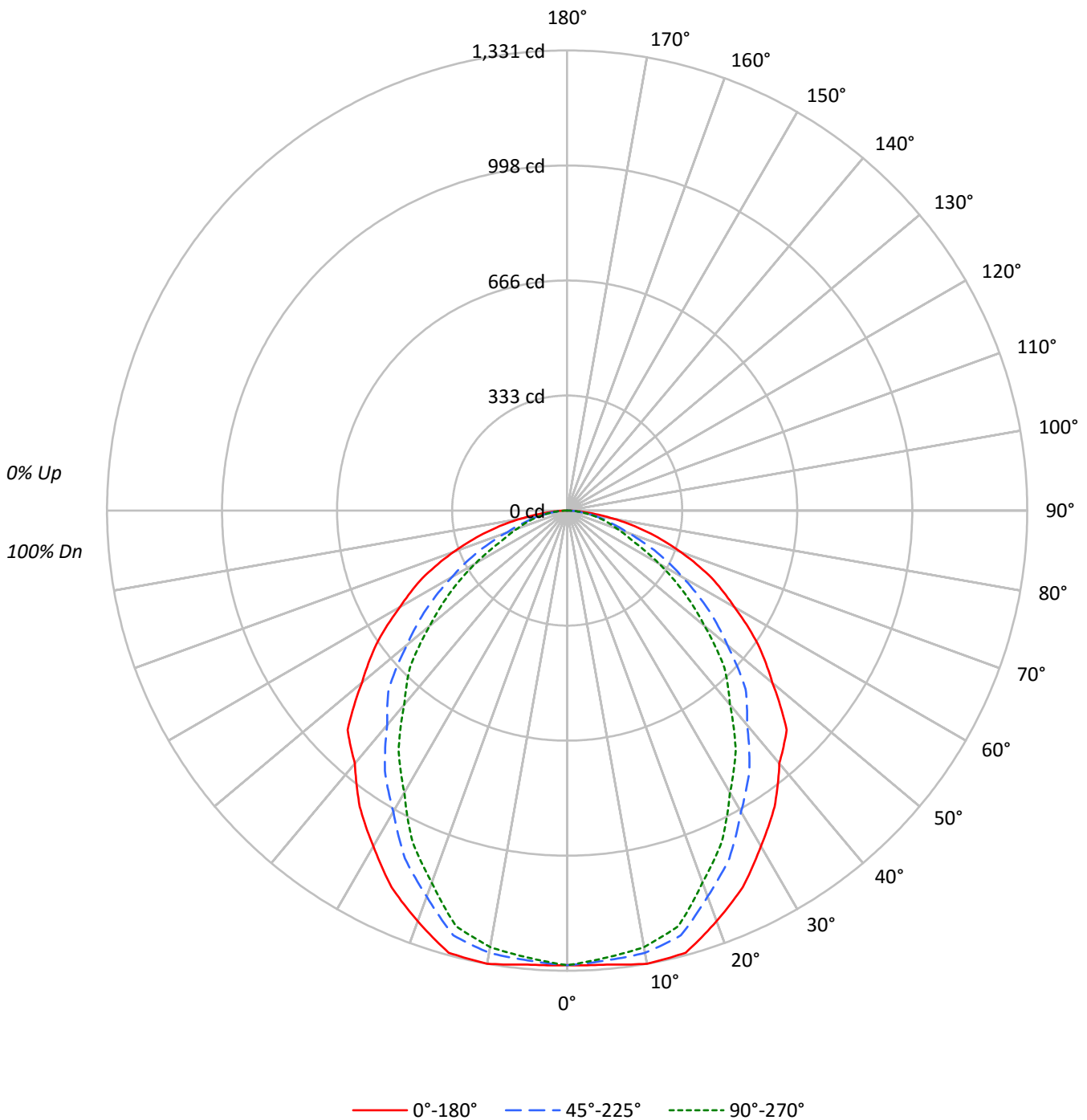
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 3102.8 lumens
Efficiency: 53.5%
Efficacy: 52.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.09 / 1.25
Luminous Opening: Rectangular (W 0.43' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 59
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



TEST NUMBER: BALLABS TEST NO. 12386.0
CATALOG NUMBER: 7A/2T5-648-STG-1EB

Luminous Intensity Polar Plot





TEST NUMBER: BALLABS TEST NO. 12386.0
 CATALOG NUMBER: 7A/2T5-648-STG-1EB

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8452	8452	8452
5°	8504	8426	8375
10°	8687	8478	8367
15°	8810	8464	8278
20°	8646	8126	7832
25°	8524	7872	7503
30°	8320	7466	6991
35°	8207	7211	6669
40°	8013	6796	6150
45°	8163	6635	5854
50°	7749	6050	5190
55°	7553	5580	4617
60°	7173	4949	3934
65°	7026	4365	3194
70°	6540	3495	2894
75°	5985	3005	2757
80°	5108	2702	2554
85°	3392	2286	2286



TEST NUMBER: BALLABS TEST NO. 12386.0
 CATALOG NUMBER: 7A/2T5-648-STG-1EB

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	124.7	4.0	2.2
10°-20°	356.8	11.5	6.2
20°-30°	512.6	16.5	8.8
30°-40°	579.4	18.7	10.0
40°-50°	567.3	18.3	9.8
50°-60°	460.5	14.8	7.9
60°-70°	305.8	9.9	5.3
70°-80°	155.1	5.0	2.7
80°-90°	40.6	1.3	0.7
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°	994.1	32.0	17.1
0°-40°	1573.5	50.7	27.1
0°-60°	2601.3	83.8	44.9
0°-90°	3102.8	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°	3102.8	100.0	53.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1318	1314	1306	1301	1298	126
15°	1324	1301	1272	1253	1244	371
25°	1202	1159	1110	1072	1058	553
35°	1046	989	919	867	850	653
45°	898	820	730	665	644	681
55°	674	592	498	433	412	600
65°	462	378	287	231	210	453
75°	241	170	121	114	111	255
85°	46	34	31	31	31	63
90°	0	0	0	0	0	



TEST NUMBER: BALLABS TEST NO. 12386.0
CATALOG NUMBER: 7A/2T5-648-STG-1EB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1315	1315	1315	1315	1315
5°	1318	1314	1306	1301	1298
10°	1331	1318	1299	1288	1282
15°	1324	1301	1272	1253	1244
20°	1264	1228	1188	1156	1145
25°	1202	1159	1110	1072	1058
30°	1121	1068	1006	961	942
35°	1046	989	919	867	850
40°	955	888	810	752	733
45°	898	820	730	665	644
50°	775	696	605	542	519
55°	674	592	498	433	412
60°	558	476	385	324	306
65°	462	378	287	231	210
70°	348	268	186	158	154
75°	241	170	121	114	111
80°	138	82	73	69	69
85°	46	34	31	31	31
90°	0	0	0	0	0

(END OF REPORT)