

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. 11963.0

Luminaire Tested: **S294 2/28T5 S17**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 11963.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S294 2/28T5 S17
Description: 2/28W T5 LAMP 2x4'RECESSED GRID MNT LUMINAIRE
Light Source: -
FP28WT5/835
Ballast/Driver: UNIVERSAL BALLAST #B228PUNV-C WATTS=65 REFL=92%

Summary

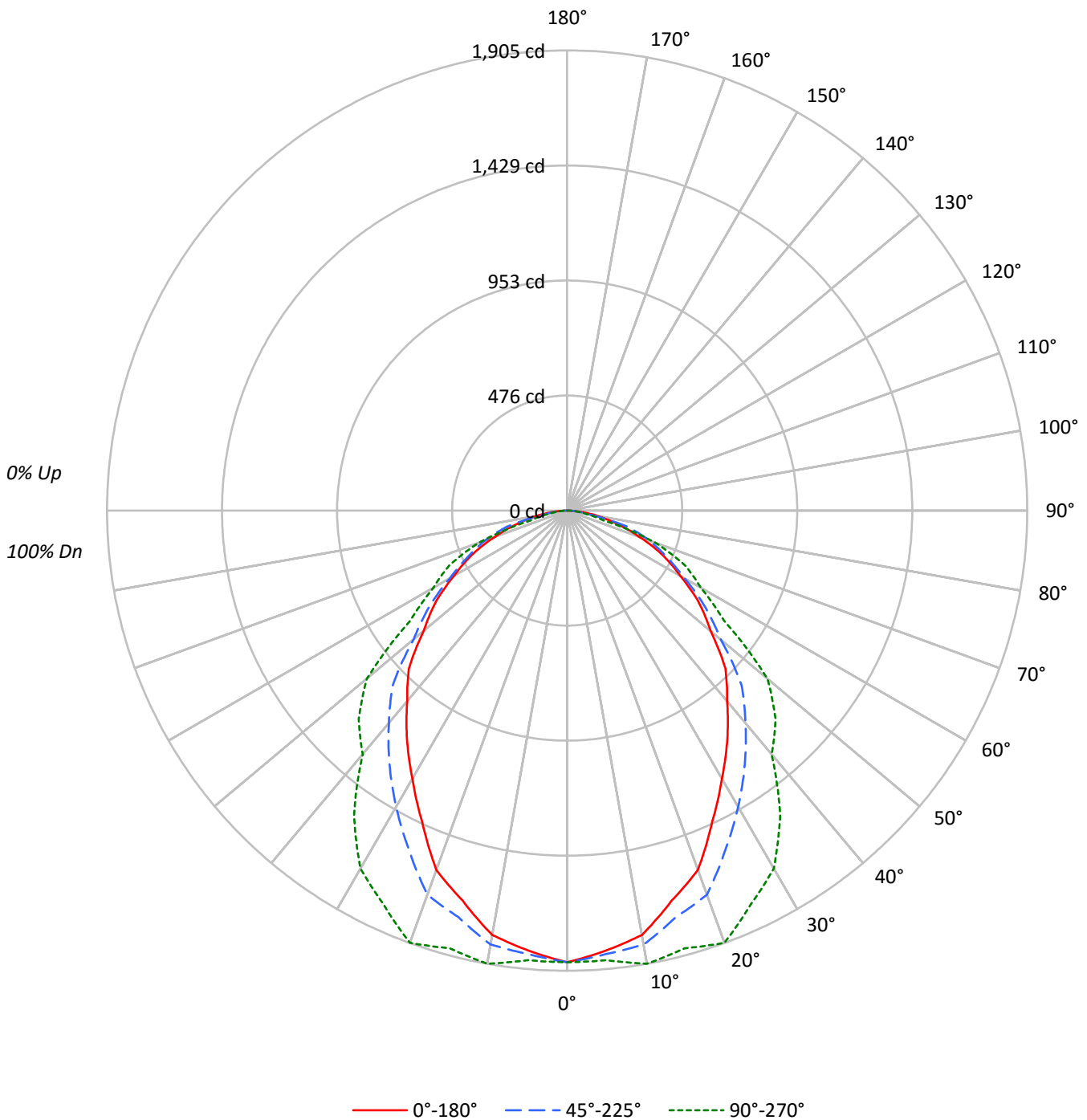
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4408.7 lumens
Efficiency: 76.0%
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.31 / 1.25
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 65
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	90	90	90	90	88	88	88	88	84	84	84	81	81	81	78	78	78	76
1	83	80	77	74	81	78	75	73	75	73	71	72	70	69	69	68	67	65
2	76	70	65	61	74	69	64	61	66	62	59	64	61	58	61	59	57	55
3	70	62	56	52	68	61	56	51	59	54	50	57	53	49	55	51	49	47
4	64	55	49	44	62	54	49	44	53	47	43	51	46	43	49	45	42	41
5	59	50	43	38	58	49	43	38	47	42	38	46	41	37	45	40	37	35
6	55	45	39	34	53	44	38	34	43	38	33	42	37	33	41	36	33	31
7	51	41	35	30	50	40	34	30	39	34	30	38	33	30	37	33	29	28
8	48	38	31	27	46	37	31	27	36	31	27	35	30	27	34	30	26	25
9	45	35	29	24	43	34	28	24	33	28	24	33	28	24	32	27	24	23
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	30	25	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2681	2681	2681
5°	2632	2652	2688
10°	2597	2655	2773
15°	2481	2585	2784
20°	2415	2581	2905
25°	2248	2452	2845
30°	2120	2344	2832
35°	2023	2243	2691
40°	1927	2148	2464
45°	1879	2070	2473
50°	1728	1849	2413
55°	1667	1747	1977
60°	1551	1608	1832
65°	1482	1537	1828
70°	1337	1513	1630
75°	1185	1423	858
80°	1048	776	644
85°	839	641	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	176.0	4.0	3.0
10°-20°	498.7	11.3	8.6
20°-30°	726.9	16.5	12.5
30°-40°	817.5	18.5	14.1
40°-50°	791.2	17.9	13.6
50°-60°	646.7	14.7	11.1
60°-70°	464.4	10.5	8.0
70°-80°	236.3	5.4	4.1
80°-90°	51.0	1.2	0.9
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°	1401.6	31.8	24.2
0°-40°	2219.1	50.3	38.3
0°-60°	3657.0	82.9	63.1
0°-90°	4408.7	100.0	76.0
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°	4408.7	100.0	76.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1829	1831	1843	1858	1868	173
15°	1672	1688	1742	1817	1876	473
25°	1421	1449	1550	1682	1799	657
35°	1156	1188	1282	1429	1538	724
45°	927	969	1021	1071	1220	706
55°	667	698	699	755	791	593
65°	437	453	453	496	539	429
75°	214	235	257	188	155	231
85°	51	45	39	35	33	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1870	1870	1870	1870	1870
5°	1829	1831	1843	1858	1868
10°	1784	1792	1824	1873	1905
15°	1672	1688	1742	1817	1876
20°	1583	1608	1692	1808	1904
25°	1421	1449	1550	1682	1799
30°	1281	1309	1416	1571	1711
35°	1156	1188	1282	1429	1538
40°	1030	1066	1148	1224	1317
45°	927	969	1021	1071	1220
50°	775	810	829	946	1082
55°	667	698	699	755	791
60°	541	565	561	579	639
65°	437	453	453	496	539
70°	319	336	361	378	389
75°	214	235	257	188	155
80°	127	148	94	83	78
85°	51	45	39	35	33
90°	0	0	0	0	0

(END OF REPORT)