

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: BAL 12073

Luminaire Tested: **S252 1/50BX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BAL 12073
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S252 1/50BX
Description: 1/50W BIAX LAMP 2x2'RECESSED GRID LUMINAIRE
Light Source: -
FT50W/2G11/835
Ballast/Driver: UNIVERSAL BALLAST #B254PUNV-D WATTS=56 REFL=94%

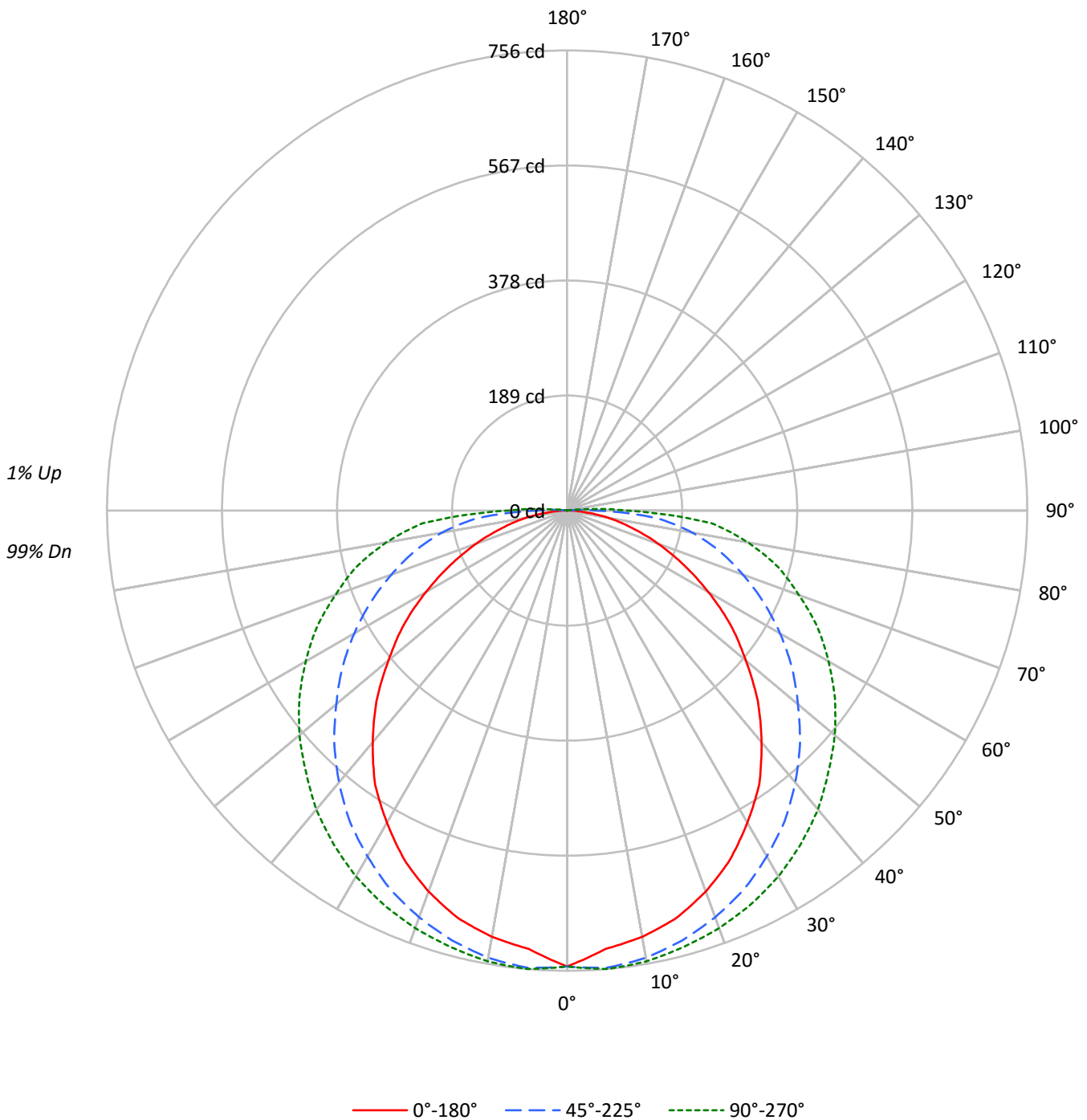
Summary

Lumens per Lamp: 4000 (1 lamp)
Luminaire Lumens: 2544.2 lumens
Efficiency: 63.6%
Efficacy: 45.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.38 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 1.96' x H: 0.15')
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	76	76	76	76	74	74	74	74	70	70	70	67	67	67	64	64	64	63
1	68	64	61	58	66	62	60	57	60	57	55	57	55	53	55	53	51	50
2	61	55	50	46	59	54	49	45	51	47	44	49	46	43	47	44	42	40
3	55	48	42	38	54	47	41	37	45	40	36	43	39	36	41	38	35	33
4	50	42	36	31	49	41	36	31	39	35	31	38	34	30	36	33	30	28
5	46	37	31	27	45	37	31	27	35	30	26	34	29	26	33	29	26	24
6	43	34	28	23	41	33	27	23	32	27	23	31	26	23	29	25	22	21
7	39	30	25	20	38	30	24	20	29	24	20	28	23	20	27	23	20	18
8	37	28	22	18	36	27	22	18	26	21	18	25	21	18	25	21	18	16
9	34	25	20	16	33	25	20	16	24	19	16	23	19	16	23	19	16	15
10	32	23	18	15	31	23	18	15	22	18	15	22	17	14	21	17	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2196	2196	2196
5°	2114	2198	2210
10°	2089	2180	2209
15°	2062	2157	2206
20°	2023	2135	2215
25°	1979	2116	2229
30°	1922	2091	2248
35°	1871	2073	2271
40°	1790	2046	2303
45°	1709	2025	2335
50°	1604	2001	2396
55°	1515	1998	2470
60°	1392	1996	2563
65°	1262	2006	2699
70°	1131	2030	2860
75°	975	2100	3151
80°	819	2190	3537
85°	472	2261	4236



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	71.1	2.8	1.8
10°-20°	204.9	8.1	5.1
20°-30°	314.1	12.3	7.9
30°-40°	385.6	15.2	9.6
40°-50°	412.2	16.2	10.3
50°-60°	394.8	15.5	9.9
60°-70°	340.1	13.4	8.5
70°-80°	259.1	10.2	6.5
80°-90°	143.4	5.6	3.6
90°-100°	18.7	0.7	0.5
100°-110°	0.3	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°	590.1	23.2	14.8
0°-40°	975.7	38.3	24.4
0°-60°	1782.7	70.1	44.6
0°-90°	2525.2	99.3	63.1
90°-120°	19.0	0.7	0.5
90°-150°	19.0	0.7	0.5
90°-180°	19.0	0.7	0.5
0°-180°	2544.2	100.0	63.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	723	748	754	751	756	69
15°	693	719	731	735	742	195
25°	633	663	687	703	714	291
35°	550	583	623	649	669	343
45°	443	485	541	585	607	341
55°	328	373	451	508	537	292
65°	211	261	356	423	454	210
75°	110	159	260	329	359	118
85°	26	70	150	211	238	31
90°	1	12	49	83	97	4
95°	0	2	8	17	21	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	749	749	749	749	749
5°	723	748	754	751	756
10°	711	738	746	744	752
15°	693	719	731	735	742
20°	666	694	711	719	730
25°	633	663	687	703	714
30°	592	624	656	679	694
35°	550	583	623	649	669
40°	497	536	583	620	641
45°	443	485	541	585	607
50°	383	430	495	548	574
55°	328	373	451	508	537
60°	268	319	404	467	496
65°	211	261	356	423	454
70°	159	208	307	376	405
75°	110	159	260	329	359
80°	69	116	209	275	302
85°	26	70	150	211	238
90°	1	12	49	83	97
95°	0	2	8	17	21
100°	0	1	2	1	2
105°	0	0	0	0	0
110°	0	0	0	0	0
115°	0	0	0	0	0
120°	0	0	0	0	0
125°	0	0	0	0	0
130°	0	0	0	0	0
135°	0	0	0	0	0
140°	0	0	0	0	0
145°	0	0	0	0	0
150°	0	0	0	0	0
155°	0	0	0	0	0
160°	0	0	0	0	0
165°	0	0	0	0	0
170°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)