

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: METALUX

Report Number: 175P152

Luminaire Tested: **BASIX TAPER OPTIC**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P152
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BASIX TAPER OPTIC
Description: Taper Optic of the Basix Project with
perferated shield and lens.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad B232IUNVHP-B Electronic L.O.B.F. = Unknown

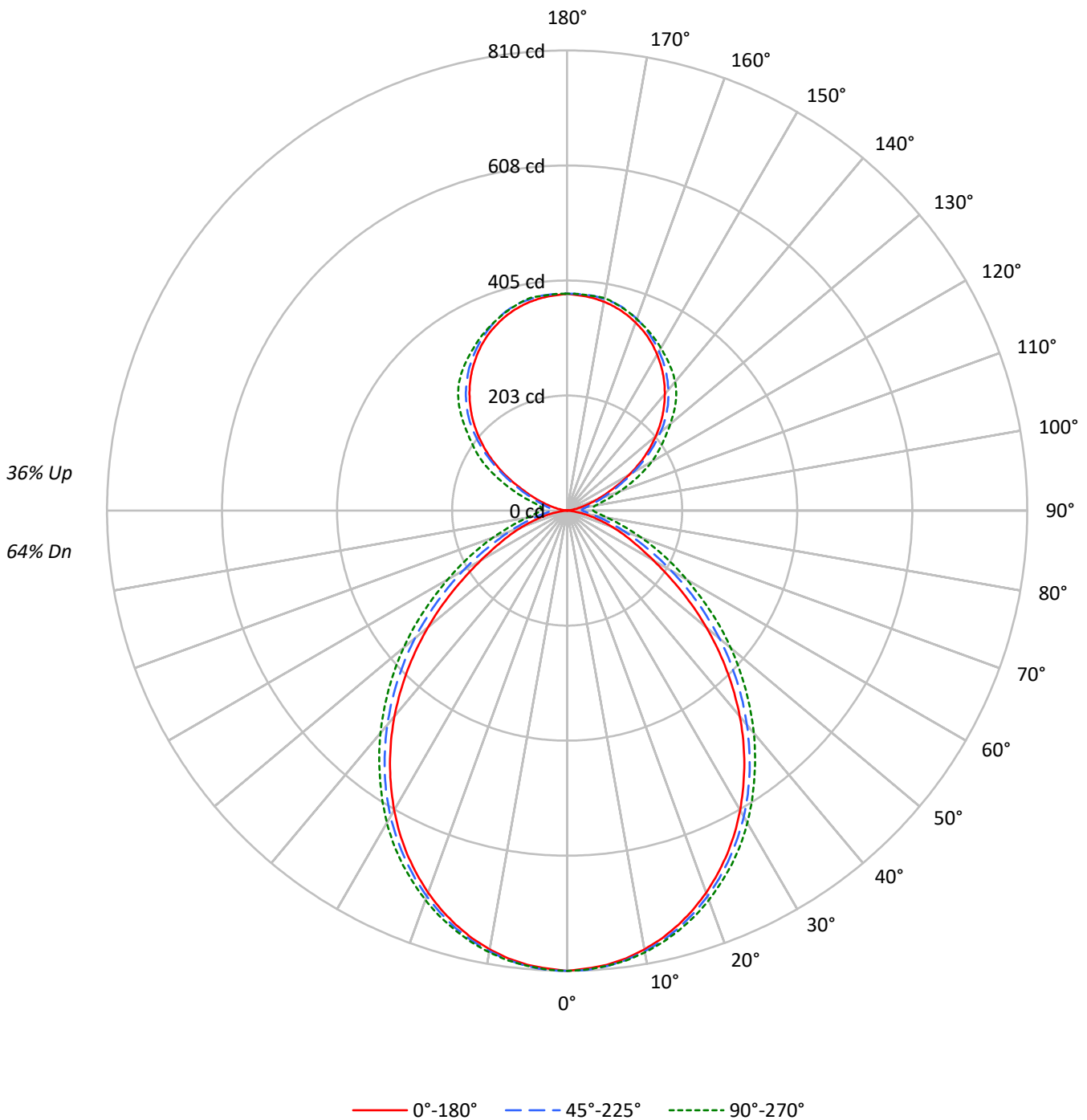
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 2821.1 lumens
Efficiency: 50.4%
Efficacy: 49.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.9' x L: 4' x H: 0.23')
CIE Type: Semi-Direct

Input Watts (W): 57
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: 175P152
CATALOG NUMBER: BASIX TAPER OPTIC

Luminous Intensity Polar Plot





TEST NUMBER: 175P152

CATALOG NUMBER: BASIX TAPER OPTIC

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	56	56	56	56	52	52	52	52	46	46	46	40	40	40	35	35	35	32
1	51	49	47	45	48	46	44	43	41	39	38	36	35	34	31	30	30	27
2	47	43	40	37	44	41	38	36	36	34	32	32	30	29	28	26	25	23
3	43	38	34	32	40	36	33	30	32	29	27	28	26	25	25	23	22	20
4	39	34	30	27	37	32	29	26	29	26	24	25	23	21	22	21	19	18
5	36	30	26	23	34	29	25	22	26	23	21	23	21	19	20	18	17	15
6	33	27	23	20	31	26	22	20	23	20	18	21	18	17	18	17	15	14
7	31	25	21	18	29	24	20	17	21	18	16	19	17	15	17	15	13	12
8	29	23	19	16	27	22	18	16	19	16	14	17	15	13	16	14	12	11
9	27	21	17	14	25	20	16	14	18	15	13	16	14	12	14	12	11	10
10	25	19	16	13	24	18	15	13	17	14	12	15	13	11	13	11	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2423	2423	2423
5°	2397	2370	2362
10°	2357	2302	2294
15°	2302	2221	2214
20°	2231	2127	2124
25°	2142	2021	2023
30°	2035	1904	1910
35°	1908	1769	1779
40°	1760	1621	1643
45°	1588	1460	1496
50°	1391	1287	1341
55°	1172	1103	1174
60°	952	914	1006
65°	785	734	856
70°	640	585	710
75°	482	464	588
80°	305	377	498
85°	122	338	474



TEST NUMBER: 175P152

CATALOG NUMBER: BASIX TAPER OPTIC

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	76.3	2.7	1.4	0°	810	810	810	810	810	
10°-20°	214.0	7.6	3.8	5°	803	803	805	807	805	76
20°-30°	311.0	11.0	5.6	15°	755	757	760	764	764	213
30°-40°	349.3	12.4	6.2	25°	667	669	676	684	686	306
40°-50°	324.3	11.5	5.8	35°	544	548	560	571	575	339
50°-60°	247.8	8.8	4.4	45°	397	404	422	438	444	306
60°-70°	154.7	5.5	2.8	55°	243	254	278	298	307	218
70°-80°	80.0	2.8	1.4	65°	125	132	153	177	187	125
80°-90°	37.2	1.3	0.7	75°	51	56	73	91	100	55
90°-100°	29.5	1.0	0.5	85°	6	16	35	49	54	9
100°-110°	52.2	1.8	0.9	90°	0	11	26	40	46	0
110°-120°	102.6	3.6	1.8	95°	2	13	27	40	46	4
120°-130°	160.7	5.7	2.9	105°	30	33	47	62	68	33
130°-140°	193.5	6.9	3.5	115°	86	81	96	123	134	86
140°-150°	189.9	6.7	3.4	125°	167	165	176	195	204	148
150°-160°	157.8	5.6	2.8	135°	238	240	249	264	270	183
160°-170°	104.2	3.7	1.9	145°	294	298	302	310	314	184
170°-180°	36.2	1.3	0.6	155°	337	341	342	345	345	155
0°-30°	601.3	21.3	10.7	165°	365	367	371	372	370	103
0°-40°	950.6	33.7	17.0	175°	378	379	381	381	381	36
0°-60°	1522.7	54.0	27.2	180°	382	382	382	382	382	
0°-90°	1794.6	63.6	32.0							
90°-120°	184.3	6.5	3.3							
90°-150°	728.3	25.8	13.0							
90°-180°	1027.0	36.4	18.3							
0°-180°	2821.1	100.0	50.4							



TEST NUMBER: 175P152

CATALOG NUMBER: BASIX TAPER OPTIC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	810.3	810.3	810.3	810.3	810.3
2.5°	806.8	807.9	809.5	810.4	808.6
5°	802.7	803.2	805.0	806.6	804.6
7.5°	794.9	795.6	797.7	799.8	798.7
10°	784.3	785.2	787.8	790.1	789.6
12.5°	771.2	772.0	775.4	778.5	778.3
15°	755.2	756.6	760.2	764.4	764.1
17.5°	736.7	738.4	742.4	747.6	748.4
20°	715.7	717.7	722.4	728.1	729.7
22.5°	692.3	694.7	700.3	706.9	708.5
25°	666.8	669.2	675.9	683.7	686.4
27.5°	639.0	641.9	649.7	658.9	661.9
30°	608.9	612.4	621.9	631.3	634.7
32.5°	577.0	581.3	591.8	602.0	605.3
35°	543.9	548.4	559.9	570.8	574.7
37.5°	509.0	514.0	526.6	538.7	543.4
40°	472.8	478.4	492.4	505.7	511.2
42.5°	435.2	441.5	457.3	471.9	477.8
45°	397.2	404.0	421.6	437.6	444.2
47.5°	358.4	365.9	385.9	403.0	409.9
50°	319.5	327.9	349.7	367.8	376.0
52.5°	281.2	290.7	313.4	333.0	341.6
55°	243.2	254.5	278.4	298.3	307.4
57.5°	207.4	219.8	244.1	264.6	273.8
60°	175.0	187.3	211.5	232.6	242.8
62.5°	147.4	158.0	181.1	203.4	214.0
65°	124.6	132.1	153.1	176.6	187.2
67.5°	104.0	109.6	128.7	152.1	161.9
70°	84.8	89.9	107.7	129.3	138.2
72.5°	67.1	72.3	89.6	108.8	117.4
75°	50.7	56.4	73.4	91.3	99.5
77.5°	36.0	42.9	60.0	76.6	83.8
80°	23.5	32.0	49.4	64.5	70.9
82.5°	13.3	22.8	40.9	55.8	61.8
85°	5.9	16.4	34.8	48.7	54.2
87.5°	2.0	12.9	29.6	43.5	49.0
90°	0.3	10.9	26.5	40.2	45.8
92.5°	0.8	11.3	26.0	39.2	44.9
95°	2.3	13.1	26.8	39.8	45.6
97.5°	6.0	16.3	29.6	41.3	46.1
100°	12.0	21.0	34.2	45.5	50.2
102.5°	20.0	26.5	40.0	52.1	57.5
105°	29.8	33.2	47.0	62.1	68.4
107.5°	41.1	41.7	55.9	74.6	82.6
110°	54.2	52.2	67.2	89.1	98.6



TEST NUMBER: 175P152

CATALOG NUMBER: BASIX TAPER OPTIC

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	68.9	65.2	80.5	105.1	115.6
115°	85.8	81.2	95.7	122.7	134.1
117.5°	105.1	100.1	113.7	141.6	153.4
120°	126.0	121.2	133.7	159.8	172.0
122.5°	146.9	143.4	154.6	176.8	188.4
125°	166.8	165.1	175.6	194.9	203.5
127.5°	185.6	185.7	195.5	213.0	219.7
130°	203.8	205.1	214.7	230.7	236.9
132.5°	221.1	223.1	232.5	248.6	254.4
135°	237.5	240.1	248.7	264.5	270.5
137.5°	252.9	256.1	263.5	278.3	284.2
140°	267.5	271.1	277.1	290.2	295.7
142.5°	281.2	284.8	289.8	300.8	305.5
145°	293.9	298.2	302.1	310.5	314.0
147.5°	305.8	310.4	313.3	319.4	322.2
150°	316.8	321.9	323.6	328.5	330.1
152.5°	327.3	332.0	333.4	337.3	338.2
155°	336.6	341.2	342.5	345.1	345.4
157.5°	344.9	349.3	351.0	352.4	352.1
160°	352.2	356.2	359.1	359.0	358.6
162.5°	359.0	361.7	365.8	365.6	365.0
165°	364.6	367.4	371.3	371.6	370.4
167.5°	369.4	371.0	375.2	376.7	375.6
170°	373.3	374.2	377.6	379.4	379.9
172.5°	376.4	377.9	380.5	380.0	380.5
175°	378.4	379.3	381.4	380.9	380.9
177.5°	379.9	380.2	381.7	382.7	381.7
180°	381.8	381.8	381.8	381.8	381.8

(END OF REPORT)