

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: 175P159

Luminaire Tested: **BASIX TAPER OPTIC 1 LIGHT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P159
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BASIX TAPER OPTIC 1 LIGHT
Description: Taper Optic of the Basix Project with
perferated shield and lens.
Light Source: One - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad B232IUNVHP-B Electronic L.O.B.F. = Unknown

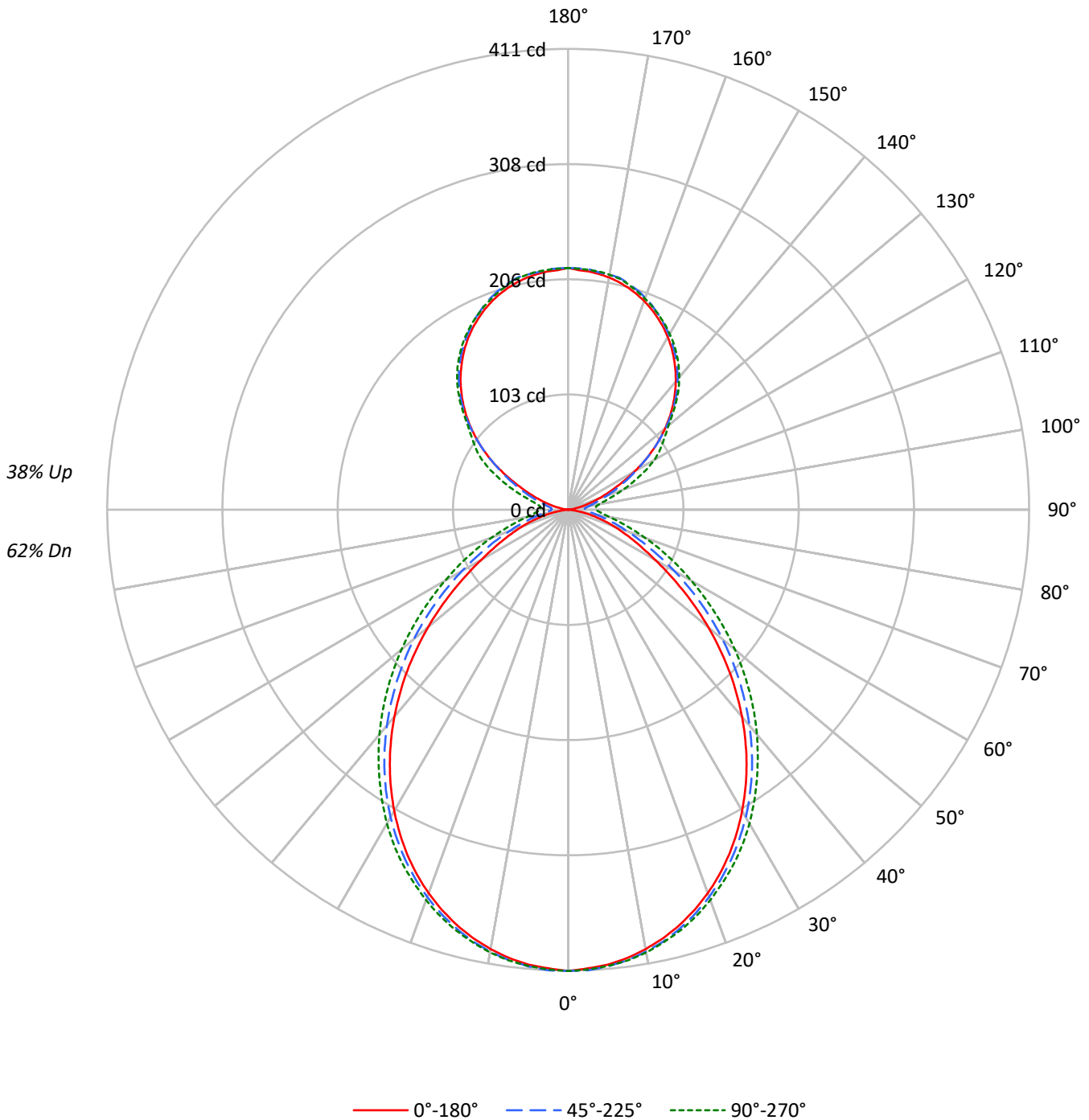
Summary

Lumens per Lamp: 2800 (1 lamp)
Luminaire Lumens: 1476.7 lumens
Efficiency: 52.7%
Efficacy: 42.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.9' x L: 4' x H: 0.15')
CIE Type: Semi-Direct

Input Watts (W): 35
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										
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	50	30	10	50	30	10	0														
RCR																																						
0	58	58	58	58	54	54	54	54	48	48	48	41	41	41	36	36	36	33																				
1	53	51	49	47	50	48	46	45	42	41	40	37	36	35	32	31	30	28																				
2	49	45	42	39	46	42	39	37	37	35	33	33	31	30	28	27	26	24																				
3	45	40	36	33	42	37	34	31	33	30	28	29	27	25	25	24	23	21																				
4	41	35	31	28	38	33	30	27	30	27	24	26	24	22	23	21	20	18																				
5	38	32	27	24	35	30	26	23	27	24	21	24	21	19	21	19	17	16																				
6	35	29	24	21	33	27	23	20	24	21	19	21	19	17	19	17	15	14																				
7	32	26	22	19	30	25	21	18	22	19	17	20	17	15	17	15	14	12																				
8	30	24	20	17	28	22	19	16	20	17	15	18	15	14	16	14	12	11																				
9	28	22	18	15	26	21	17	14	19	15	13	17	14	12	15	13	11	10																				
10	26	20	16	14	25	19	15	13	17	14	12	15	13	11	14	12	10	9																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1230	1230	1230
5°	1218	1212	1208
10°	1200	1185	1183
15°	1175	1152	1150
20°	1142	1111	1111
25°	1100	1064	1068
30°	1048	1009	1018
35°	986	947	959
40°	913	875	896
45°	827	797	827
50°	727	712	753
55°	615	619	671
60°	503	523	588
65°	416	428	511
70°	342	350	434
75°	261	286	370
80°	169	243	329
85°	74	232	341



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	38.7	2.6	1.4	0°	411	411	411	411	411	
10°-20°	108.8	7.4	3.9	5°	407	408	409	410	408	39
20°-30°	158.3	10.7	5.7	15°	384	384	386	388	388	108
30°-40°	178.3	12.1	6.4	25°	339	341	344	348	349	156
40°-50°	166.1	11.2	5.9	35°	277	280	286	291	293	173
50°-60°	127.6	8.6	4.6	45°	203	206	216	225	228	156
60°-70°	80.2	5.4	2.9	55°	124	130	143	154	159	112
70°-80°	41.5	2.8	1.5	65°	64	68	79	92	98	64
80°-90°	19.5	1.3	0.7	75°	26	29	38	48	52	28
90°-100°	16.1	1.1	0.6	85°	3	8	18	26	29	4
100°-110°	28.2	1.9	1.0	90°	0	6	15	22	25	0
110°-120°	54.5	3.7	1.9	95°	1	6	15	22	25	2
120°-130°	84.2	5.7	3.0	105°	16	18	26	34	37	17
130°-140°	103.3	7.0	3.7	115°	46	44	52	64	70	46
140°-150°	104.4	7.1	3.7	125°	92	90	92	98	102	81
150°-160°	88.1	6.0	3.1	135°	132	133	134	136	136	102
160°-170°	58.6	4.0	2.1	145°	164	167	167	169	169	103
170°-180°	20.4	1.4	0.7	155°	189	191	191	192	191	87
0°-30°	305.8	20.7	10.9	165°	205	207	209	208	208	58
0°-40°	484.0	32.8	17.3	175°	213	214	215	216	215	20
0°-60°	777.7	52.7	27.8	180°	216	216	216	216	216	
0°-90°	918.9	62.2	32.8							
90°-120°	98.9	6.7	3.5							
90°-150°	390.8	26.5	14.0							
90°-180°	558.0	37.8	19.9							
0°-180°	1476.7	100.0	52.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.4	411.4	411.4	411.4	411.4
2.5°	409.4	410.1	411.1	411.6	410.4
5°	407.2	407.7	408.8	409.6	408.5
7.5°	403.3	403.9	405.2	406.2	405.5
10°	397.9	398.8	400.2	401.5	401.0
12.5°	391.4	392.3	394.1	395.6	395.0
15°	383.5	384.5	386.4	388.5	388.1
17.5°	374.3	375.5	377.5	380.0	380.0
20°	363.9	365.1	367.5	370.2	370.5
22.5°	352.3	353.6	356.3	359.5	359.9
25°	339.4	340.9	344.1	348.0	349.0
27.5°	325.3	327.1	330.8	335.4	336.7
30°	310.2	312.2	316.7	321.7	323.2
32.5°	294.2	296.5	301.5	307.1	308.6
35°	277.3	279.8	285.6	291.4	293.3
37.5°	259.5	262.4	268.8	275.4	277.7
40°	241.2	244.1	251.4	258.9	261.7
42.5°	222.1	225.5	233.7	242.0	245.3
45°	202.8	206.4	215.8	224.8	228.2
47.5°	183.0	187.1	197.6	207.3	211.2
50°	163.2	167.7	179.5	189.6	194.0
52.5°	143.5	148.7	161.2	172.0	176.7
55°	124.2	130.3	143.2	154.3	159.4
57.5°	106.0	112.6	125.9	137.2	142.6
60°	89.5	96.2	109.3	120.9	126.8
62.5°	75.4	81.0	93.7	106.1	112.1
65°	63.6	67.8	79.2	92.3	98.1
67.5°	52.9	56.2	66.6	79.7	85.0
70°	43.2	46.0	55.9	67.9	72.4
72.5°	34.2	37.0	46.5	56.7	61.3
75°	25.8	28.9	38.1	47.6	51.9
77.5°	18.3	21.9	31.0	40.0	43.8
80°	11.9	16.5	25.7	33.7	37.2
82.5°	6.8	11.6	21.2	29.1	32.3
85°	3.1	8.4	17.9	25.7	28.9
87.5°	1.0	6.4	15.7	23.2	26.3
90°	0.0	5.8	14.7	21.9	25.1
92.5°	0.3	5.8	14.7	21.8	25.0
95°	1.1	6.5	15.0	21.7	24.7
97.5°	3.1	8.4	16.4	22.9	25.6
100°	6.2	11.0	18.8	25.3	28.0
102.5°	10.5	14.1	22.0	28.8	31.7
105°	15.7	17.6	25.9	33.8	37.0
107.5°	21.8	22.0	30.8	40.2	44.0
110°	28.8	27.8	36.9	47.6	51.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.8	34.9	43.9	55.5	60.5
115°	46.1	43.6	51.8	64.4	69.8
117.5°	56.7	54.1	60.6	73.9	79.5
120°	68.6	65.9	70.2	82.5	88.6
122.5°	80.3	78.1	80.5	90.3	96.1
125°	91.6	90.5	91.5	98.2	102.4
127.5°	102.4	102.2	102.5	106.3	109.2
130°	112.8	113.1	113.6	115.5	116.8
132.5°	122.7	123.5	124.2	125.8	126.2
135°	132.1	133.3	134.2	135.8	136.3
137.5°	140.9	142.3	143.4	145.3	145.6
140°	149.3	150.8	151.8	153.7	154.2
142.5°	157.1	159.1	159.6	161.5	161.8
145°	164.4	166.6	166.9	168.6	168.8
147.5°	171.3	173.7	173.6	175.1	175.3
150°	177.7	180.3	180.0	181.0	181.1
152.5°	183.5	186.4	185.9	186.6	186.6
155°	188.8	191.3	191.4	191.7	191.4
157.5°	193.7	196.6	196.6	196.3	196.1
160°	198.0	200.1	201.3	200.8	200.3
162.5°	201.9	204.1	205.3	204.9	204.2
165°	205.2	206.7	208.6	208.5	207.9
167.5°	208.0	209.1	211.8	211.6	211.1
170°	210.3	211.9	212.9	213.9	212.8
172.5°	212.0	212.4	213.3	215.1	214.2
175°	213.2	214.0	215.1	215.6	214.6
177.5°	213.9	214.8	215.4	215.5	215.1
180°	215.5	215.5	215.5	215.5	215.5

(END OF REPORT)