

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P35238

Luminaire Tested: **14EN-LD2-28HP-UNV-L835-CD1-U**

Test Date: 10/08/16

Test Information

Test Method: LM-79-08
Report Number: P35238
Test Lab: INNOVATION CENTER-P3
Test Date: 10/08/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-28HP-UNV-L835-CD1-U
Description: ENCOUNTER 1X4 LED TROFFER
Light Source: (392) EATON 3500K LEDS
EL232N098E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 520 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2847.2 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.4 / 1.42
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

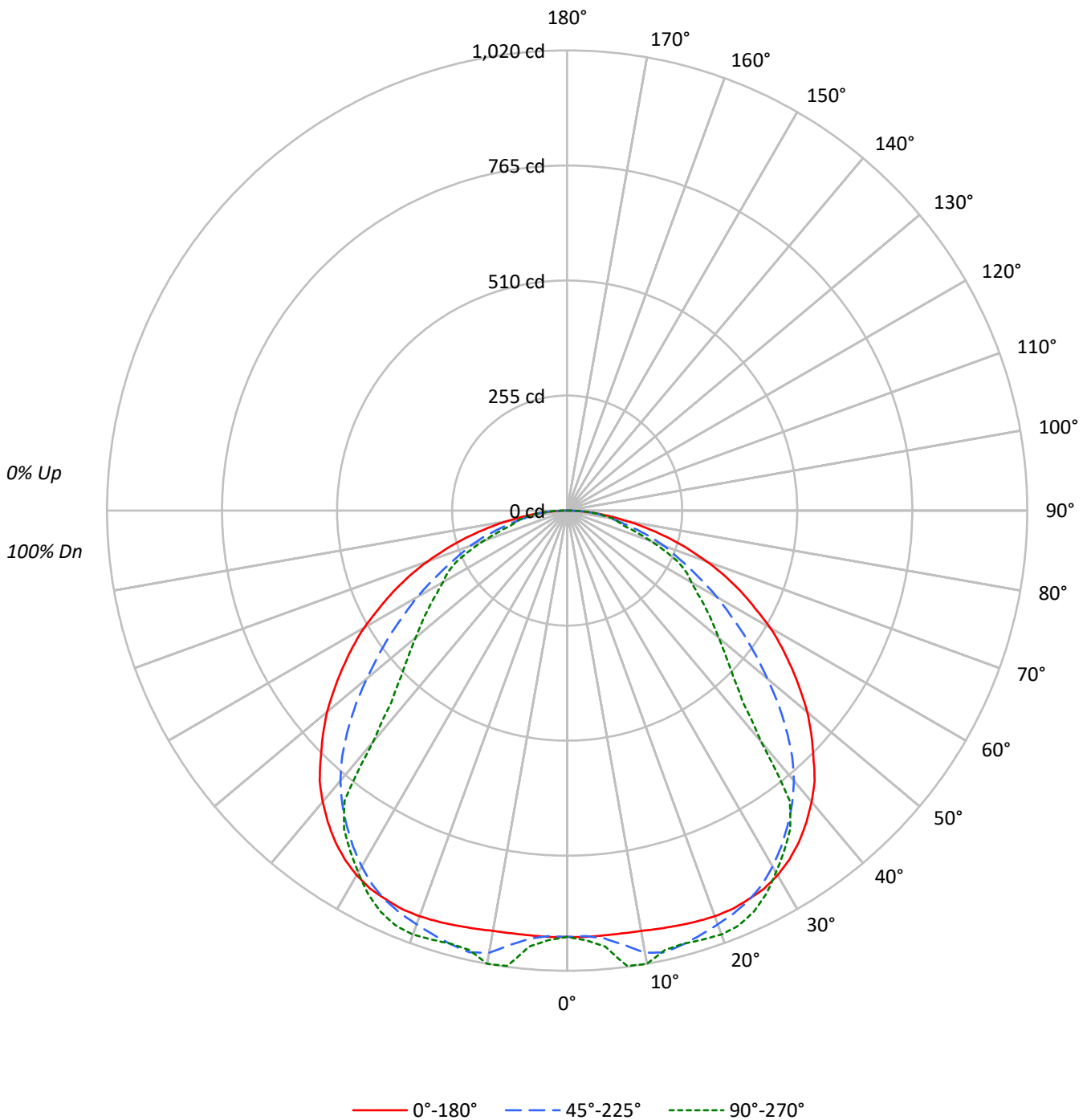
Input Watts (W): 23
Input Voltage (V): 120.0
Input Current (A_{in}): 0.193
Voltage Rise (V): NR
Power Factor: 0.9955
Total Harmonic Distortion (THDi): 8.59%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



TEST NUMBER: P35238

CATALOG NUMBER: 14EN-LD2-28HP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P35238

CATALOG NUMBER: 14EN-LD2-28HP-UNV-L835-CD1-U

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3184	3184	3184
5°	3196	3220	3281
10°	3237	3404	3490
15°	3321	3471	3468
20°	3432	3500	3586
25°	3536	3543	3644
30°	3630	3545	3603
35°	3686	3505	3546
40°	3708	3440	2943
45°	3679	3274	2483
50°	3643	3035	2296
55°	3566	2802	2197
60°	3504	2588	2143
65°	3389	2360	2177
70°	3241	2246	1941
75°	2994	2018	1692
80°	2620	1843	2018
85°	2242	2242	2204



TEST NUMBER: P35238

CATALOG NUMBER: 14EN-LD2-28HP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	3.3
10°-20°	278.8	9.8
20°-30°	442.0	15.5
30°-40°	537.5	18.9
40°-50°	512.6	18.0
50°-60°	428.5	15.0
60°-70°	316.2	11.1
70°-80°	178.5	6.3
80°-90°	60.6	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	813.4	28.6
0°-40°	1350.9	47.4
0°-60°	2292.0	80.5
0°-90°	2847.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2847.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	948	952	963	970	90
15°	952	974	995	992	994	270
25°	951	952	953	973	980	439
35°	896	867	852	862	862	560
45°	772	723	687	592	521	596
55°	607	553	477	394	374	543
65°	425	367	296	270	273	420
75°	230	189	155	134	130	243
85°	58	52	58	57	57	67
90°	0	0	0	0	0	



TEST NUMBER: P35238

CATALOG NUMBER: 14EN-LD2-28HP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	945	945	945	945	945
2.5°	946	946	944	950	953
5°	945	948	952	963	970
7.5°	945	952	971	1003	1018
10°	946	962	995	1020	1020
12.5°	949	971	1003	1001	998
15°	952	974	995	992	994
17.5°	955	974	986	990	997
20°	957	970	976	990	1000
22.5°	956	962	966	986	995
25°	951	952	953	973	980
27.5°	945	938	935	951	957
30°	933	918	911	923	926
32.5°	917	896	883	895	895
35°	896	867	852	862	862
37.5°	871	835	819	818	811
40°	843	801	782	743	669
42.5°	812	763	738	660	577
45°	772	723	687	592	521
47.5°	734	682	635	534	477
50°	695	639	579	482	438
52.5°	651	596	527	436	405
55°	607	553	477	394	374
57.5°	564	505	427	355	343
60°	520	460	384	322	318
62.5°	470	411	338	296	299
65°	425	367	296	270	273
67.5°	378	321	259	238	235
70°	329	275	228	201	197
72.5°	279	232	194	166	162
75°	230	189	155	134	130
77.5°	182	152	122	113	116
80°	135	120	95	100	104
82.5°	95	82	79	82	81
85°	58	52	58	57	57
87.5°	26	29	30	30	31
90°	0	0	0	0	0

(END OF REPORT)