

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: P238665

Luminaire Tested: **14ENA-LD2-33-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238665
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ENA-LD2-33-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2776.5 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 0.67' x L: 3.83' x H: 0')
CIE Type: Direct

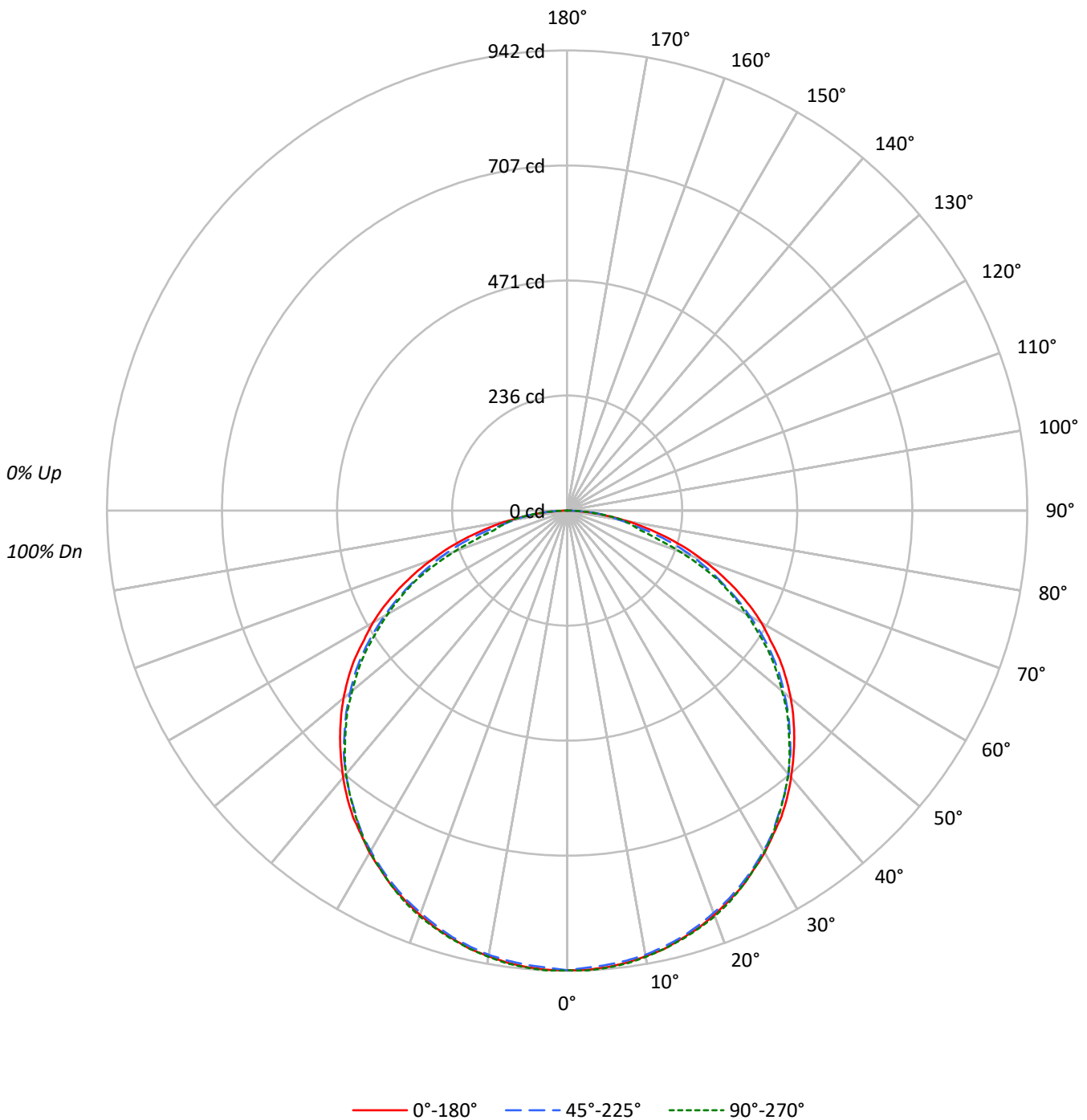
Input Watts (W): 28.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3963	3963	3963
5°	3966	3947	3972
10°	3962	3949	3968
15°	3956	3943	3962
20°	3948	3928	3961
25°	3943	3923	3943
30°	3934	3912	3927
35°	3933	3887	3895
40°	3923	3874	3874
45°	3917	3838	3821
50°	3915	3799	3761
55°	3902	3751	3697
60°	3871	3636	3573
65°	3789	3482	3438
70°	3634	3345	3018
75°	3416	3011	2532
80°	3027	2600	2848
85°	2339	2697	2552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.1	3.2
10°-20°	255.9	9.2
20°-30°	390.1	14.0
30°-40°	475.0	17.1
40°-50°	499.4	18.0
50°-60°	458.4	16.5
60°-70°	352.2	12.7
70°-80°	196.6	7.1
80°-90°	59.7	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°	735.1	26.5
0°-40°	1210.1	43.6
0°-60°	2168.0	78.1
0°-90°	2776.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2776.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	938	938	934	938	940	89
15°	907	907	904	907	909	256
25°	848	846	844	847	848	391
35°	765	762	756	758	758	478
45°	658	653	644	642	642	507
55°	531	527	511	502	504	474
65°	380	370	349	345	345	376
75°	210	200	185	160	156	222
85°	48	50	56	54	53	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	941.0	941.0	941.0	941.0	941.0
2.5°	941.0	941.0	936.6	941.0	942.4
5°	938.0	938.0	933.6	938.0	939.5
7.5°	933.6	933.6	929.2	932.2	935.1
10°	926.3	926.3	923.3	926.3	927.7
12.5°	918.9	917.5	914.5	917.5	918.9
15°	907.2	907.2	904.3	907.2	908.7
17.5°	895.5	894.0	891.0	895.5	896.9
20°	880.8	879.3	876.4	880.8	883.7
22.5°	864.6	863.2	861.7	866.1	867.6
25°	848.5	845.5	844.1	847.0	848.5
27.5°	827.9	826.5	825.0	826.5	827.9
30°	808.8	805.9	804.4	804.4	807.4
32.5°	785.4	783.9	782.4	783.9	783.9
35°	764.8	761.9	756.0	757.5	757.5
37.5°	739.9	735.4	731.0	731.0	731.0
40°	713.4	710.5	704.6	703.2	704.6
42.5°	685.5	682.6	676.7	672.3	673.8
45°	657.6	653.2	644.4	641.5	641.5
47.5°	628.3	623.9	613.6	609.2	610.7
50°	597.5	591.6	579.8	574.0	574.0
52.5°	565.2	559.3	547.5	540.2	540.2
55°	531.4	527.0	510.8	502.0	503.5
57.5°	493.2	488.8	472.7	462.4	462.4
60°	459.5	450.7	431.6	424.2	424.2
62.5°	421.3	411.0	391.9	383.1	384.6
65°	380.2	369.9	349.4	345.0	345.0
67.5°	339.1	330.3	311.2	303.9	296.5
70°	295.1	286.3	271.6	254.0	245.1
72.5°	254.0	243.7	230.5	204.0	195.2
75°	209.9	199.6	185.0	160.0	155.6
77.5°	167.3	158.5	138.0	132.1	135.1
80°	124.8	121.8	107.2	113.0	117.4
82.5°	83.7	82.2	85.1	88.1	88.1
85°	48.4	49.9	55.8	54.3	52.8
87.5°	20.6	25.0	23.5	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)