

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: P238703

Luminaire Tested: **14EN-LD2-38-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238703
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: 14EN-LD2-38-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3456.7 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

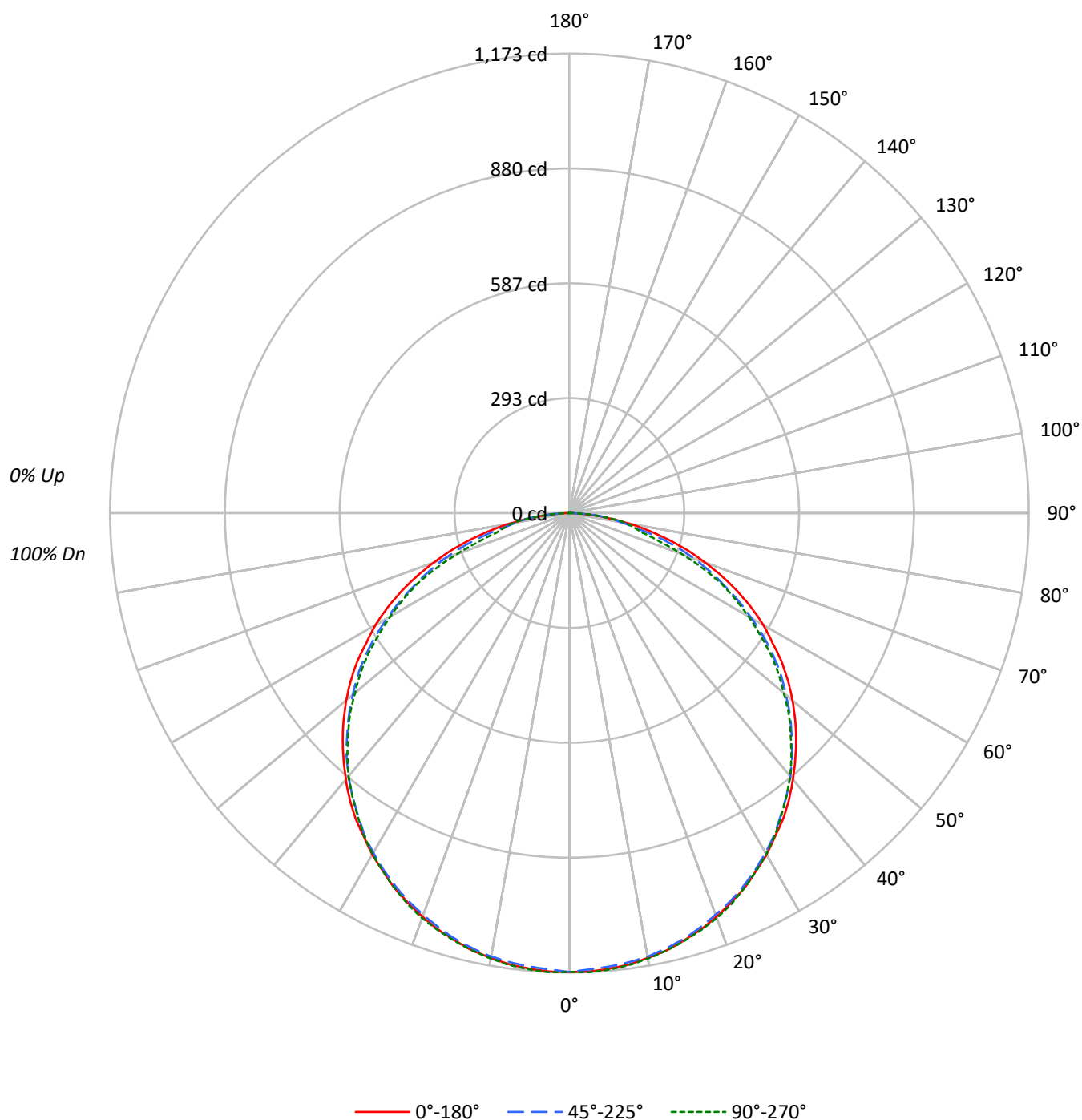
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238703

CATALOG NUMBER: 14EN-LD2-38-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238703

CATALOG NUMBER: 14EN-LD2-38-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	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°	3290	3290	3290
5°	3292	3276	3297
10°	3288	3278	3294
15°	3283	3273	3289
20°	3277	3260	3288
25°	3273	3256	3273
30°	3265	3247	3259
35°	3264	3226	3233
40°	3256	3216	3216
45°	3252	3186	3172
50°	3249	3154	3122
55°	3239	3114	3069
60°	3212	3017	2966
65°	3145	2890	2854
70°	3016	2776	2506
75°	2835	2499	2101
80°	2511	2157	2364
85°	1943	2236	2120



TEST NUMBER: P238703

CATALOG NUMBER: 14EN-LD2-38-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.9	3.2
10°-20°	318.6	9.2
20°-30°	485.6	14.0
30°-40°	591.4	17.1
40°-50°	621.8	18.0
50°-60°	570.8	16.5
60°-70°	438.5	12.7
70°-80°	244.8	7.1
80°-90°	74.3	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°	915.2	26.5
0°-40°	1506.6	43.6
0°-60°	2699.1	78.1
0°-90°	3456.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3456.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1168	1168	1162	1168	1170	111
15°	1130	1130	1126	1130	1131	319
25°	1056	1053	1051	1054	1056	487
35°	952	948	941	943	943	595
45°	819	813	802	799	799	632
55°	662	656	636	625	627	590
65°	473	461	435	430	430	468
75°	261	249	230	199	194	276
85°	60	62	69	68	66	73
90°	0	0	0	0	0	



TEST NUMBER: P238703

CATALOG NUMBER: 14EN-LD2-38-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1171.5	1171.5	1171.5	1171.5	1171.5
2.5°	1171.5	1171.5	1166.0	1171.5	1173.3
5°	1167.8	1167.8	1162.4	1167.8	1169.7
7.5°	1162.4	1162.4	1156.9	1160.5	1164.2
10°	1153.2	1153.2	1149.6	1153.2	1155.1
12.5°	1144.1	1142.3	1138.6	1142.3	1144.1
15°	1129.5	1129.5	1125.8	1129.5	1131.3
17.5°	1114.8	1113.0	1109.4	1114.8	1116.7
20°	1096.6	1094.7	1091.1	1096.6	1100.2
22.5°	1076.5	1074.6	1072.8	1078.3	1080.1
25°	1056.4	1052.7	1050.9	1054.5	1056.4
27.5°	1030.8	1028.9	1027.1	1028.9	1030.8
30°	1007.0	1003.4	1001.5	1001.5	1005.2
32.5°	977.8	975.9	974.1	975.9	975.9
35°	952.2	948.5	941.2	943.0	943.0
37.5°	921.1	915.6	910.2	910.2	910.2
40°	888.2	884.6	877.3	875.4	877.3
42.5°	853.5	849.8	842.5	837.0	838.9
45°	818.8	813.3	802.3	798.7	798.7
47.5°	782.2	776.7	763.9	758.5	760.3
50°	743.8	736.5	721.9	714.6	714.6
52.5°	703.6	696.3	681.7	672.6	672.6
55°	661.6	656.1	636.0	625.0	626.9
57.5°	614.1	608.6	588.5	575.7	575.7
60°	572.0	561.1	537.3	528.2	528.2
62.5°	524.5	511.7	488.0	477.0	478.8
65°	473.4	460.6	435.0	429.5	429.5
67.5°	422.2	411.2	387.5	378.3	369.2
70°	367.4	356.4	338.1	316.2	305.2
72.5°	316.2	303.4	286.9	254.0	243.1
75°	261.3	248.6	230.3	199.2	193.7
77.5°	208.3	197.4	171.8	164.5	168.1
80°	155.3	151.7	133.4	140.7	146.2
82.5°	104.2	102.3	106.0	109.7	109.7
85°	60.3	62.1	69.4	67.6	65.8
87.5°	25.6	31.1	29.2	29.2	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)