

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: P238847

Luminaire Tested: **22EN-LD2-39-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-39-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3583.4 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

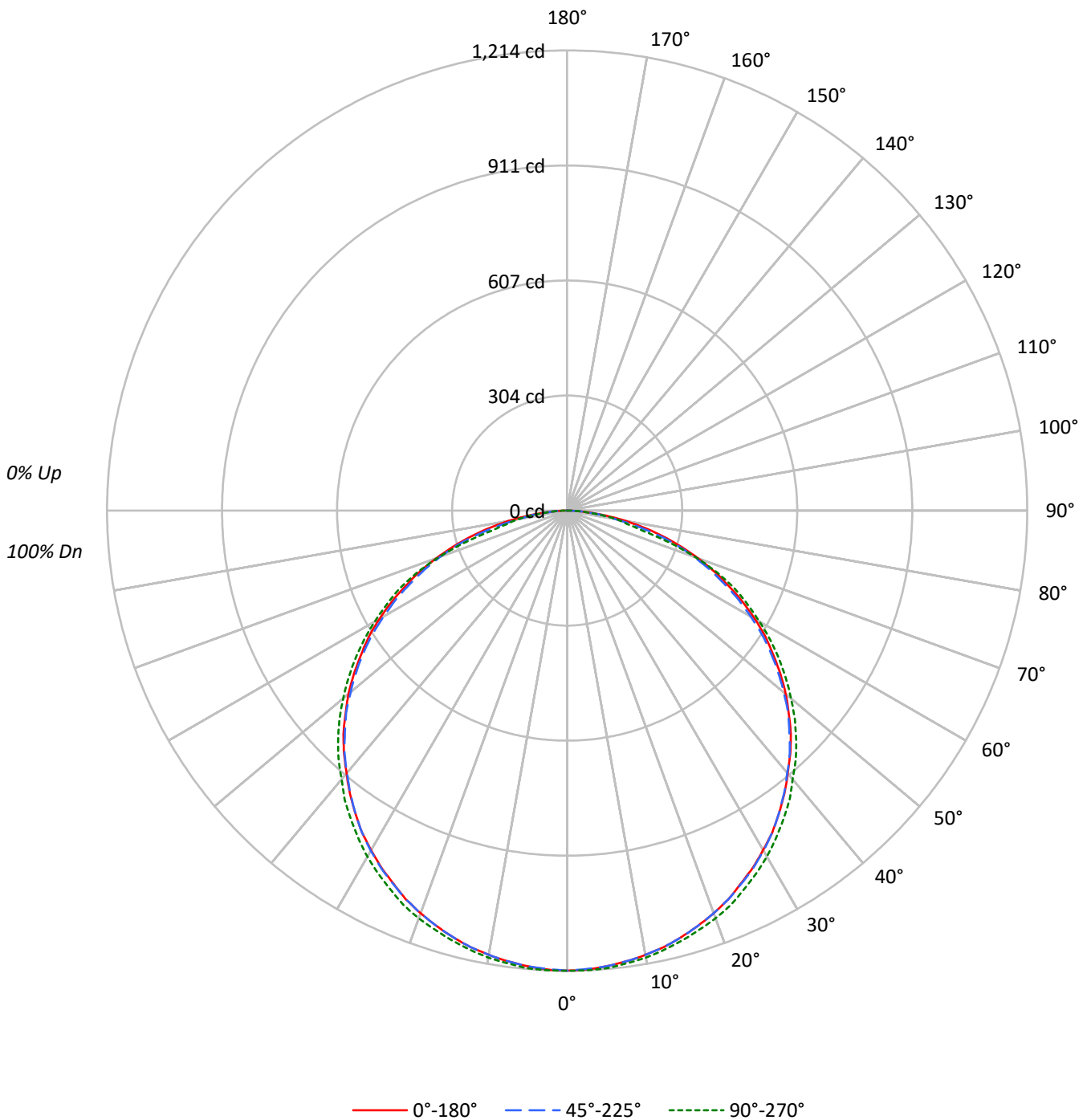
Input Watts (W): 33.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	97	94	91	93	91	88	90	88	86	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	39	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°	3888	3888	3888
5°	3879	3879	3897
10°	3871	3871	3894
15°	3862	3862	3892
20°	3852	3852	3902
25°	3834	3841	3898
30°	3825	3831	3898
35°	3809	3809	3888
40°	3785	3778	3869
45°	3780	3755	3870
50°	3752	3716	3842
55°	3708	3668	3810
60°	3661	3580	3754
65°	3562	3465	3699
70°	3432	3330	3381
75°	3233	3031	2582
80°	2844	2375	2477
85°	2069	1999	1933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	3.2
10°-20°	329.5	9.2
20°-30°	503.0	14.0
30°-40°	612.7	17.1
40°-50°	644.9	18.0
50°-60°	593.8	16.6
60°-70°	462.2	12.9
70°-80°	256.5	7.2
80°-90°	65.9	1.8
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°	947.4	26.4
0°-40°	1560.1	43.5
0°-60°	2798.8	78.1
0°-90°	3583.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3583.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1207	1207	1207	1210	1212	115
15°	1165	1165	1165	1170	1174	329
25°	1085	1087	1087	1096	1103	501
35°	974	974	974	985	994	610
45°	835	829	829	842	855	643
55°	664	662	657	668	682	594
65°	470	464	457	472	488	466
75°	261	256	245	218	209	275
85°	56	53	54	53	53	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.9	1213.9	1213.9	1213.9	1213.9
2.5°	1212.1	1210.3	1210.3	1213.9	1213.9
5°	1206.7	1206.7	1206.7	1210.3	1212.1
7.5°	1199.4	1199.4	1199.4	1204.8	1204.8
10°	1190.3	1188.5	1190.3	1194.0	1197.6
12.5°	1179.4	1177.6	1179.4	1183.1	1186.7
15°	1164.9	1164.9	1164.9	1170.4	1174.0
17.5°	1148.6	1146.8	1148.6	1154.0	1159.5
20°	1130.4	1130.4	1130.4	1137.7	1145.0
22.5°	1110.5	1108.7	1110.5	1119.6	1126.8
25°	1085.1	1086.9	1086.9	1096.0	1103.2
27.5°	1061.5	1059.7	1063.3	1070.6	1079.6
30°	1034.3	1034.3	1036.1	1045.2	1054.2
32.5°	1007.1	1005.2	1007.1	1016.1	1025.2
35°	974.4	974.4	974.4	985.3	994.4
37.5°	941.7	939.9	939.9	950.8	963.5
40°	905.4	903.6	903.6	916.3	925.4
42.5°	871.0	869.2	869.2	880.0	892.7
45°	834.7	829.2	829.2	841.9	854.6
47.5°	792.9	789.3	791.1	802.0	814.7
50°	753.0	747.6	745.8	758.5	771.2
52.5°	709.5	707.7	702.2	713.1	727.6
55°	664.1	662.3	656.9	667.7	682.3
57.5°	620.6	615.1	609.7	618.8	635.1
60°	571.6	566.1	558.9	571.6	586.1
62.5°	522.6	515.3	509.9	520.8	537.1
65°	470.0	464.5	457.3	471.8	488.1
67.5°	421.0	415.5	406.5	419.2	430.0
70°	366.5	359.3	355.6	357.5	361.1
72.5°	313.9	310.3	304.8	290.3	286.7
75°	261.3	255.8	245.0	217.7	208.7
77.5°	208.7	205.0	185.1	161.5	161.5
80°	154.2	152.4	128.8	132.5	134.3
82.5°	105.2	101.6	94.4	92.5	92.5
85°	56.3	52.6	54.4	52.6	52.6
87.5°	21.8	21.8	23.6	21.8	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)