

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: P225839

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P225839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A19/156-UNV-L940-CD1-U
Description: METALUX GR 1X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2383.9 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

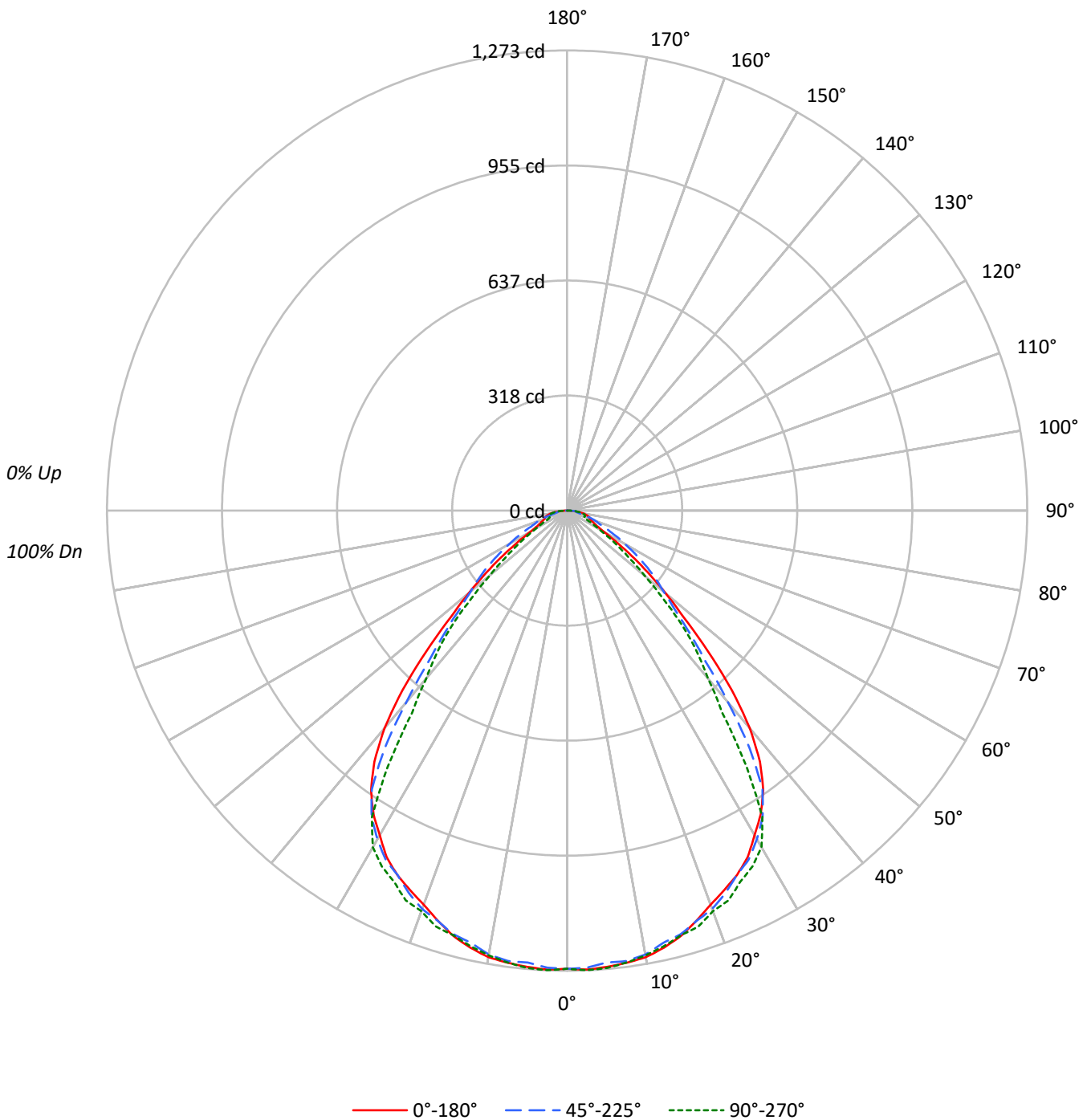
Input Watts (W): 24.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4271	4271	4271
5°	4286	4245	4295
10°	4293	4266	4274
15°	4249	4234	4243
20°	4160	4205	4228
25°	4135	4133	4212
30°	4034	4083	4183
35°	3890	3874	3560
40°	3454	3049	2669
45°	2621	2281	2159
50°	1860	1825	1465
55°	1272	1558	1006
60°	787	1243	673
65°	648	958	487
70°	644	833	499
75°	775	596	668
80°	889	551	836
85°	843	970	951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	5.0
10°-20°	343.3	14.4
20°-30°	516.3	21.7
30°-40°	562.8	23.6
40°-50°	394.1	16.5
50°-60°	223.1	9.4
60°-70°	122.1	5.1
70°-80°	74.0	3.1
80°-90°	28.0	1.2
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°	979.9	41.1
0°-40°	1542.7	64.7
0°-60°	2159.8	90.6
0°-90°	2383.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2383.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1267	1265	1255	1270	1270	121
15°	1218	1215	1214	1231	1216	343
25°	1112	1114	1112	1137	1133	511
35°	946	941	942	894	866	583
45°	550	574	479	473	453	427
55°	217	259	265	263	171	198
65°	81	134	120	152	61	84
75°	60	86	46	90	51	62
85°	22	35	25	30	25	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1267.6	1267.6	1267.6	1267.6	1267.6
2.5°	1270.9	1269.3	1265.5	1273.1	1272.6
5°	1267.1	1265.0	1255.1	1269.9	1269.9
7.5°	1261.7	1256.2	1256.8	1265.0	1261.1
10°	1254.6	1245.3	1246.9	1249.2	1249.2
12.5°	1238.2	1229.5	1225.1	1232.2	1234.4
15°	1218.0	1214.8	1213.6	1231.1	1216.4
17.5°	1189.6	1196.8	1190.2	1204.3	1206.6
20°	1160.1	1173.8	1172.7	1182.6	1179.2
22.5°	1136.1	1144.9	1144.9	1156.9	1166.8
25°	1112.2	1114.3	1111.6	1137.3	1132.9
27.5°	1081.0	1079.4	1088.2	1101.2	1110.0
30°	1036.8	1037.4	1049.4	1066.8	1075.0
32.5°	996.5	991.6	1006.3	1013.9	1005.2
35°	945.7	941.4	941.9	893.9	865.5
37.5°	876.4	880.2	830.0	742.2	705.0
40°	785.3	792.9	693.1	627.5	606.8
42.5°	675.0	677.2	568.1	546.8	533.1
45°	550.1	574.0	478.6	472.6	453.0
47.5°	436.0	480.7	401.1	404.9	358.0
50°	354.8	399.5	348.1	349.8	279.4
52.5°	280.5	324.1	307.2	302.3	219.4
55°	216.6	259.2	265.2	263.0	171.3
57.5°	159.4	205.2	222.7	230.8	132.1
60°	116.8	167.5	184.5	200.8	99.8
62.5°	92.8	145.2	151.2	175.2	77.5
65°	81.3	133.7	120.1	151.7	61.1
67.5°	72.6	127.1	97.7	134.2	53.5
70°	65.4	114.6	84.6	120.1	50.7
72.5°	65.4	100.4	66.6	106.4	51.3
75°	59.5	85.7	45.8	90.0	51.3
77.5°	53.0	73.1	34.4	73.1	48.0
80°	45.8	57.3	28.4	56.2	43.1
82.5°	33.8	43.1	24.6	42.1	34.9
85°	21.8	35.4	25.1	30.5	24.6
87.5°	10.4	18.0	15.8	15.3	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)