

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: P225832

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P225832
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-L935-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: 2316.3 lumens
Efficiency: N/A
Efficacy: 93.0 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

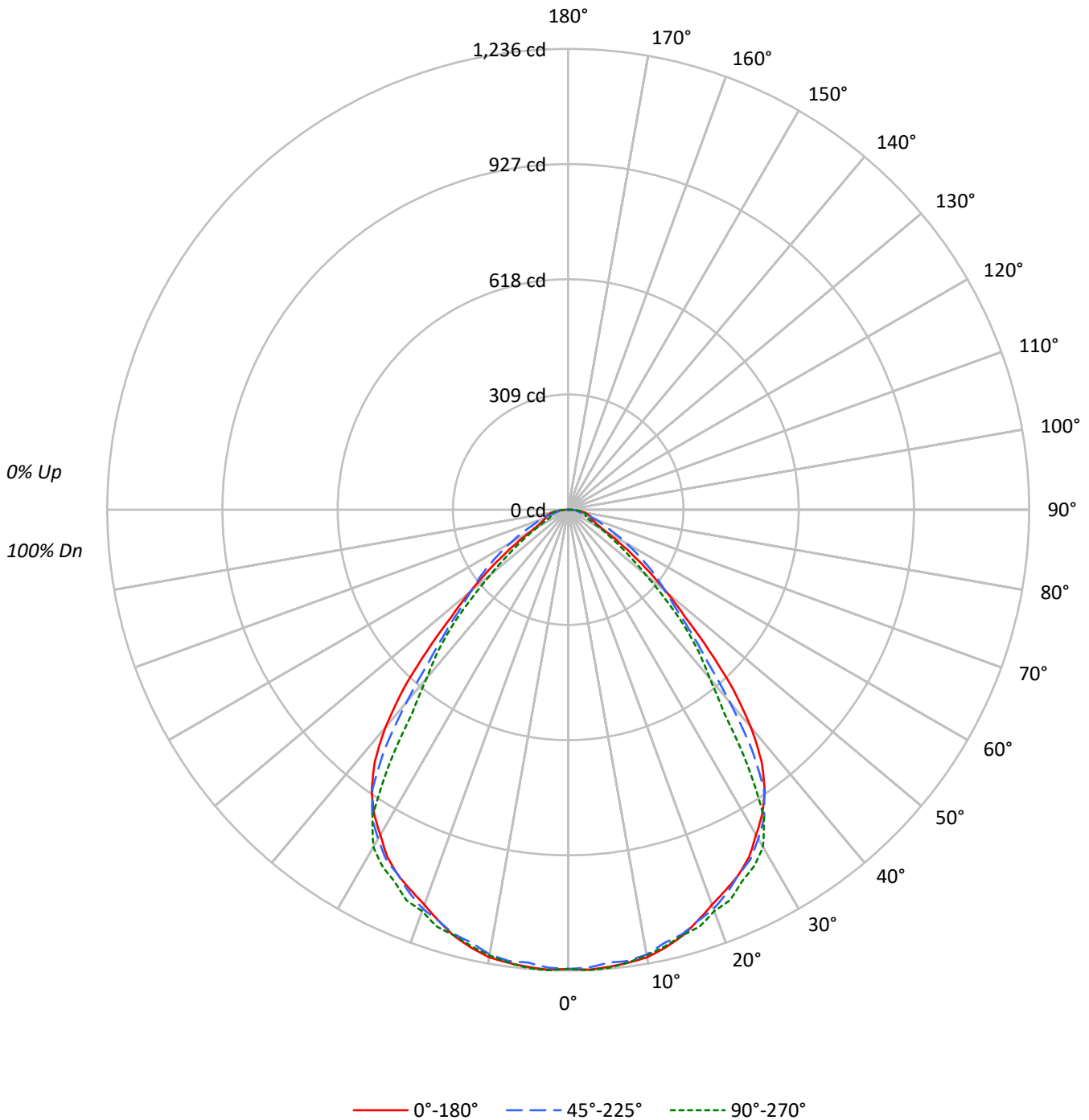
Input Watts (W): 24.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4150	4150	4150
5°	4164	4125	4173
10°	4171	4145	4152
15°	4129	4114	4123
20°	4042	4086	4109
25°	4018	4015	4093
30°	3920	3967	4064
35°	3779	3765	3459
40°	3356	2962	2593
45°	2547	2216	2097
50°	1807	1773	1423
55°	1237	1514	978
60°	765	1208	654
65°	630	930	474
70°	628	810	486
75°	753	579	648
80°	864	534	813
85°	820	943	924



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	5.0
10°-20°	333.6	14.4
20°-30°	501.6	21.7
30°-40°	546.8	23.6
40°-50°	382.9	16.5
50°-60°	216.8	9.4
60°-70°	118.6	5.1
70°-80°	71.9	3.1
80°-90°	27.3	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°	952.0	41.1
0°-40°	1498.9	64.7
0°-60°	2098.5	90.6
0°-90°	2316.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2316.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1231	1229	1220	1234	1234	117
15°	1184	1180	1179	1196	1182	333
25°	1081	1083	1080	1105	1101	496
35°	919	915	915	868	841	566
45°	534	558	465	459	440	415
55°	210	252	258	256	166	192
65°	79	130	117	147	59	81
75°	58	83	44	88	50	60
85°	21	34	24	30	24	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1234.9	1233.3	1229.6	1237.0	1236.5
5°	1231.1	1229.0	1219.5	1233.8	1233.8
7.5°	1225.9	1220.5	1221.1	1229.0	1225.4
10°	1219.0	1210.0	1211.5	1213.6	1213.6
12.5°	1203.1	1194.6	1190.3	1197.2	1199.4
15°	1183.5	1180.2	1179.2	1196.2	1181.8
17.5°	1155.8	1162.8	1156.4	1170.2	1172.3
20°	1127.3	1140.5	1139.4	1148.9	1145.8
22.5°	1103.9	1112.4	1112.4	1124.0	1133.6
25°	1080.6	1082.7	1080.0	1105.0	1100.8
27.5°	1050.3	1048.7	1057.2	1070.0	1078.5
30°	1007.4	1007.9	1019.6	1036.6	1044.6
32.5°	968.2	963.4	977.8	985.2	976.6
35°	918.8	914.6	915.2	868.5	840.9
37.5°	851.5	855.3	806.5	721.1	685.0
40°	763.0	770.4	673.4	609.8	589.6
42.5°	655.9	658.0	552.0	531.2	518.0
45°	534.5	557.8	465.0	459.2	440.0
47.5°	423.6	467.2	389.7	393.4	347.8
50°	344.7	388.1	338.3	339.8	271.5
52.5°	272.5	314.9	298.5	293.8	213.2
55°	210.5	251.9	257.7	255.6	166.5
57.5°	154.8	199.3	216.3	224.3	128.4
60°	113.5	162.8	179.2	195.2	97.1
62.5°	90.1	141.0	146.9	170.2	75.3
65°	79.0	129.9	116.6	147.4	59.4
67.5°	70.6	123.5	94.9	130.5	51.9
70°	63.7	111.4	82.2	116.6	49.3
72.5°	63.7	97.6	64.7	103.4	49.8
75°	57.8	83.2	44.5	87.5	49.8
77.5°	51.4	71.1	33.4	71.1	46.7
80°	44.5	55.7	27.5	54.6	41.9
82.5°	32.9	41.9	23.9	40.8	33.9
85°	21.2	34.4	24.4	29.7	23.9
87.5°	10.1	17.5	15.4	14.9	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)