

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: P476252

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476252  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-28-A19/156-UNV-L835-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2682.4 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

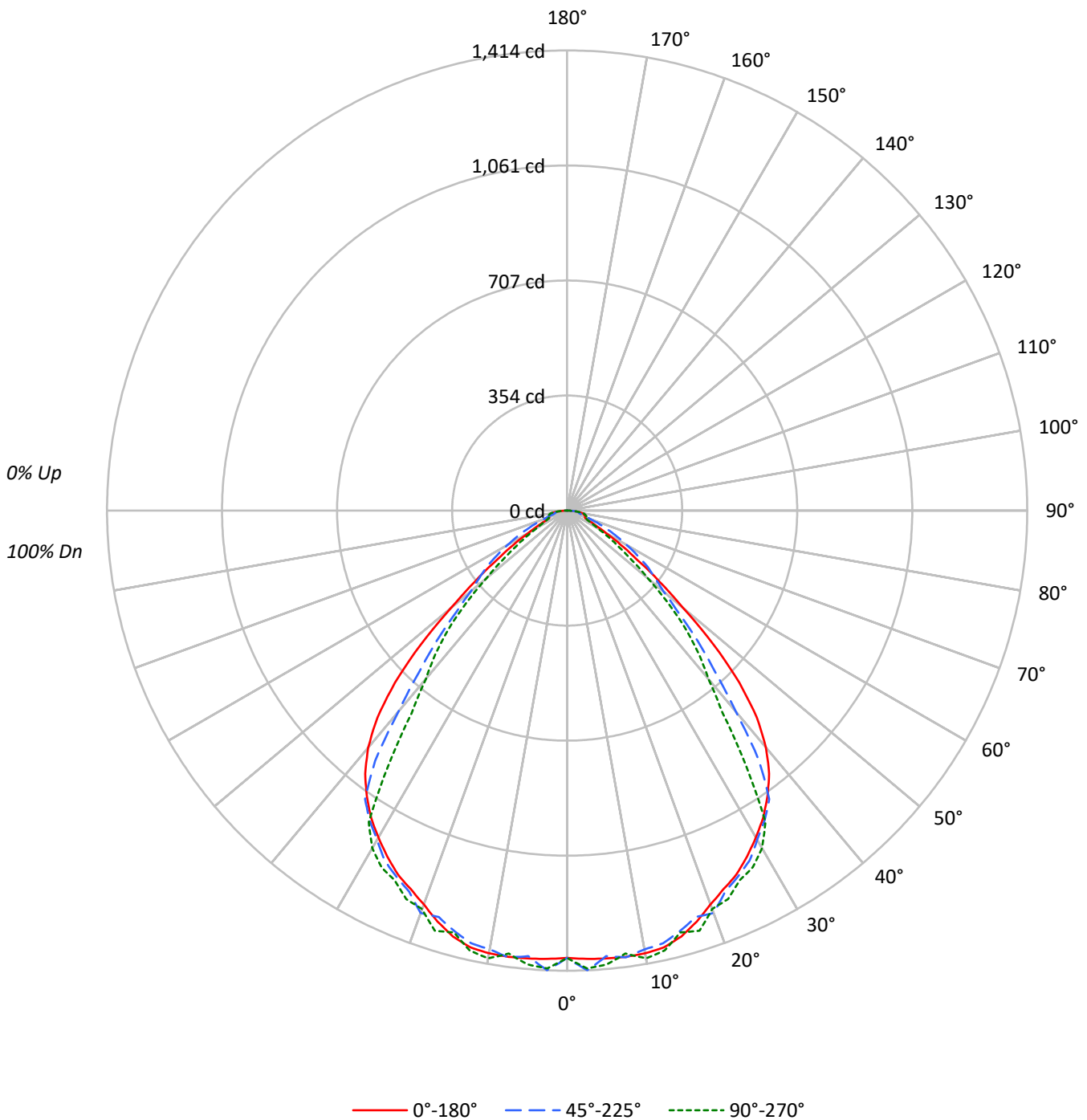
Input Watts (W): 23.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	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	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3699	3699	3699
5°	3732	3713	3781
10°	3775	3741	3818
15°	3775	3728	3740
20°	3687	3768	3731
25°	3660	3685	3723
30°	3604	3630	3722
35°	3524	3556	3155
40°	3339	2831	2373
45°	2848	2159	1966
50°	1946	1616	1358
55°	1225	1416	903
60°	741	1133	582
65°	465	876	447
70°	464	585	475
75°	584	467	613
80°	761	566	806
85°	738	781	781



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.6	4.9
10°-20°	380.1	14.2
20°-30°	573.7	21.4
30°-40°	639.9	23.9
40°-50°	465.3	17.3
50°-60°	255.2	9.5
60°-70°	129.8	4.8
70°-80°	76.3	2.8
80°-90°	29.5	1.1
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°	1086.5	40.5
0°-40°	1726.4	64.4
0°-60°	2446.9	91.2
0°-90°	2682.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2682.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1382	1411	1375	1400	1400	132
15°	1355	1349	1338	1366	1342	380
25°	1233	1233	1241	1265	1254	567
35°	1073	1071	1083	1010	960	668
45°	748	691	567	526	517	562
55°	261	323	302	270	192	246
65°	73	156	138	142	70	81
75°	56	100	45	90	59	58
85°	24	31	25	32	25	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1374.6	1374.6	1374.6	1374.6	1374.6
2.5°	1378.8	1406.9	1413.9	1413.9	1408.3
5°	1381.6	1411.1	1374.6	1399.9	1399.9
7.5°	1383.0	1387.3	1384.5	1390.1	1373.2
10°	1381.6	1371.8	1369.0	1404.1	1397.1
12.5°	1374.6	1336.7	1362.0	1350.8	1384.5
15°	1355.0	1349.3	1338.1	1366.2	1342.3
17.5°	1324.1	1326.9	1310.0	1324.1	1353.6
20°	1287.6	1300.2	1315.7	1319.9	1303.0
22.5°	1258.1	1262.3	1267.9	1282.0	1291.8
25°	1232.8	1232.8	1241.2	1265.1	1253.9
27.5°	1197.7	1200.5	1213.2	1220.2	1235.6
30°	1159.8	1162.6	1168.2	1200.5	1197.7
32.5°	1120.5	1123.3	1128.9	1150.0	1134.5
35°	1072.7	1071.3	1082.6	1009.6	960.4
37.5°	1019.4	1018.0	968.8	831.2	784.9
40°	950.6	945.0	806.0	697.8	675.4
42.5°	863.5	839.7	674.0	610.8	599.6
45°	748.4	690.8	567.3	526.5	516.7
47.5°	612.2	568.7	462.0	443.7	419.8
50°	464.8	467.6	386.1	373.5	324.3
52.5°	355.2	388.9	339.8	315.9	251.3
55°	261.2	322.9	301.9	269.6	192.4
57.5°	193.8	268.2	255.5	231.7	147.4
60°	137.6	223.3	210.6	199.4	108.1
62.5°	99.7	186.7	172.7	168.5	82.8
65°	73.0	155.9	137.6	141.8	70.2
67.5°	59.0	130.6	103.9	123.6	60.4
70°	59.0	116.5	74.4	109.5	60.4
72.5°	59.0	109.5	59.0	99.7	63.2
75°	56.2	99.7	44.9	89.9	59.0
77.5°	52.0	81.4	37.9	77.2	56.2
80°	49.1	60.4	36.5	60.4	52.0
82.5°	37.9	42.1	33.7	44.9	40.7
85°	23.9	30.9	25.3	32.3	25.3
87.5°	11.2	16.8	11.2	16.8	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)