

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: P35602

Luminaire Tested: **14GR-LD5-43-F1-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P35602  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-43-F1-UNV-L935-CD1-U  
Description: METALUX GR 1X4 LED TROFFER WITH F1 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3641.2 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

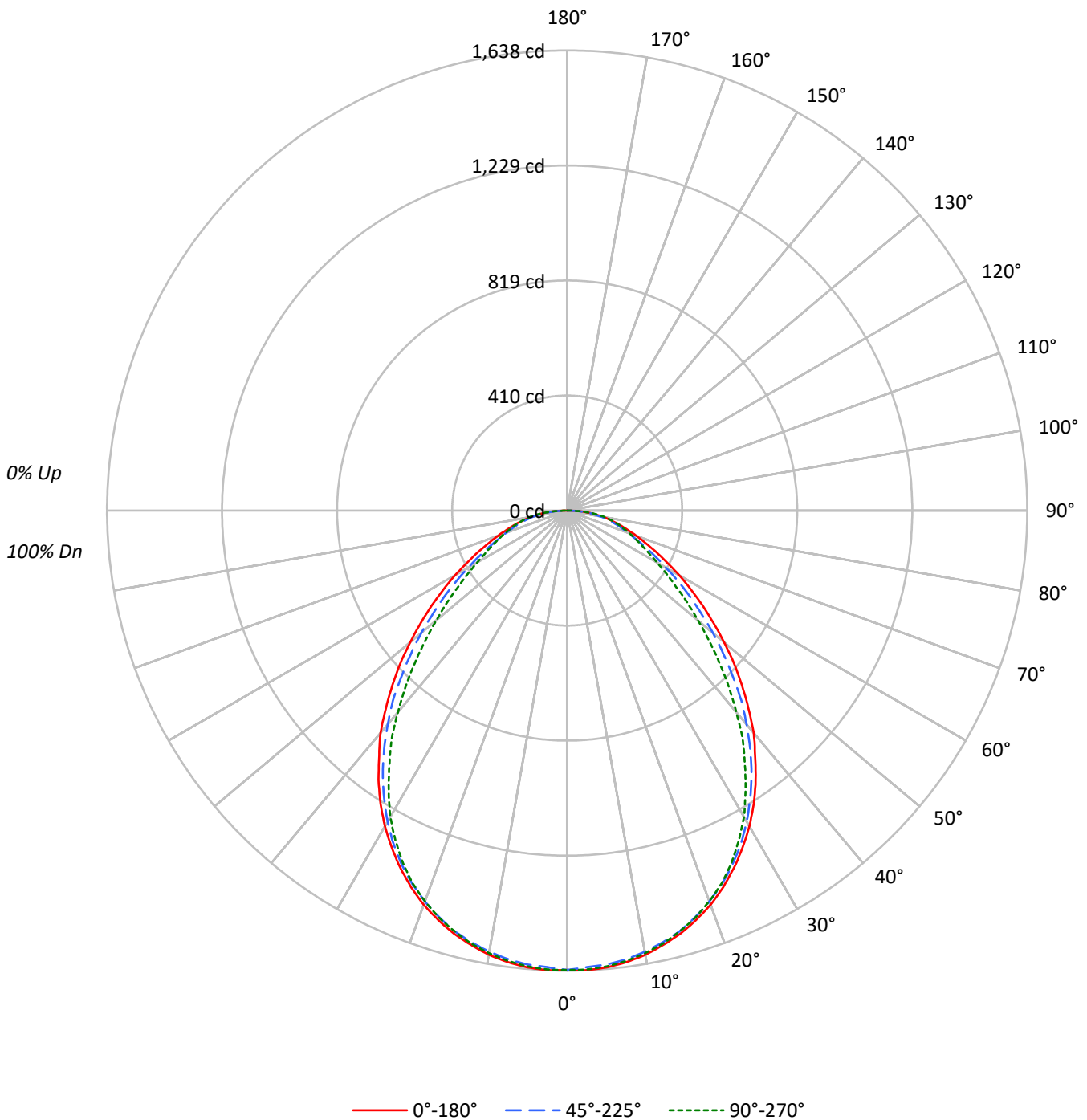
Input Watts (W): 41.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	34
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	30	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	5511	5511	5511
5°	5520	5486	5509
10°	5494	5456	5473
15°	5438	5406	5408
20°	5355	5310	5306
25°	5221	5173	5145
30°	5047	4974	4898
35°	4814	4706	4538
40°	4546	4371	4120
45°	4193	3973	3654
50°	3818	3551	3190
55°	3451	3141	2781
60°	3105	2732	2486
65°	2785	2440	2331
70°	2571	2270	2311
75°	2479	2246	2435
80°	2492	2342	2639
85°	2660	2432	2760



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.5	4.2
10°-20°	437.6	12.0
20°-30°	640.5	17.6
30°-40°	711.9	19.6
40°-50°	639.9	17.6
50°-60°	478.5	13.1
60°-70°	315.1	8.7
70°-80°	191.6	5.3
80°-90°	71.7	2.0
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°	1232.6	33.9
0°-40°	1944.4	53.4
0°-60°	3062.9	84.1
0°-90°	3641.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3641.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1632	1629	1622	1630	1629	155
15°	1559	1556	1550	1555	1550	439
25°	1404	1402	1391	1389	1384	646
35°	1170	1164	1144	1119	1103	730
45°	880	870	834	789	767	679
55°	587	575	535	490	473	527
65°	349	337	306	293	292	349
75°	190	182	172	181	187	203
85°	69	64	63	73	71	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1635.4	1635.4	1635.4	1635.4	1635.4
2.5°	1638.0	1634.6	1626.9	1636.2	1635.4
5°	1632.0	1628.6	1621.8	1630.3	1628.6
7.5°	1621.0	1616.7	1610.8	1619.2	1616.7
10°	1605.6	1601.4	1594.6	1604.0	1599.7
12.5°	1583.6	1581.0	1574.2	1581.0	1578.4
15°	1558.9	1555.5	1549.6	1554.6	1550.4
17.5°	1527.4	1524.0	1517.2	1524.0	1519.0
20°	1493.4	1489.2	1480.7	1485.8	1479.8
22.5°	1451.0	1446.7	1439.0	1441.6	1436.5
25°	1404.2	1401.6	1391.4	1388.9	1383.8
27.5°	1352.4	1348.1	1338.8	1333.6	1323.4
30°	1297.1	1292.8	1278.4	1269.9	1258.8
32.5°	1236.8	1230.0	1213.0	1198.5	1182.4
35°	1170.4	1164.5	1144.1	1119.4	1103.3
37.5°	1099.0	1095.6	1070.1	1039.6	1026.8
40°	1033.6	1020.8	993.6	956.2	936.7
42.5°	955.4	946.9	918.0	876.4	851.7
45°	879.8	870.4	833.8	788.8	766.7
47.5°	805.8	795.6	753.9	709.8	684.2
50°	728.4	719.9	677.4	628.2	608.6
52.5°	656.2	645.2	600.9	556.8	539.8
55°	587.4	574.6	534.6	490.4	473.4
57.5°	521.9	506.6	468.4	430.1	419.0
60°	460.7	443.7	405.4	377.4	368.9
62.5°	401.2	388.4	354.4	333.2	328.1
65°	349.3	336.6	306.0	293.2	292.4
67.5°	301.8	289.0	265.2	261.8	263.5
70°	261.0	249.9	230.4	232.0	234.6
72.5°	222.7	212.5	200.6	204.8	210.0
75°	190.4	181.9	172.5	181.0	187.0
77.5°	159.8	151.3	146.2	154.7	161.5
80°	128.4	122.4	120.7	130.0	136.0
82.5°	99.4	94.4	91.8	103.7	106.2
85°	68.8	63.8	62.9	73.1	71.4
87.5°	36.6	32.3	32.3	38.2	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)