

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: P476171

Luminaire Tested: **14GR-LD5-28-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

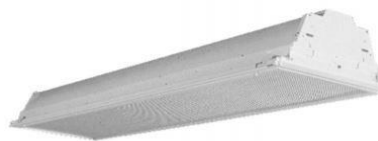
Test Information

Test Method: LM-79-08
Report Number: P476171
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-F1-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

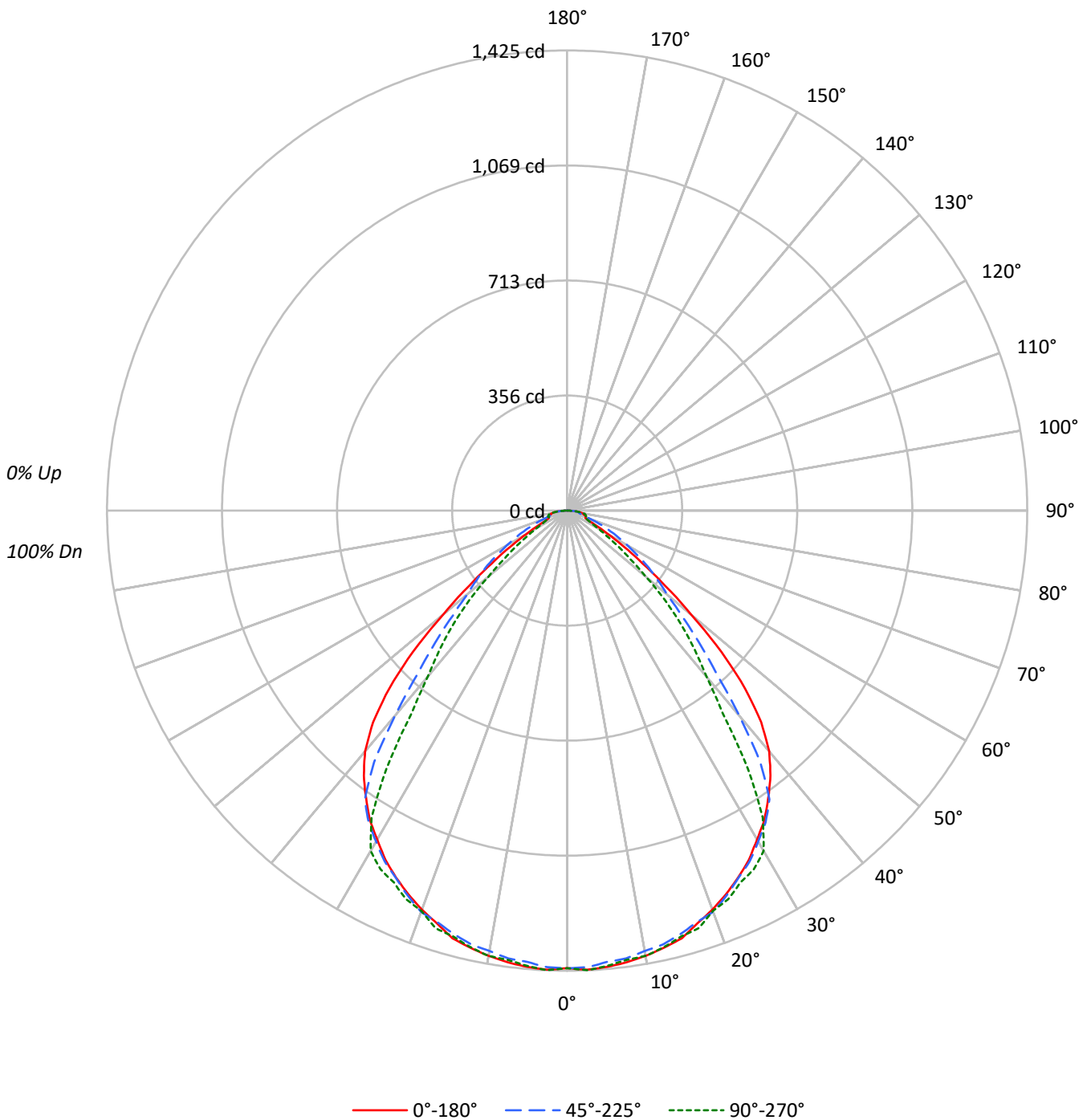
Lumens per Lamp: N/A
Luminaire Lumens: 2724.7 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	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	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	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	50	43	39	49	43	38	48	42	38	47	42	38	36					36			
10	59	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°	3813	3813	3813
5°	3832	3791	3824
10°	3826	3785	3826
15°	3820	3782	3803
20°	3765	3787	3778
25°	3723	3727	3773
30°	3654	3678	3782
35°	3568	3588	3207
40°	3418	2909	2357
45°	2966	2194	1904
50°	2107	1686	1335
55°	1338	1445	895
60°	788	1158	591
65°	466	904	457
70°	480	612	468
75°	586	476	619
80°	756	590	828
85°	800	800	800



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	4.9
10°-20°	384.8	14.1
20°-30°	581.9	21.4
30°-40°	648.0	23.8
40°-50°	474.3	17.4
50°-60°	261.4	9.6
60°-70°	133.7	4.9
70°-80°	76.1	2.8
80°-90°	30.3	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°	1101.0	40.4
0°-40°	1749.0	64.2
0°-60°	2484.7	91.2
0°-90°	2724.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2724.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1418	1418	1403	1412	1416	135
15°	1371	1356	1358	1374	1365	385
25°	1254	1251	1255	1277	1271	577
35°	1086	1088	1092	1017	976	678
45°	779	718	577	525	500	587
55°	285	336	308	264	191	267
65°	73	174	142	136	72	84
75°	56	98	46	87	60	59
85°	26	32	26	35	26	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1423.1	1423.1	1415.5	1424.6	1424.6
5°	1418.5	1418.5	1403.3	1412.4	1415.5
7.5°	1410.9	1410.9	1398.7	1406.3	1403.3
10°	1400.2	1392.6	1385.0	1406.3	1400.2
12.5°	1386.5	1371.2	1375.8	1374.3	1385.0
15°	1371.2	1356.0	1357.5	1374.3	1365.1
17.5°	1340.7	1342.3	1336.2	1348.4	1356.0
20°	1314.8	1319.4	1322.4	1330.1	1319.4
22.5°	1285.8	1287.4	1290.4	1301.1	1302.6
25°	1253.8	1250.8	1255.3	1276.7	1270.6
27.5°	1218.7	1217.2	1224.8	1243.1	1252.3
30°	1176.0	1182.1	1183.6	1217.2	1217.2
32.5°	1136.4	1136.4	1144.0	1160.8	1127.2
35°	1086.0	1087.5	1092.1	1017.4	976.2
37.5°	1034.2	1029.6	982.3	846.5	791.6
40°	973.1	962.5	828.2	706.2	671.1
42.5°	889.3	857.2	683.3	610.1	584.2
45°	779.4	718.4	576.6	524.7	500.3
47.5°	648.3	591.8	478.9	443.9	410.3
50°	503.4	491.1	402.7	372.2	318.8
52.5°	382.9	407.3	353.9	314.2	245.6
55°	285.2	335.6	308.1	263.9	190.7
57.5°	209.0	279.1	259.3	224.2	143.4
60°	146.4	236.4	215.1	189.1	109.8
62.5°	103.7	204.4	176.9	161.7	83.9
65°	73.2	173.9	141.9	135.8	71.7
67.5°	61.0	146.4	108.3	120.5	61.0
70°	61.0	122.0	77.8	106.8	59.5
72.5°	61.0	106.8	58.0	97.6	62.5
75°	56.4	97.6	45.8	86.9	59.5
77.5°	51.9	82.4	39.7	74.7	58.0
80°	48.8	59.5	38.1	61.0	53.4
82.5°	39.7	42.7	35.1	47.3	41.2
85°	25.9	32.0	25.9	35.1	25.9
87.5°	12.2	16.8	12.2	15.3	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)