

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: P475898

Luminaire Tested: **22GR-LD5-40-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475898
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-F1-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4110.7 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

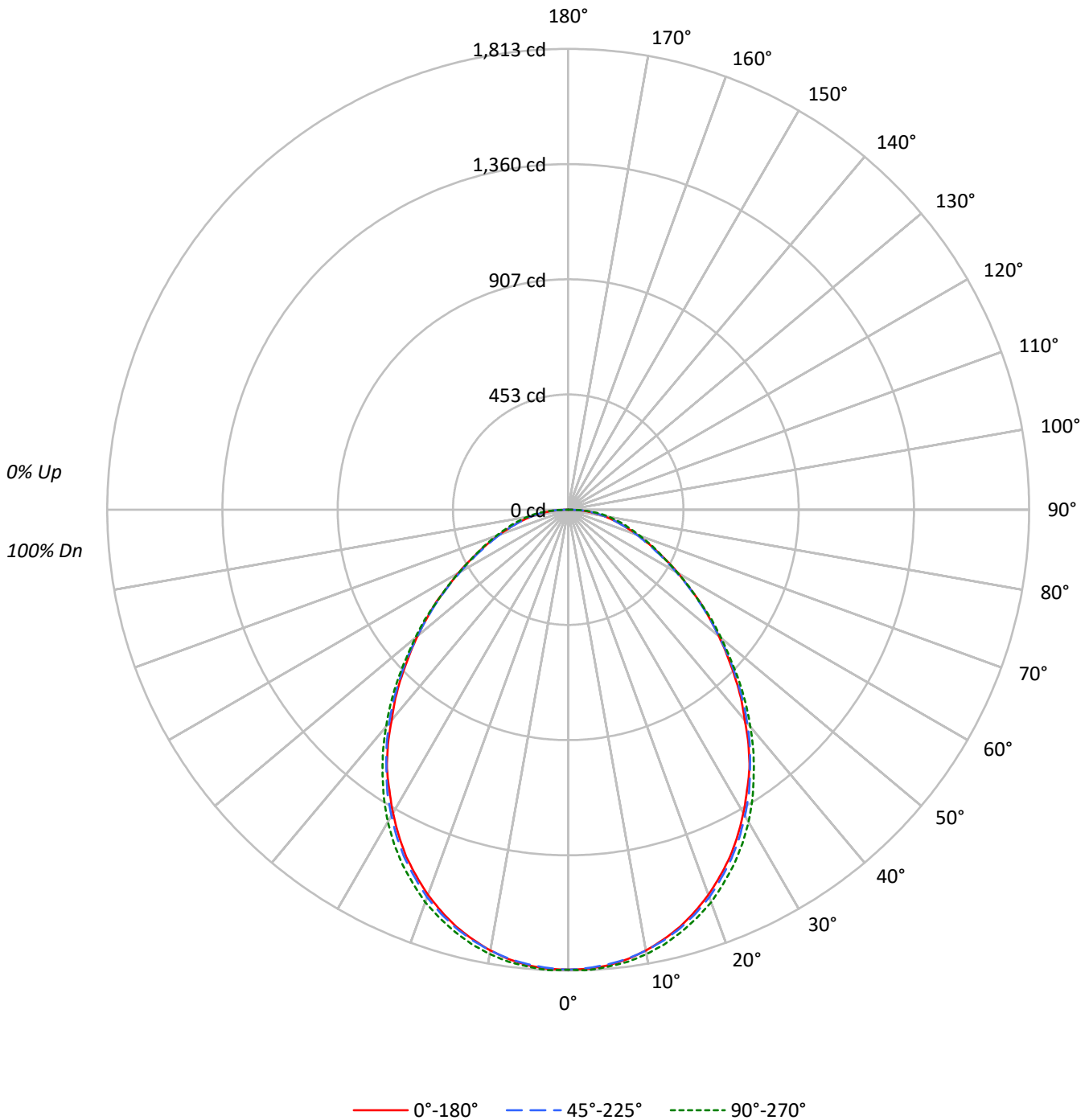
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31					31			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4870	4870	4870
5°	4861	4851	4875
10°	4813	4813	4851
15°	4733	4747	4791
20°	4617	4647	4706
25°	4473	4504	4576
30°	4282	4320	4406
35°	4083	4095	4180
40°	3794	3849	3916
45°	3523	3556	3609
50°	3237	3237	3288
55°	2968	2936	2952
60°	2687	2640	2678
65°	2450	2395	2472
70°	2264	2250	2360
75°	2181	2163	2379
80°	2204	2204	2526
85°	2300	2408	2890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.7	4.2
10°-20°	480.4	11.7
20°-30°	698.5	17.0
30°-40°	781.9	19.0
40°-50°	721.7	17.6
50°-60°	563.2	13.7
60°-70°	381.2	9.3
70°-80°	227.6	5.5
80°-90°	85.5	2.1
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°	1349.6	32.8
0°-40°	2131.5	51.9
0°-60°	3416.3	83.1
0°-90°	4110.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4110.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1810	1810	1810	1810	1810	
5°	1799	1796	1796	1803	1805	171
15°	1699	1699	1704	1714	1720	478
25°	1506	1506	1517	1532	1541	692
35°	1243	1241	1246	1266	1272	773
45°	926	931	934	941	948	714
55°	633	628	626	629	629	565
65°	385	381	376	383	388	383
75°	210	208	208	220	229	223
85°	74	73	78	90	94	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1809.8	1809.8	1809.8	1809.8	1809.8
2.5°	1808.1	1804.6	1804.6	1809.8	1813.3
5°	1799.4	1796.0	1796.0	1802.9	1804.6
7.5°	1783.8	1782.1	1782.1	1789.0	1794.2
10°	1761.3	1759.6	1761.3	1768.2	1775.2
12.5°	1731.8	1731.8	1735.3	1744.0	1750.9
15°	1698.9	1698.9	1704.1	1714.5	1719.7
17.5°	1657.3	1659.0	1665.9	1678.1	1683.3
20°	1612.2	1615.7	1622.6	1633.0	1643.4
22.5°	1560.2	1563.7	1570.6	1586.2	1593.1
25°	1506.5	1506.5	1516.9	1532.5	1541.1
27.5°	1444.1	1445.8	1456.2	1473.5	1482.2
30°	1378.2	1383.4	1390.3	1405.9	1418.1
32.5°	1308.8	1314.0	1322.7	1340.0	1348.7
35°	1243.0	1241.2	1246.4	1265.5	1272.4
37.5°	1165.0	1166.7	1173.6	1187.5	1196.2
40°	1080.0	1088.7	1095.6	1106.0	1114.7
42.5°	1005.5	1010.7	1015.9	1026.3	1033.2
45°	925.7	930.9	934.4	941.3	948.3
47.5°	847.7	849.4	854.6	858.1	863.3
50°	773.2	774.9	773.2	778.4	785.3
52.5°	700.4	698.6	698.6	700.4	710.8
55°	632.7	627.5	625.8	629.3	629.3
57.5°	558.2	556.5	556.5	554.7	563.4
60°	499.3	494.1	490.6	494.1	497.5
62.5°	438.6	433.4	429.9	436.9	436.9
65°	384.8	381.4	376.2	383.1	388.3
67.5°	332.8	329.4	327.6	336.3	343.2
70°	287.8	286.0	286.0	294.7	299.9
72.5°	246.2	244.4	244.4	256.6	261.8
75°	209.8	208.0	208.0	220.2	228.8
77.5°	173.4	171.6	176.8	187.2	195.9
80°	142.2	140.4	142.2	156.0	163.0
82.5°	107.5	107.5	110.9	124.8	131.8
85°	74.5	72.8	78.0	90.1	93.6
87.5°	38.1	39.9	41.6	48.5	48.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)