

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: P476306

Luminaire Tested: **14GR-LD5-28-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476306
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A-UNV-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2793.1 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

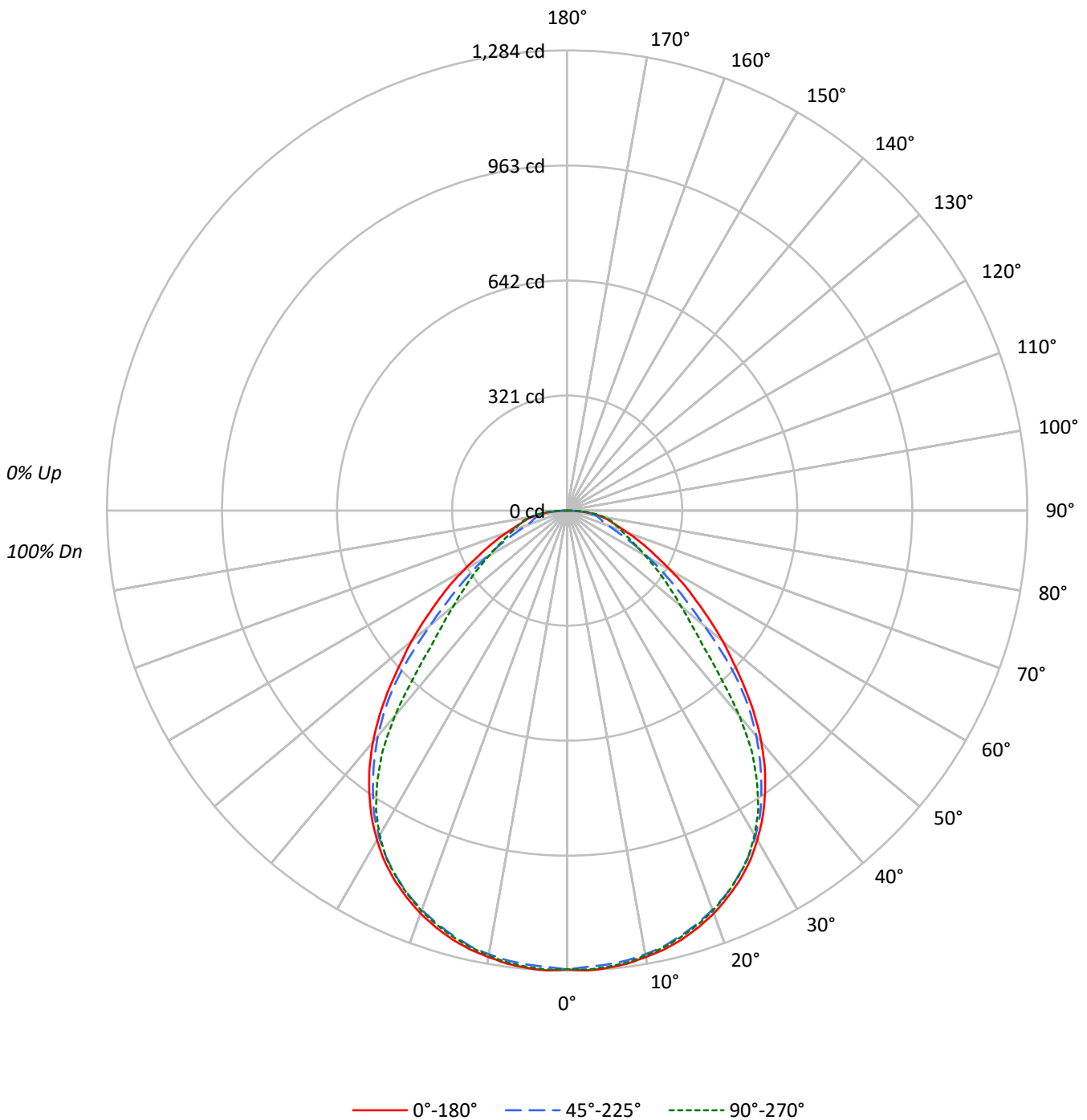
Input Watts (W): 23.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33				33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4313	4313	4313
5°	4334	4301	4322
10°	4328	4302	4313
15°	4320	4282	4295
20°	4289	4250	4262
25°	4233	4192	4194
30°	4129	4086	4069
35°	3960	3888	3800
40°	3707	3613	3288
45°	3348	3221	2569
50°	2969	2615	2173
55°	2591	2145	1917
60°	2247	1766	1692
65°	1971	1417	1563
70°	1758	1202	1572
75°	1715	1268	1758
80°	1900	1599	2014
85°	1979	1705	2358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	4.3
10°-20°	347.9	12.5
20°-30°	520.4	18.6
30°-40°	587.5	21.0
40°-50°	498.4	17.8
50°-60°	337.2	12.1
60°-70°	201.3	7.2
70°-80°	126.1	4.5
80°-90°	53.0	1.9
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°	989.7	35.4
0°-40°	1577.2	56.5
0°-60°	2412.7	86.4
0°-90°	2793.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2793.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1281	1277	1272	1280	1278	122
15°	1238	1236	1227	1236	1231	349
25°	1138	1135	1127	1133	1128	524
35°	963	956	945	937	924	600
45°	703	705	676	579	539	541
55°	441	420	365	327	326	397
65°	247	205	178	189	196	247
75°	132	117	97	128	135	142
85°	51	49	44	57	61	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.0	1280.0	1280.0	1280.0	1280.0
2.5°	1284.5	1280.5	1274.7	1282.6	1281.9
5°	1281.2	1277.4	1271.5	1280.5	1277.9
7.5°	1275.3	1272.1	1266.3	1274.7	1272.1
10°	1265.0	1262.4	1257.2	1264.3	1260.5
12.5°	1254.0	1252.0	1245.5	1252.0	1248.1
15°	1238.4	1235.8	1227.4	1235.8	1231.2
17.5°	1219.0	1215.7	1208.6	1215.7	1211.7
20°	1196.2	1192.4	1185.2	1192.4	1188.5
22.5°	1169.0	1165.7	1159.3	1165.7	1160.5
25°	1138.5	1134.7	1127.4	1132.6	1128.1
27.5°	1103.5	1098.3	1091.8	1095.7	1093.1
30°	1061.3	1054.9	1050.2	1050.2	1045.7
32.5°	1015.2	1010.7	1003.0	998.3	992.5
35°	962.7	956.3	945.2	936.8	923.7
37.5°	906.3	898.5	884.9	863.4	846.0
40°	842.7	832.9	821.3	779.1	747.4
42.5°	774.6	772.6	752.5	680.5	636.4
45°	702.6	705.1	676.0	579.3	539.1
47.5°	629.8	639.0	585.9	491.1	470.4
50°	566.4	569.5	498.8	426.2	414.5
52.5°	500.9	495.6	425.6	374.9	366.5
55°	441.1	420.4	365.2	327.0	326.3
57.5°	388.5	350.3	312.0	283.5	286.8
60°	333.4	290.6	262.0	246.5	251.1
62.5°	284.8	243.9	218.6	214.1	221.8
65°	247.2	205.0	177.7	189.4	196.0
67.5°	211.5	175.8	144.6	172.5	175.1
70°	178.4	152.4	122.0	158.9	159.6
72.5°	151.2	135.0	105.7	144.1	146.0
75°	131.7	117.4	97.4	128.4	135.0
77.5°	115.5	100.5	90.2	111.0	122.0
80°	97.9	81.0	82.4	92.7	103.8
82.5°	75.3	62.9	65.5	76.5	84.3
85°	51.2	48.6	44.1	57.1	61.0
87.5°	27.2	26.0	22.7	32.4	30.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)