

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: P476050

Luminaire Tested: **22GR-LD5-24-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476050
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A-UNV-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2404.9 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

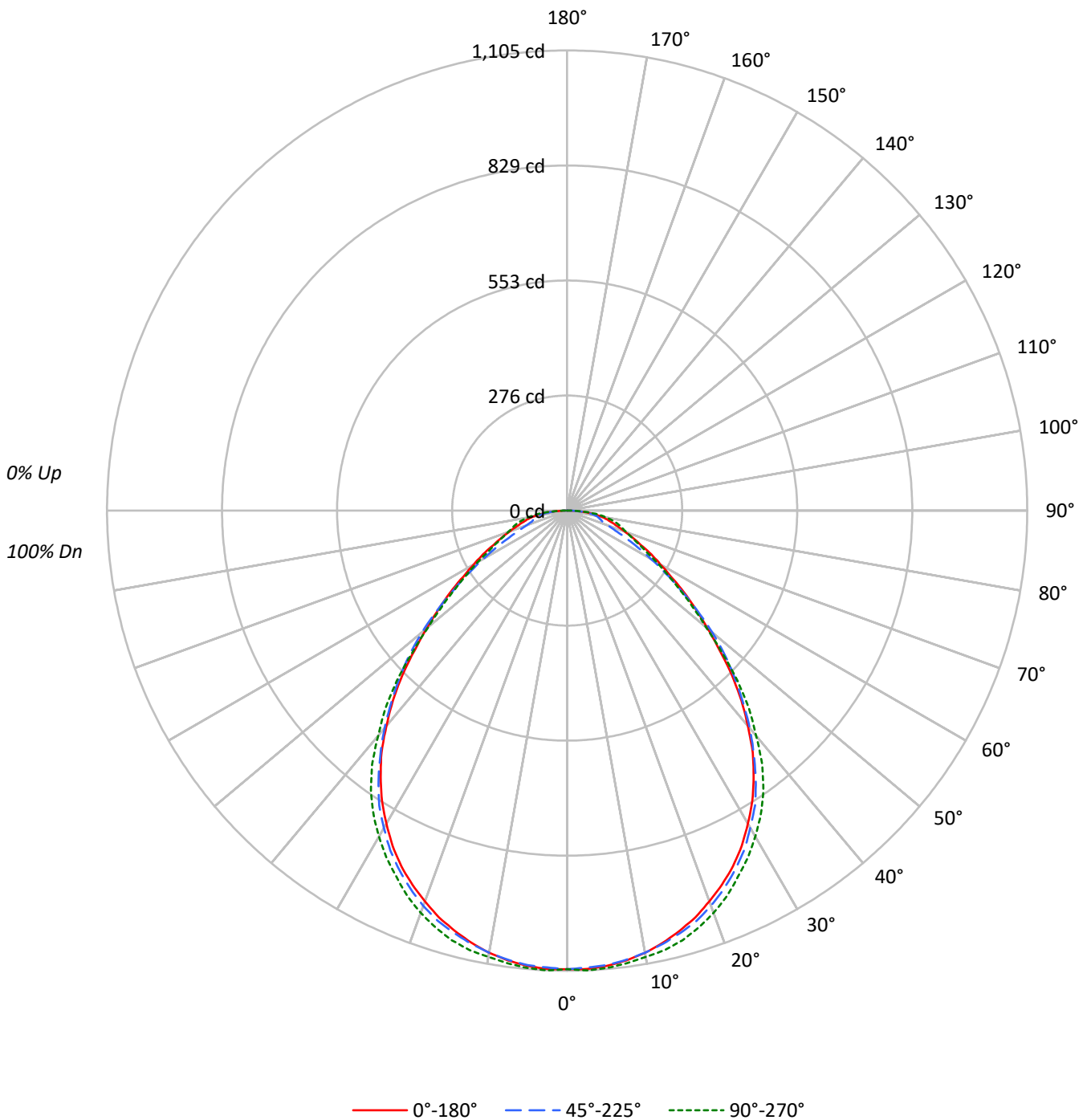
Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2964	2964	2964
5°	2964	2960	2978
10°	2946	2945	2974
15°	2909	2925	2976
20°	2859	2893	2944
25°	2798	2830	2881
30°	2697	2734	2808
35°	2565	2594	2699
40°	2371	2396	2481
45°	2130	2168	2202
50°	1841	1907	1823
55°	1607	1565	1544
60°	1392	1253	1337
65°	1244	983	1202
70°	1153	814	1185
75°	1152	861	1315
80°	1275	1083	1483
85°	1331	1176	1677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.2	4.3
10°-20°	296.8	12.3
20°-30°	439.0	18.3
30°-40°	495.4	20.6
40°-50°	436.7	18.2
50°-60°	299.6	12.5
60°-70°	176.8	7.4
70°-80°	110.3	4.6
80°-90°	46.0	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°	840.1	34.9
0°-40°	1335.5	55.5
0°-60°	2071.8	86.1
0°-90°	2404.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2404.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1101	1101	1101	1101	1101	
5°	1097	1095	1096	1100	1102	104
15°	1044	1045	1050	1063	1068	294
25°	942	946	953	965	970	433
35°	781	787	790	809	822	486
45°	560	562	570	573	579	430
55°	342	334	334	322	329	307
65°	195	172	154	179	189	197
75°	111	100	83	116	126	119
85°	43	40	38	50	54	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1101.3	1101.3	1101.3	1101.3	<i>1101.3</i>
2.5°	<i>1101.9</i>	<i>1099.1</i>	<i>1098.0</i>	<i>1102.5</i>	<i>1105.3</i>
5°	1097.4	1095.2	1095.8	1099.7	<i>1102.5</i>
7.5°	1089.6	1088.0	1088.0	1093.4	<i>1096.3</i>
10°	1078.3	1077.9	1077.9	1084.6	<i>1088.4</i>
12.5°	1062.8	1063.2	1065.4	1074.5	<i>1081.1</i>
15°	1044.3	1045.3	1049.9	1062.8	<i>1068.3</i>
17.5°	1024.1	1024.1	1033.0	1043.1	<i>1049.9</i>
20°	998.4	1000.0	1010.1	1021.3	<i>1028.0</i>
22.5°	972.0	974.8	983.3	996.1	<i>1002.2</i>
25°	942.4	945.8	953.1	965.3	<i>970.4</i>
27.5°	907.7	912.2	920.0	928.9	<i>939.6</i>
30°	867.9	874.7	879.8	892.0	<i>903.7</i>
32.5°	827.6	833.8	839.5	852.4	<i>865.7</i>
35°	780.7	787.4	789.6	808.7	<i>821.6</i>
37.5°	732.6	735.4	736.4	755.5	<i>769.4</i>
40°	675.0	680.4	682.2	697.3	<i>706.2</i>
42.5°	619.4	621.8	625.1	636.3	<i>647.0</i>
45°	559.6	562.4	569.7	573.1	<i>578.7</i>
47.5°	497.0	505.4	513.7	503.0	<i>503.6</i>
50°	439.8	446.6	455.5	435.4	<i>435.4</i>
52.5°	388.9	392.3	392.9	376.1	<i>379.4</i>
55°	342.5	334.1	333.5	322.4	<i>329.0</i>
57.5°	296.0	284.9	280.9	277.5	<i>285.4</i>
60°	258.6	238.4	232.8	237.8	<i>248.5</i>
62.5°	227.7	202.0	191.3	204.2	<i>213.8</i>
65°	195.3	171.8	154.4	178.6	<i>188.7</i>
67.5°	170.1	147.8	125.4	159.5	<i>166.7</i>
70°	146.6	129.3	103.5	145.0	<i>150.6</i>
72.5°	127.6	114.2	89.6	130.9	<i>137.7</i>
75°	110.8	99.7	82.8	115.8	<i>126.5</i>
77.5°	97.4	85.0	77.3	100.1	<i>113.0</i>
80°	82.3	69.9	69.9	84.0	<i>95.7</i>
82.5°	64.9	54.8	56.6	68.3	<i>76.7</i>
85°	43.1	40.3	38.1	49.8	<i>54.3</i>
87.5°	21.8	22.4	20.1	25.8	<i>26.4</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)