

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: P475730

Luminaire Tested: **24GR-LD5-180-A-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475730
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-A-UNV-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17524.3 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

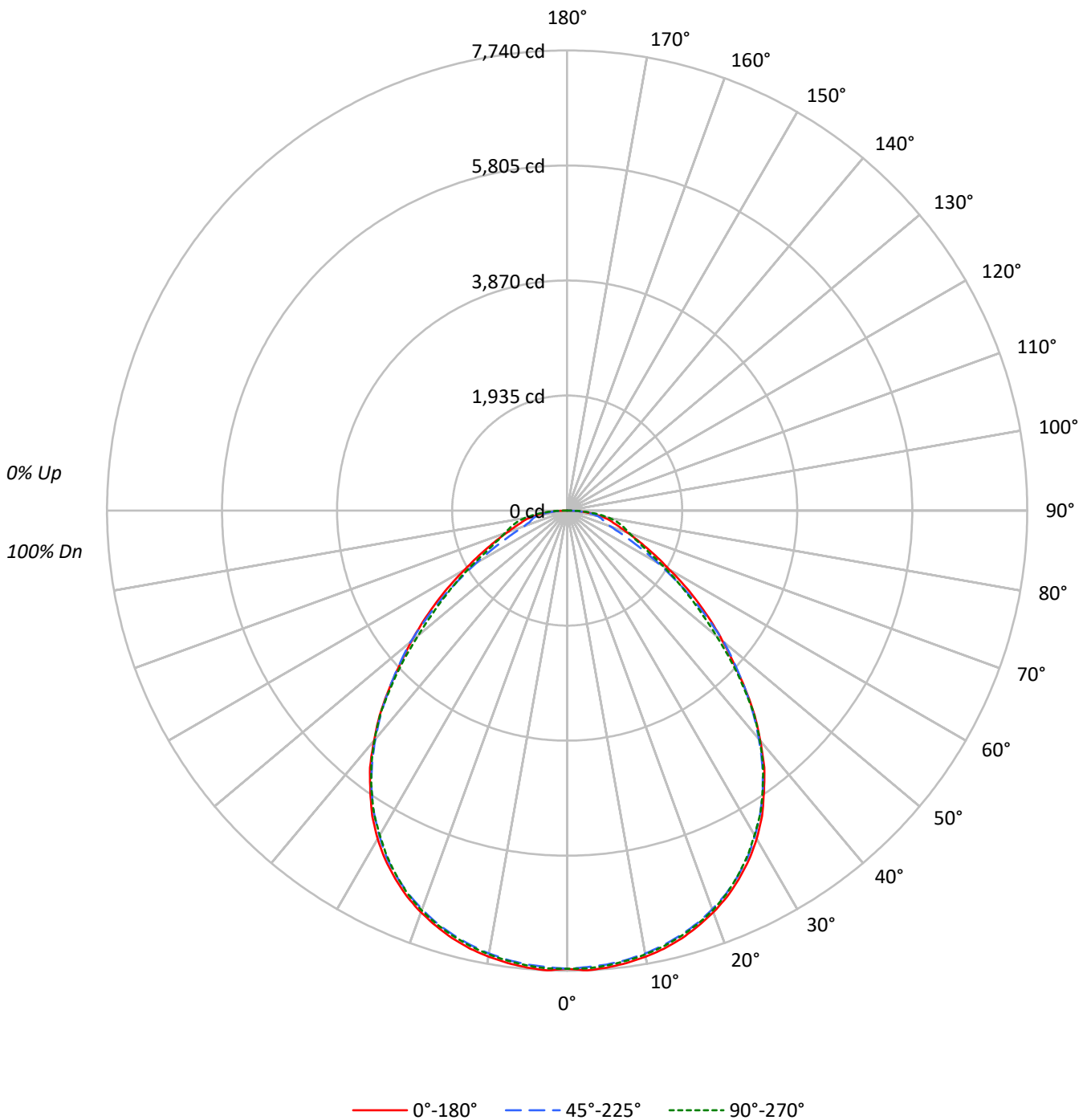
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10371	10371	10371
5°	10422	10352	10375
10°	10406	10335	10356
15°	10376	10294	10318
20°	10295	10221	10248
25°	10152	10077	10070
30°	9906	9814	9790
35°	9480	9421	9421
40°	8871	8819	8856
45°	8054	8041	7975
50°	7144	7198	6844
55°	6278	6003	5861
60°	5344	4741	4987
65°	4670	3686	4400
70°	4222	3034	4392
75°	4225	3238	4906
80°	4653	3984	5615
85°	4795	4475	6127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	729.8	4.2
10°-20°	2089.5	11.9
20°-30°	3125.7	17.8
30°-40°	3576.9	20.4
40°-50°	3240.8	18.5
50°-60°	2294.4	13.1
60°-70°	1325.4	7.6
70°-80°	803.5	4.6
80°-90°	338.2	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°	5945.1	33.9
0°-40°	9522.0	54.3
0°-60°	15057.1	85.9
0°-90°	17524.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17524.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7708	7708	7708	7708	7708	
5°	7716	7689	7665	7663	7682	733
15°	7449	7420	7390	7390	7408	2100
25°	6838	6810	6788	6783	6783	3145
35°	5772	5746	5736	5727	5736	3601
45°	4233	4224	4226	4195	4191	3261
55°	2676	2586	2559	2483	2498	2398
65°	1467	1315	1158	1325	1382	1474
75°	813	728	623	801	944	871
85°	311	280	290	371	397	334
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7707.7	7707.7	7707.7	7707.7	7707.7
2.5°	7740.5	7711.2	7685.3	7688.8	7707.7
5°	7716.4	7688.8	7664.6	7662.9	7681.9
7.5°	7675.0	7650.8	7623.2	7623.2	7638.7
10°	7616.3	7592.1	7564.5	7562.8	7580.1
12.5°	7547.3	7516.2	7486.9	7486.9	7505.9
15°	7448.9	7419.6	7390.2	7390.2	7407.5
17.5°	7328.1	7302.3	7278.1	7279.8	7293.6
20°	7190.1	7164.2	7138.3	7141.8	7157.3
22.5°	7031.3	7000.3	6979.6	6977.9	6988.2
25°	6838.1	6810.5	6788.1	6782.9	6782.9
27.5°	6622.4	6593.1	6577.5	6553.4	6560.3
30°	6375.7	6344.6	6317.0	6303.2	6301.5
32.5°	6097.9	6066.8	6042.6	6040.9	6047.8
35°	5771.7	5745.9	5735.5	5726.9	5735.5
37.5°	5449.1	5400.8	5392.1	5390.4	5412.8
40°	5050.5	5033.2	5021.2	5012.5	5041.9
42.5°	4667.4	4632.9	4636.4	4603.6	4655.4
45°	4232.6	4224.0	4225.7	4194.7	4191.2
47.5°	3801.2	3799.5	3825.4	3739.1	3733.9
50°	3413.0	3395.8	3438.9	3306.0	3269.8
52.5°	3042.0	2993.7	2979.9	2859.1	2859.1
55°	2676.2	2586.5	2558.9	2483.0	2498.5
57.5°	2329.4	2201.7	2144.8	2143.1	2168.9
60°	1986.0	1841.1	1761.7	1823.8	1853.2
62.5°	1713.4	1554.7	1433.9	1551.2	1578.8
65°	1466.7	1314.8	1157.8	1325.2	1382.1
67.5°	1254.4	1128.5	931.8	1150.9	1226.8
70°	1073.3	961.1	771.3	1014.6	1116.4
72.5°	930.0	836.9	671.2	905.9	1028.4
75°	812.7	728.2	622.9	800.6	943.8
77.5°	719.5	619.4	583.2	700.5	847.2
80°	600.5	509.0	514.2	602.2	724.7
82.5°	462.4	393.4	414.1	498.7	569.4
85°	310.6	279.5	289.9	371.0	396.9
87.5°	153.6	148.4	158.7	217.4	217.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)