

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: P475697

Luminaire Tested: **24GR-LD5-120-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475697
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11647.9 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

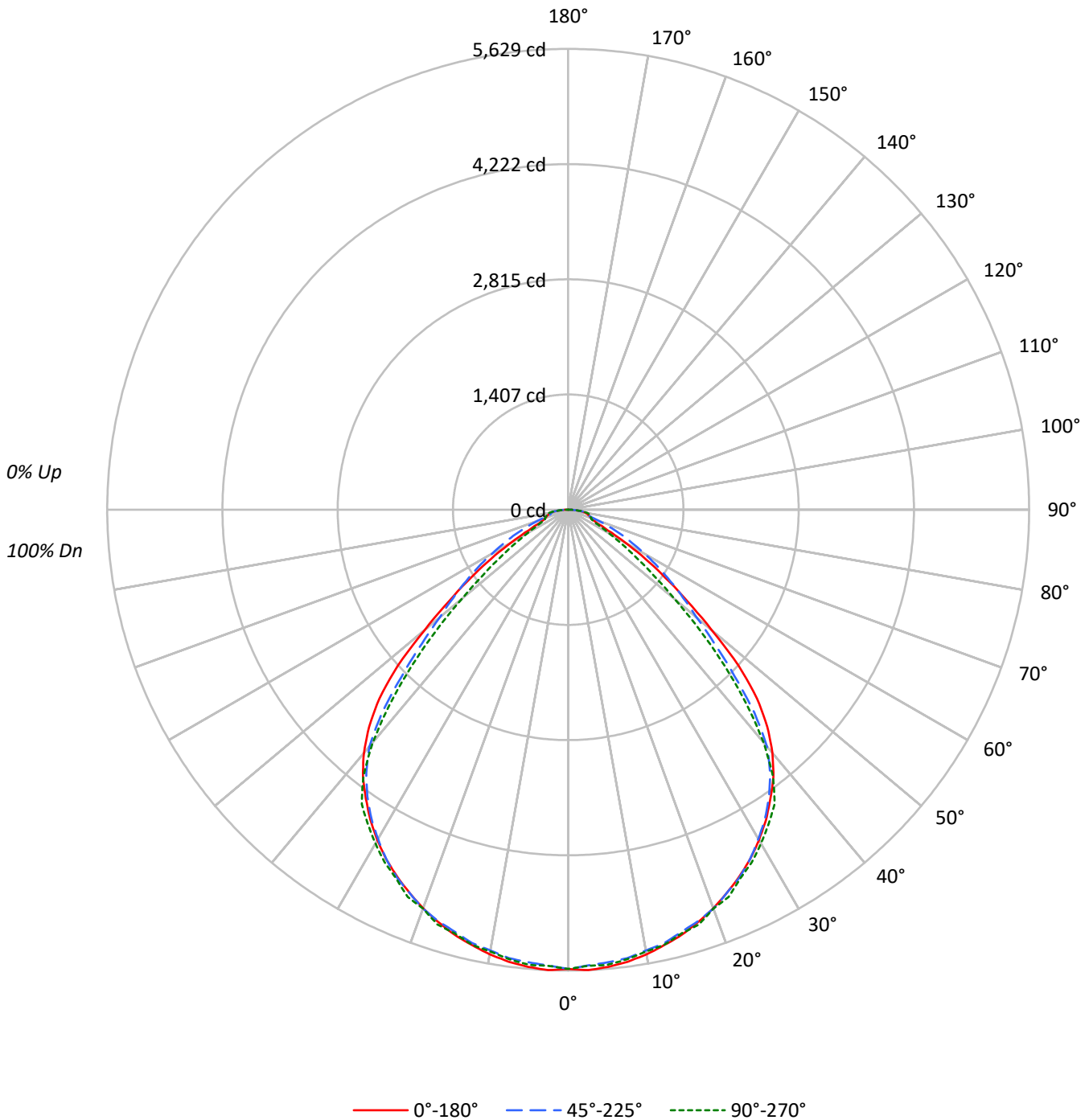
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88					88			
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76					76			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42					42			
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40	38					38			
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36	34					34			
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7547	7547	7547
5°	7571	7497	7536
10°	7534	7469	7487
15°	7484	7436	7461
20°	7420	7425	7422
25°	7341	7353	7378
30°	7239	7216	7312
35°	7074	7022	7216
40°	6817	6638	6519
45°	6205	5460	5151
50°	4788	4282	3540
55°	3402	3572	2342
60°	2154	2885	1528
65°	1250	2269	1117
70°	1157	1563	1185
75°	1331	1190	1412
80°	1663	1645	1865
85°	1812	1922	1996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	528.6	4.5
10°-20°	1511.9	13.0
20°-30°	2281.2	19.6
30°-40°	2677.6	23.0
40°-50°	2254.2	19.4
50°-60°	1280.5	11.0
60°-70°	639.1	5.5
70°-80°	335.1	2.9
80°-90°	139.7	1.2
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°	4321.7	37.1
0°-40°	6999.3	60.1
0°-60°	10534.0	90.4
0°-90°	11647.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11647.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5609	5609	5609	5609	5609	
5°	5605	5565	5551	5560	5579	532
15°	5373	5360	5339	5353	5356	1515
25°	4945	4947	4953	4966	4970	2278
35°	4307	4283	4275	4347	4394	2690
45°	3261	3131	2870	2820	2707	2456
55°	1450	1551	1523	1313	998	1319
65°	392	814	713	605	351	446
75°	256	395	229	344	272	271
85°	117	140	124	158	129	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5608.9	5608.9	5608.9	5608.9	5608.9
2.5°	5629.1	5601.8	5571.0	5562.7	5576.9
5°	5605.4	5565.1	5550.8	5560.3	5579.3
7.5°	5568.6	5527.1	5524.8	5508.2	5536.6
10°	5514.1	5486.8	5466.6	5476.1	5479.7
12.5°	5445.3	5437.0	5421.6	5408.5	5440.6
15°	5373.0	5359.9	5338.6	5352.8	5356.4
17.5°	5280.5	5273.4	5269.8	5280.5	5311.3
20°	5182.1	5182.1	5185.6	5188.0	5183.2
22.5°	5064.7	5061.1	5065.8	5075.3	5120.4
25°	4944.9	4947.3	4953.2	4966.2	4969.8
27.5°	4812.1	4813.3	4810.9	4823.9	4854.8
30°	4659.1	4654.4	4644.9	4673.3	4706.5
32.5°	4493.1	4483.6	4472.9	4516.8	4552.4
35°	4306.9	4283.2	4274.9	4347.2	4393.5
37.5°	4116.0	4067.4	4049.6	4103.0	4108.9
40°	3881.2	3808.9	3779.2	3727.0	3711.6
42.5°	3599.0	3524.3	3364.2	3283.5	3226.6
45°	3261.0	3130.6	2869.7	2819.9	2707.2
47.5°	2824.6	2685.9	2425.0	2318.3	2190.2
50°	2287.5	2206.8	2045.5	1912.7	1691.0
52.5°	1828.5	1845.1	1769.2	1585.4	1310.3
55°	1450.3	1551.1	1522.6	1312.7	998.5
57.5°	1115.9	1332.9	1298.5	1080.3	762.5
60°	800.4	1141.9	1072.0	889.4	568.0
62.5°	549.0	974.7	878.7	734.0	435.2
65°	392.5	813.5	712.7	604.8	351.0
67.5°	322.5	665.2	546.7	513.5	305.9
70°	294.1	536.0	397.3	448.2	301.2
72.5°	279.9	449.4	291.7	392.5	287.0
75°	256.1	394.9	228.9	343.9	271.6
77.5°	237.2	341.5	213.4	301.2	264.4
80°	214.6	270.4	212.3	255.0	240.7
82.5°	173.1	196.8	179.1	208.7	194.5
85°	117.4	139.9	124.5	157.7	129.3
87.5°	58.1	68.8	55.7	74.7	56.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)