

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: P231847

Luminaire Tested: **24GR-LD5-100-A19/156-UNV-L950-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-A19/156-UNV-L950-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9771.5 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

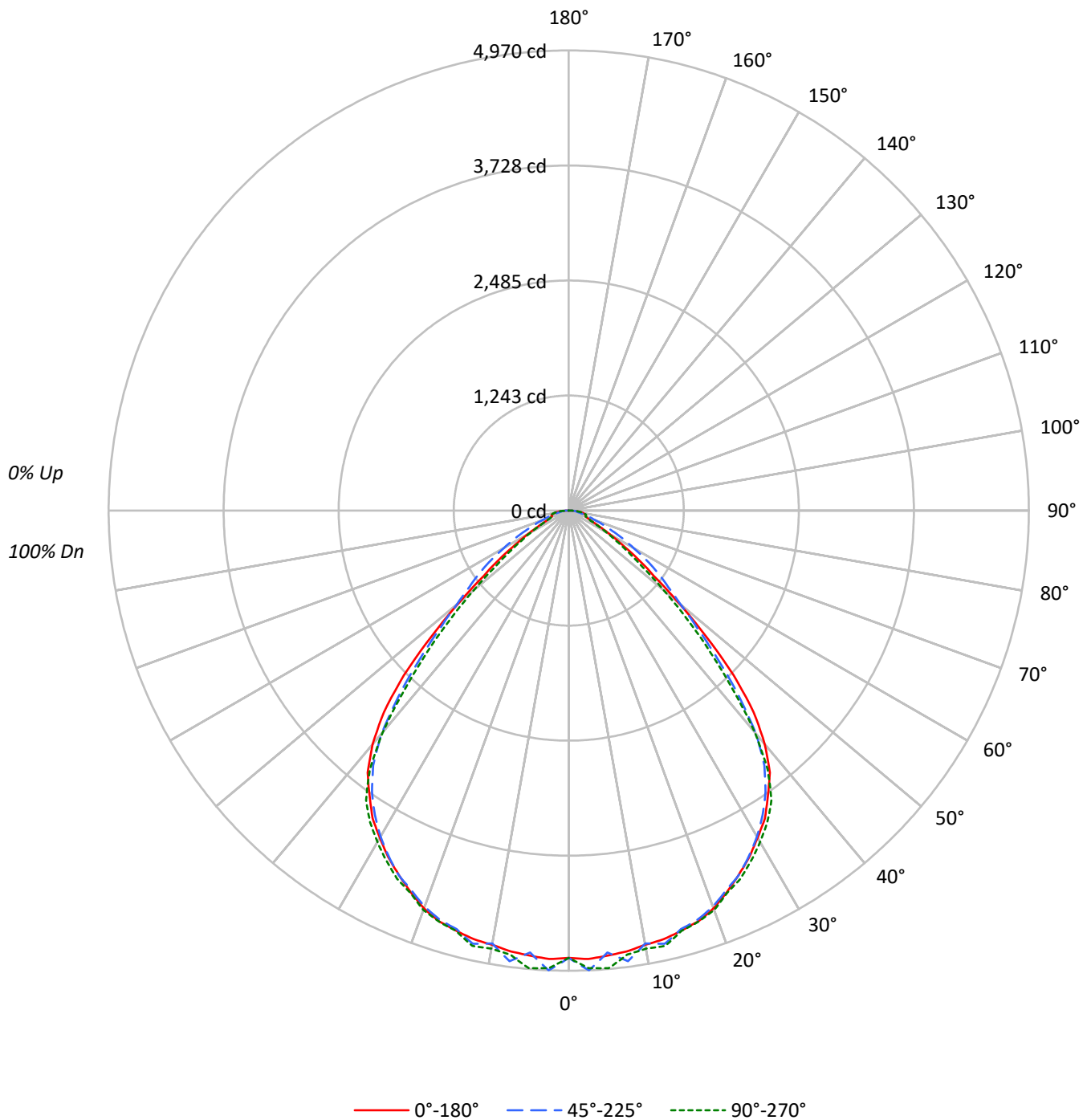
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53		
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48		
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43		
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39		
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36		
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7400	7400	7400
5°	7417	7368	7629
10°	7405	7383	7473
15°	7448	7423	7453
20°	7453	7423	7484
25°	7338	7343	7415
30°	7216	7194	7310
35°	7013	6928	7136
40°	6586	6291	6256
45°	5459	4939	4684
50°	3672	3747	3201
55°	2422	3143	2099
60°	1553	2480	1437
65°	1001	1894	973
70°	885	1356	885
75°	1142	1077	1152
80°	1398	927	1467
85°	1626	1378	1710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.6	4.7
10°-20°	1328.4	13.6
20°-30°	1999.8	20.5
30°-40°	2317.9	23.7
40°-50°	1810.7	18.5
50°-60°	966.8	9.9
60°-70°	497.2	5.1
70°-80°	281.2	2.9
80°-90°	106.8	1.1
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°	3790.8	38.8
0°-40°	6108.8	62.5
0°-60°	8886.3	90.9
0°-90°	9771.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9771.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4832	4832	4832	4832	4832	
5°	4824	4959	4792	4924	4962	459
15°	4697	4727	4681	4711	4700	1327
25°	4342	4328	4345	4339	4388	2001
35°	3751	3733	3705	3779	3816	2338
45°	2520	2522	2280	2260	2162	1899
55°	907	1147	1177	1061	786	837
65°	276	576	522	574	268	304
75°	193	362	182	339	195	196
85°	92	121	78	121	97	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4831.7	4831.7	4831.7	4831.7	4831.7
2.5°	4847.5	4935.3	4969.9	4927.5	4946.3
5°	4823.9	4958.9	4792.5	4924.4	4962.0
7.5°	4802.0	4787.8	4908.6	4783.1	4836.5
10°	4761.1	4770.6	4747.0	4836.5	4805.1
12.5°	4742.3	4797.2	4792.5	4747.0	4816.1
15°	4696.8	4726.6	4681.1	4710.9	4700.0
17.5°	4651.3	4637.2	4632.4	4645.0	4656.0
20°	4572.8	4525.8	4554.0	4557.2	4591.7
22.5°	4459.8	4431.6	4437.9	4466.1	4469.3
25°	4342.2	4328.1	4345.2	4339.1	4387.7
27.5°	4219.8	4200.9	4211.9	4235.4	4265.3
30°	4080.1	4075.3	4067.5	4087.9	4133.4
32.5°	3942.0	3904.4	3898.1	3940.4	3992.2
35°	3750.6	3733.3	3705.1	3778.8	3816.4
37.5°	3568.5	3515.1	3469.6	3513.6	3529.3
40°	3293.9	3253.1	3146.4	3151.1	3129.1
42.5°	2956.5	2926.7	2722.6	2686.6	2625.4
45°	2520.2	2521.8	2280.2	2259.7	2162.4
47.5°	2013.4	2102.8	1892.5	1869.0	1724.6
50°	1541.0	1702.6	1572.4	1534.7	1343.3
52.5°	1156.5	1393.5	1352.7	1271.1	1007.5
55°	907.0	1147.1	1177.0	1060.8	786.2
57.5°	682.6	944.7	993.4	897.6	607.3
60°	506.9	795.6	809.7	772.0	469.2
62.5°	376.6	676.3	657.6	662.2	348.3
65°	276.2	575.9	522.5	574.4	268.4
67.5°	226.0	499.0	406.4	497.5	218.1
70°	197.7	442.5	302.8	437.8	197.7
72.5°	191.5	406.4	240.1	389.2	193.0
75°	193.0	362.5	182.0	339.0	194.6
77.5°	177.4	298.1	138.1	288.7	185.2
80°	158.5	226.0	105.1	229.1	166.3
82.5°	135.0	164.8	84.7	169.4	139.7
85°	92.5	120.8	78.4	120.8	97.3
87.5°	44.0	72.2	48.7	69.1	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)