

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: P231848

Luminaire Tested: **24GR-LD5-120-A19/156-UNV-L930-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231848
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-LD5-120-A19/156-UNV-L930-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: 9412.8 lumens
Efficiency: N/A
Efficacy: 104.5 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

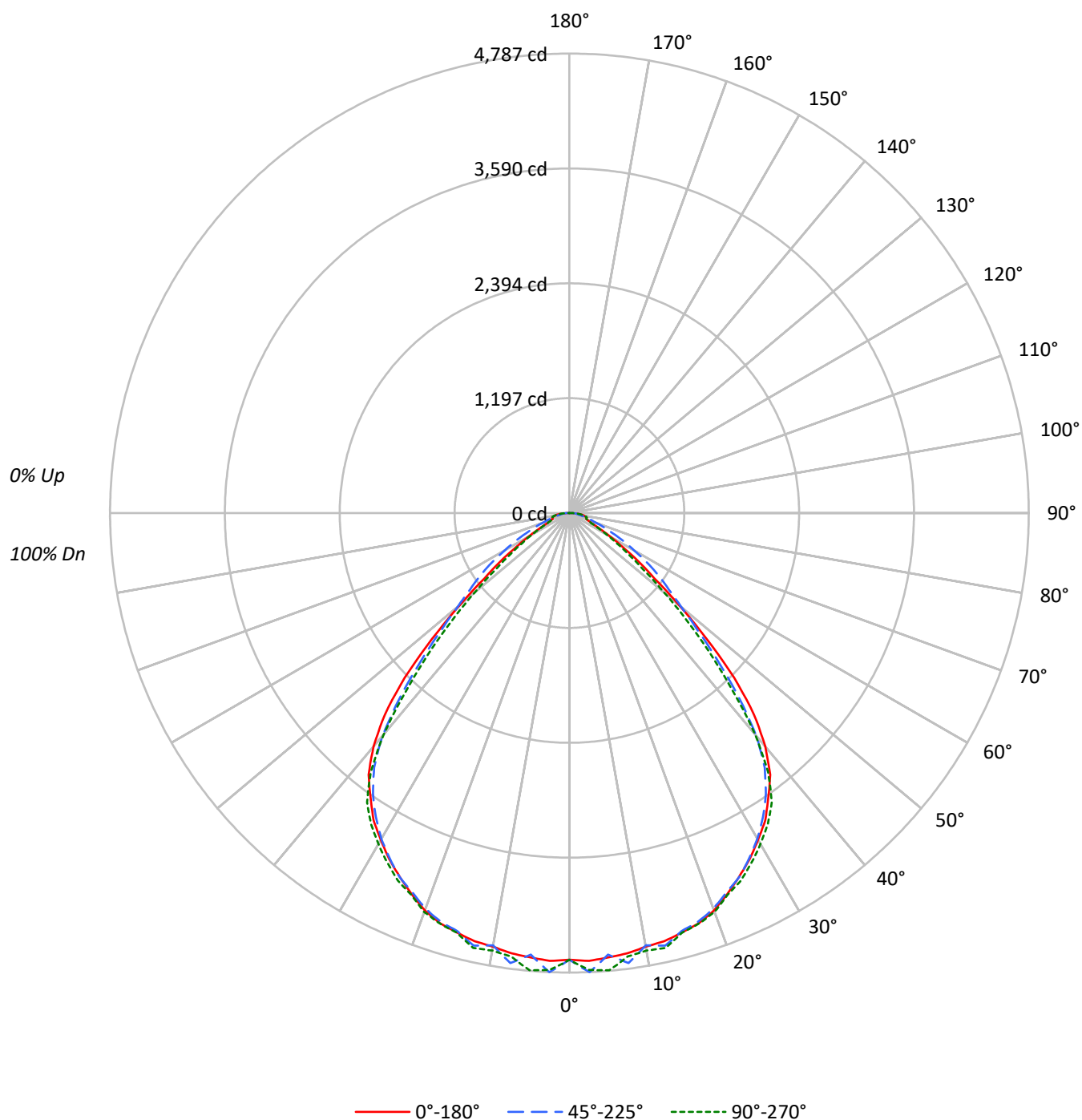
Input Watts (W): 90.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7129	7129	7129
5°	7144	7098	7349
10°	7133	7112	7199
15°	7174	7150	7179
20°	7180	7150	7209
25°	7069	7074	7143
30°	6951	6930	7042
35°	6755	6673	6874
40°	6344	6060	6027
45°	5259	4758	4512
50°	3537	3609	3083
55°	2333	3027	2022
60°	1495	2389	1385
65°	964	1824	937
70°	853	1307	853
75°	1100	1037	1110
80°	1347	893	1413
85°	1568	1329	1647



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.6	4.7
10°-20°	1279.6	13.6
20°-30°	1926.4	20.5
30°-40°	2232.8	23.7
40°-50°	1744.2	18.5
50°-60°	931.4	9.9
60°-70°	478.9	5.1
70°-80°	270.9	2.9
80°-90°	102.9	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°	3651.6	38.8
0°-40°	5884.5	62.5
0°-60°	8560.0	90.9
0°-90°	9412.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9412.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4654	4654	4654	4654	4654	
5°	4647	4777	4616	4744	4780	442
15°	4524	4553	4509	4538	4527	1278
25°	4183	4169	4186	4180	4226	1927
35°	3613	3596	3569	3640	3676	2252
45°	2428	2429	2196	2177	2083	1829
55°	874	1105	1134	1022	757	806
65°	266	555	503	553	258	292
75°	186	349	175	326	188	188
85°	89	116	76	116	94	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4654.3	4654.3	4654.3	4654.3	4654.3
2.5°	4669.5	4754.1	4787.4	4746.6	4764.7
5°	4646.8	4776.8	4616.5	4743.5	4779.8
7.5°	4625.6	4612.0	4728.4	4607.5	4658.9
10°	4586.3	4595.4	4572.7	4658.9	4628.7
12.5°	4568.2	4621.1	4616.5	4572.7	4639.2
15°	4524.3	4553.0	4509.3	4538.0	4527.4
17.5°	4480.5	4466.9	4462.4	4474.5	4485.1
20°	4405.0	4359.6	4386.8	4389.8	4423.1
22.5°	4296.1	4268.9	4274.9	4302.1	4305.2
25°	4182.7	4169.1	4185.8	4179.7	4226.5
27.5°	4064.8	4046.7	4057.3	4079.9	4108.6
30°	3930.3	3925.7	3918.2	3937.8	3981.7
32.5°	3797.3	3760.9	3754.9	3795.7	3845.6
35°	3612.8	3596.2	3569.0	3640.1	3676.3
37.5°	3437.4	3386.1	3342.2	3384.6	3399.7
40°	3172.9	3133.6	3030.9	3035.4	3014.2
42.5°	2847.9	2819.2	2622.7	2587.9	2529.0
45°	2427.7	2429.2	2196.5	2176.8	2083.0
47.5°	1939.5	2025.6	1823.0	1800.4	1661.3
50°	1484.4	1640.2	1514.7	1478.4	1294.0
52.5°	1114.1	1342.3	1303.1	1224.4	970.5
55°	873.7	1105.0	1133.7	1021.9	757.4
57.5°	657.6	910.0	956.9	864.7	585.0
60°	488.2	766.4	780.0	743.7	452.0
62.5°	362.8	651.5	633.4	637.9	335.5
65°	266.1	554.8	503.4	553.3	258.5
67.5°	217.7	480.7	391.5	479.2	210.1
70°	190.5	426.3	291.8	421.7	190.5
72.5°	184.4	391.5	231.3	374.9	185.9
75°	185.9	349.2	175.3	326.5	187.5
77.5°	170.8	287.2	133.0	278.1	178.4
80°	152.7	217.7	101.3	220.7	160.2
82.5°	130.0	158.8	81.6	163.3	134.6
85°	89.2	116.4	75.6	116.4	93.7
87.5°	42.3	69.5	46.8	66.5	48.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)