

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: P231854

Luminaire Tested: **24GR-LD5-130-A19/156-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231854
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-LD5-130-A19/156-UNV-L940-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: 11124.1 lumens
Efficiency: N/A
Efficacy: 112.1 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

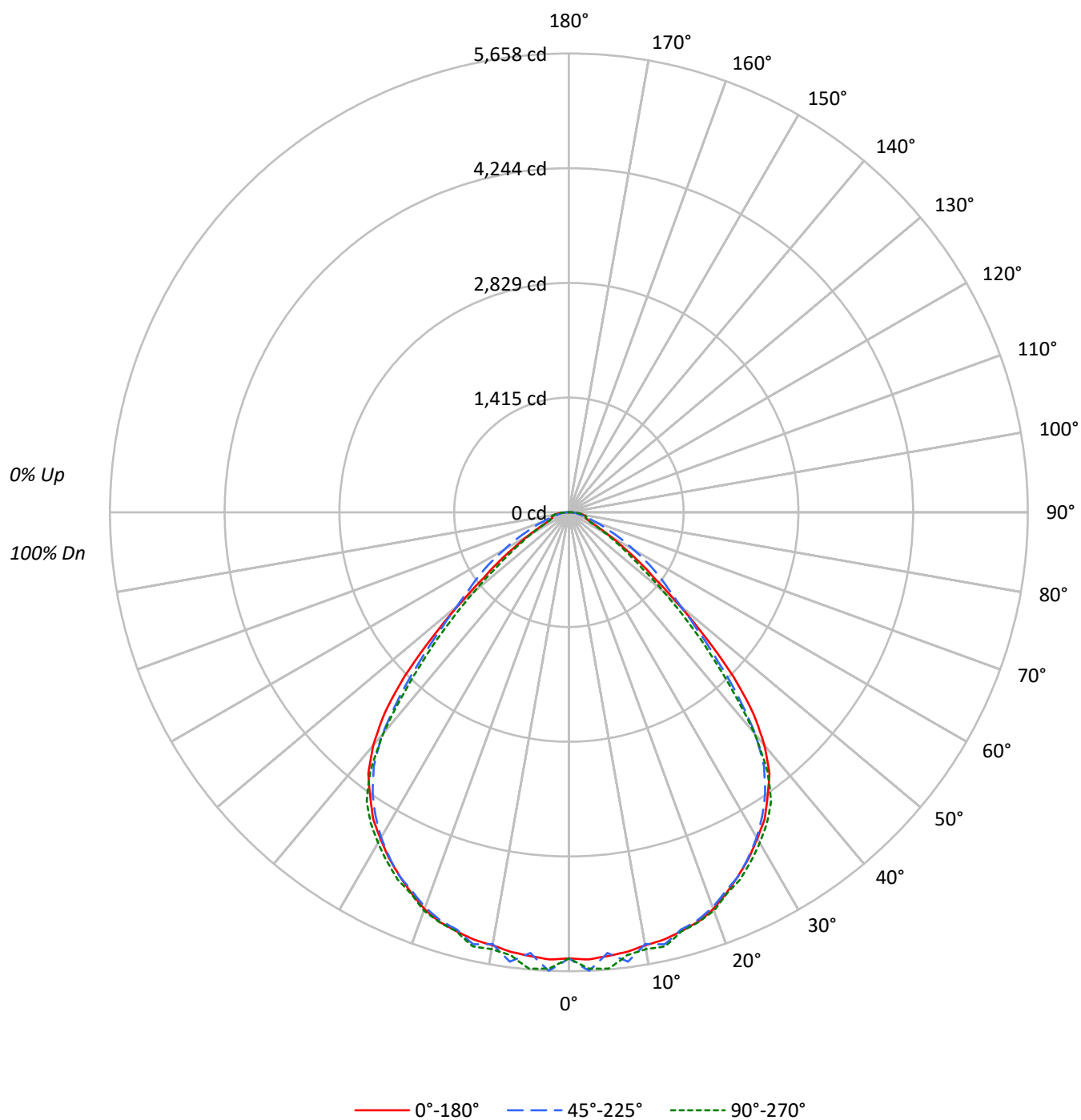
Input Watts (W): 99.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8425	8425	8425
5°	8443	8388	8685
10°	8430	8405	8508
15°	8478	8450	8484
20°	8485	8450	8520
25°	8354	8360	8441
30°	8215	8189	8322
35°	7983	7886	8124
40°	7497	7162	7122
45°	6214	5622	5332
50°	4180	4265	3644
55°	2757	3578	2390
60°	1768	2824	1636
65°	1139	2156	1107
70°	1008	1544	1008
75°	1300	1227	1311
80°	1591	1056	1671
85°	1852	1571	1947



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.7	4.7
10°-20°	1512.2	13.6
20°-30°	2276.7	20.5
30°-40°	2638.8	23.7
40°-50°	2061.3	18.5
50°-60°	1100.7	9.9
60°-70°	566.0	5.1
70°-80°	320.2	2.9
80°-90°	121.6	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°	4315.5	38.8
0°-40°	6954.3	62.5
0°-60°	10116.3	90.9
0°-90°	11124.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11124.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5501	5501	5501	5501	5501	
5°	5492	5645	5456	5606	5649	522
15°	5347	5381	5329	5363	5350	1510
25°	4943	4927	4947	4940	4995	2278
35°	4270	4250	4218	4302	4345	2662
45°	2869	2871	2596	2572	2462	2162
55°	1033	1306	1340	1208	895	953
65°	314	656	595	654	306	346
75°	220	413	207	386	222	223
85°	105	138	89	138	111	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5500.6	5500.6	5500.6	5500.6	5500.6
2.5°	5518.4	5618.5	5657.8	5609.5	5630.9
5°	5491.6	5645.2	5455.9	5605.9	5648.8
7.5°	5466.6	5450.5	5588.1	5445.2	5505.9
10°	5420.2	5430.9	5404.1	5505.9	5470.2
12.5°	5398.7	5461.3	5455.9	5404.1	5482.7
15°	5346.9	5380.8	5329.1	5363.0	5350.5
17.5°	5295.1	5279.0	5273.7	5288.0	5300.4
20°	5205.8	5152.2	5184.3	5188.0	5227.3
22.5°	5077.2	5045.0	5052.2	5084.3	5087.8
25°	4943.2	4927.1	4946.7	4939.6	4995.0
27.5°	4803.8	4782.4	4794.9	4821.7	4855.6
30°	4644.9	4639.4	4630.5	4653.7	4705.6
32.5°	4487.7	4444.7	4437.6	4485.8	4544.8
35°	4269.6	4250.0	4217.9	4301.8	4344.7
37.5°	4062.5	4001.7	3949.9	3999.9	4017.7
40°	3749.8	3703.3	3581.9	3587.2	3562.2
42.5°	3365.7	3331.8	3099.5	3058.4	2988.8
45°	2869.0	2870.9	2595.7	2572.5	2461.8
47.5°	2292.1	2393.9	2154.5	2127.7	1963.3
50°	1754.3	1938.4	1790.0	1747.2	1529.3
52.5°	1316.7	1586.4	1539.9	1447.0	1146.9
55°	1032.6	1305.9	1339.9	1207.7	895.0
57.5°	777.1	1075.4	1130.8	1021.9	691.4
60°	577.1	905.8	921.8	878.9	534.1
62.5°	428.8	770.0	748.5	753.9	396.6
65°	314.4	655.7	594.9	653.9	305.5
67.5°	257.2	568.1	462.7	566.3	248.3
70°	225.1	503.8	344.8	498.5	225.1
72.5°	217.9	462.7	273.3	443.1	219.7
75°	219.7	412.7	207.3	385.9	221.5
77.5°	201.8	339.4	157.2	328.7	210.8
80°	180.4	257.2	119.7	260.8	189.4
82.5°	153.6	187.6	96.5	192.9	159.0
85°	105.4	137.6	89.4	137.6	110.8
87.5°	50.1	82.2	55.4	78.6	57.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)