

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: P231846

Luminaire Tested: **24GR-LD5-100-A19/156-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231846
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-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: 8395.3 lumens
Efficiency: N/A
Efficacy: 117.1 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

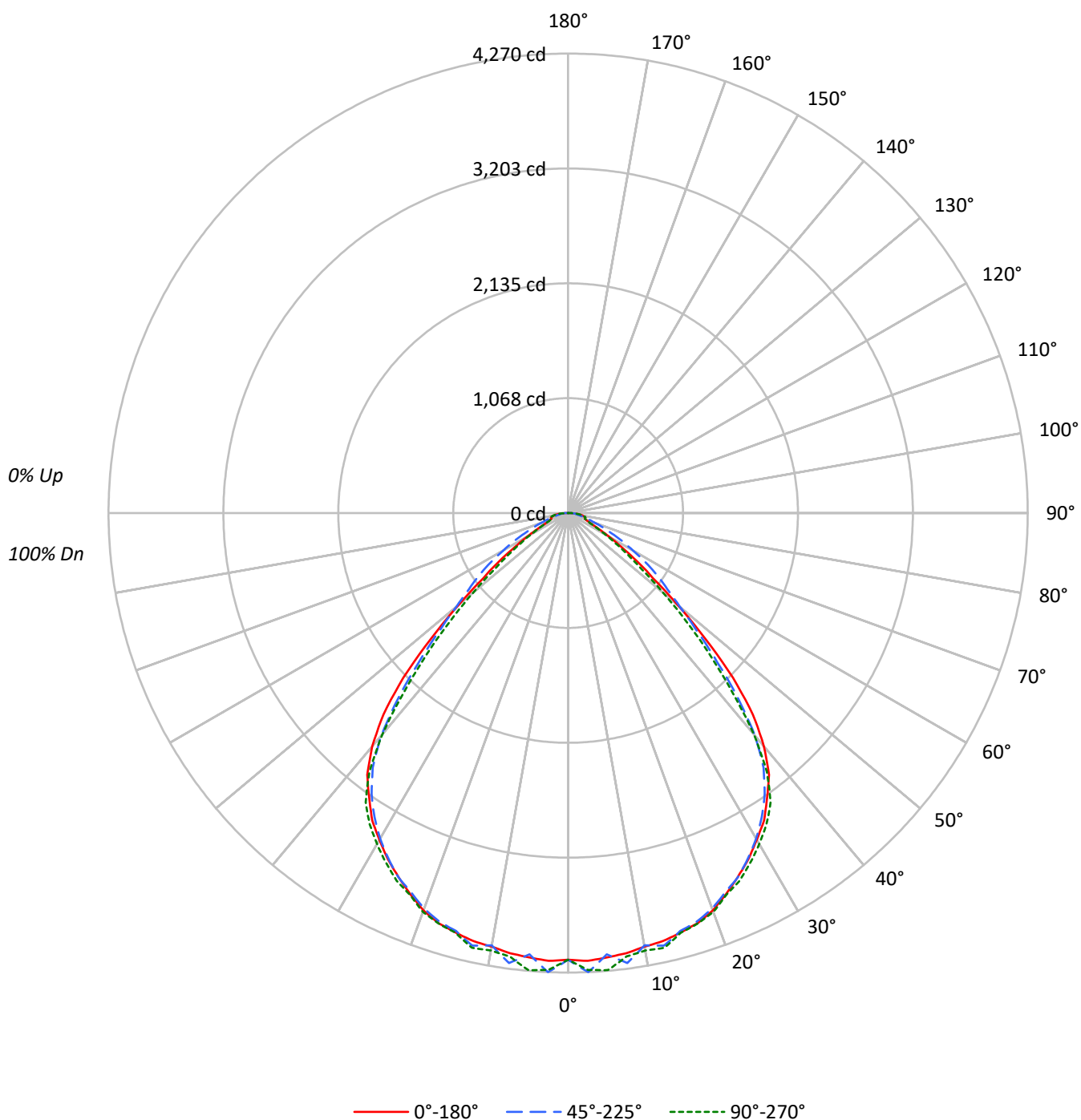
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P231846

CATALOG NUMBER: 24GR-LD5-100-A19/156-UNV-L940-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P231846

CATALOG NUMBER: 24GR-LD5-100-A19/156-UNV-L940-CD2-U

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°	6358	6358	6358
5°	6372	6331	6555
10°	6362	6343	6421
15°	6399	6377	6403
20°	6404	6377	6430
25°	6305	6309	6371
30°	6200	6180	6281
35°	6025	5952	6131
40°	5658	5405	5375
45°	4690	4243	4024
50°	3155	3219	2750
55°	2081	2700	1804
60°	1334	2131	1235
65°	860	1627	836
70°	760	1165	760
75°	981	926	989
80°	1200	796	1260
85°	1399	1184	1469



TEST NUMBER: P231846

CATALOG NUMBER: 24GR-LD5-100-A19/156-UNV-L940-CD2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	397.5	4.7
10°-20°	1141.3	13.6
20°-30°	1718.2	20.5
30°-40°	1991.5	23.7
40°-50°	1555.7	18.5
50°-60°	830.7	9.9
60°-70°	427.2	5.1
70°-80°	241.7	2.9
80°-90°	91.8	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°	3256.9	38.8
0°-40°	5248.4	62.5
0°-60°	7634.8	90.9
0°-90°	8395.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8395.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4151	4151	4151	4151	4151	
5°	4144	4260	4118	4231	4263	394
15°	4035	4061	4022	4047	4038	1140
25°	3731	3718	3733	3728	3770	1719
35°	3222	3208	3183	3247	3279	2009
45°	2165	2167	1959	1941	1858	1632
55°	779	986	1011	911	675	719
65°	237	495	449	494	231	261
75°	166	311	156	291	167	168
85°	80	104	67	104	84	82
90°	0	0	0	0	0	



TEST NUMBER: P231846

CATALOG NUMBER: 24GR-LD5-100-A19/156-UNV-L940-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4151.2	4151.2	4151.2	4151.2	4151.2
2.5°	4164.7	4240.2	4269.9	4233.5	4249.7
5°	4144.5	4260.4	4117.5	4230.8	4263.2
7.5°	4125.6	4113.5	4217.3	4109.4	4155.3
10°	4090.6	4098.7	4078.5	4155.3	4128.3
12.5°	4074.4	4121.6	4117.5	4078.5	4137.8
15°	4035.3	4060.9	4021.8	4047.4	4038.0
17.5°	3996.2	3984.0	3980.0	3990.8	4000.2
20°	3928.8	3888.3	3912.6	3915.3	3945.0
22.5°	3831.7	3807.5	3812.8	3837.1	3839.8
25°	3730.6	3718.5	3733.3	3727.9	3769.7
27.5°	3625.4	3609.2	3618.7	3638.9	3664.5
30°	3505.4	3501.4	3494.6	3512.2	3551.3
32.5°	3386.8	3354.4	3349.0	3385.5	3429.9
35°	3222.3	3207.5	3183.2	3246.6	3278.9
37.5°	3065.9	3020.1	2980.9	3018.7	3032.2
40°	2830.0	2794.9	2703.2	2707.3	2688.4
42.5°	2540.1	2514.5	2339.2	2308.2	2255.6
45°	2165.3	2166.6	1959.0	1941.4	1857.9
47.5°	1729.8	1806.7	1626.0	1605.8	1481.7
50°	1324.0	1462.9	1351.0	1318.6	1154.1
52.5°	993.6	1197.2	1162.2	1092.1	865.6
55°	779.2	985.6	1011.2	911.4	675.4
57.5°	586.5	811.7	853.5	771.2	521.8
60°	435.5	683.5	695.7	663.3	403.2
62.5°	323.6	581.1	564.9	569.0	299.3
65°	237.3	494.8	449.0	493.5	230.6
67.5°	194.2	428.7	349.2	427.4	187.4
70°	169.8	380.2	260.2	376.2	169.8
72.5°	164.5	349.2	206.3	334.4	165.8
75°	165.8	311.4	156.4	291.2	167.2
77.5°	152.4	256.2	118.7	248.1	159.1
80°	136.1	194.2	90.3	196.9	142.9
82.5°	115.9	141.6	72.8	145.6	120.0
85°	79.6	103.8	67.4	103.8	83.6
87.5°	37.8	62.0	41.8	59.3	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)