

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: P231861

Luminaire Tested: **24GR-LD5-180-A19/156-UNV-L935-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231861
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-LD5-180-A19/156-UNV-L935-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: 14932.8 lumens
Efficiency: N/A
Efficacy: 103.6 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

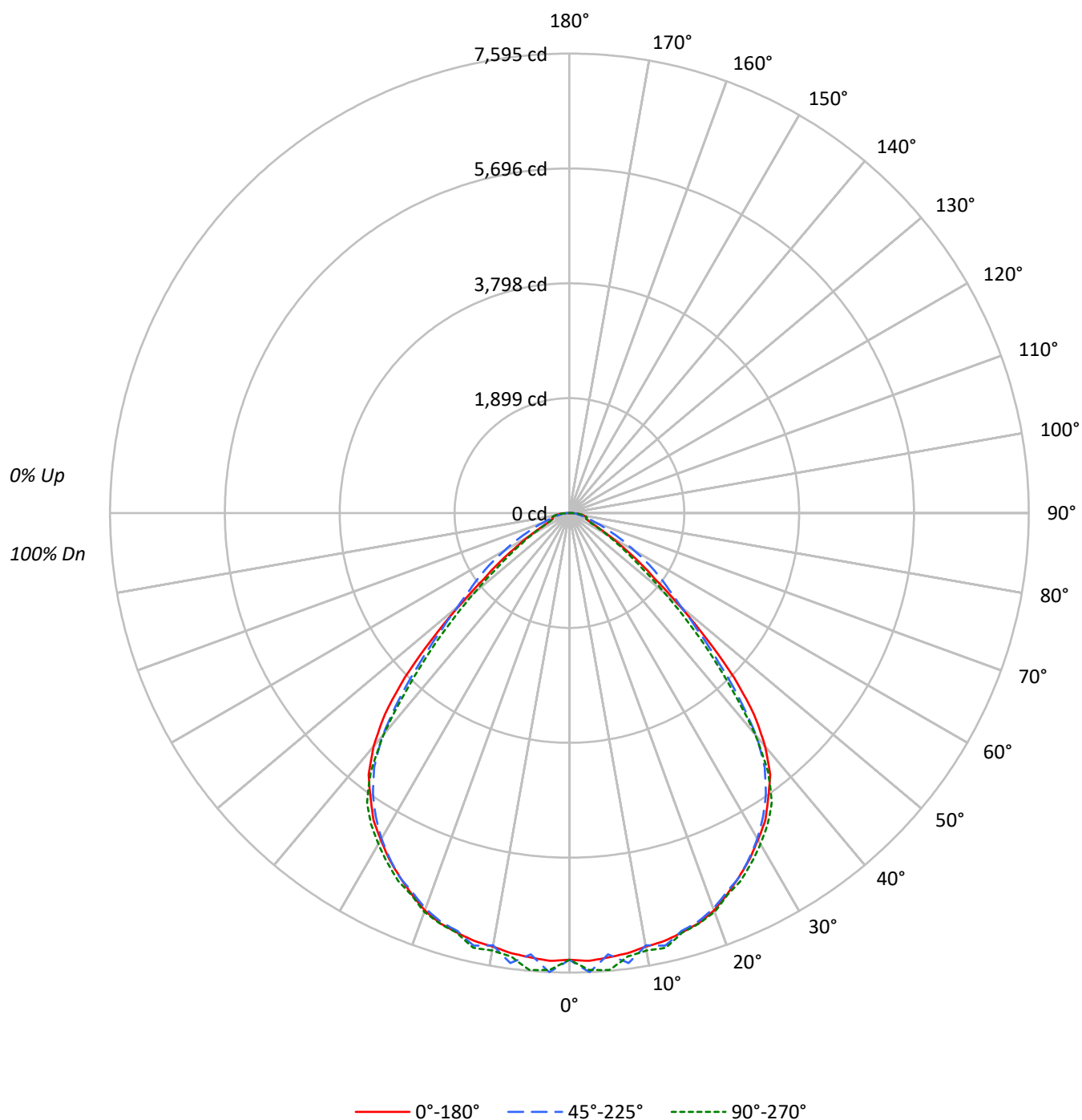
Input Watts (W): 144.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	11309	11309	11309
5°	11334	11260	11658
10°	11316	11282	11420
15°	11381	11343	11389
20°	11390	11343	11437
25°	11214	11222	11331
30°	11027	10993	11172
35°	10717	10587	10905
40°	10064	9614	9561
45°	8342	7548	7158
50°	5611	5726	4891
55°	3701	4803	3208
60°	2373	3790	2197
65°	1530	2894	1486
70°	1353	2072	1353
75°	1746	1646	1759
80°	2136	1417	2242
85°	2487	2107	2613



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	707.0	4.7
10°-20°	2030.0	13.6
20°-30°	3056.1	20.5
30°-40°	3542.3	23.7
40°-50°	2767.1	18.5
50°-60°	1477.5	9.9
60°-70°	759.8	5.1
70°-80°	429.8	2.9
80°-90°	163.2	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°	5793.1	38.8
0°-40°	9335.4	62.5
0°-60°	13580.0	90.9
0°-90°	14932.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14932.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7384	7384	7384	7384	7384	
5°	7372	7578	7324	7525	7583	701
15°	7178	7223	7154	7199	7182	2027
25°	6636	6614	6640	6631	6705	3058
35°	5732	5705	5662	5775	5832	3573
45°	3851	3854	3484	3453	3305	2902
55°	1386	1753	1799	1621	1202	1279
65°	422	880	799	878	410	464
75°	295	554	278	518	297	299
85°	142	185	120	185	149	146
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7383.9	7383.9	7383.9	7383.9	7383.9
2.5°	7407.8	7542.1	7594.8	7530.2	7558.9
5°	7371.9	7578.1	7323.9	7525.3	7582.8
7.5°	7338.3	7316.7	7501.3	7309.5	7391.0
10°	7275.9	7290.3	7254.3	7391.0	7343.1
12.5°	7247.2	7331.1	7323.9	7254.3	7359.9
15°	7177.6	7223.1	7153.6	7199.2	7182.4
17.5°	7108.0	7086.4	7079.3	7098.4	7115.3
20°	6988.2	6916.2	6959.4	6964.1	7016.9
22.5°	6815.5	6772.3	6781.9	6825.1	6829.8
25°	6635.6	6614.0	6640.5	6630.8	6705.1
27.5°	6448.6	6419.8	6436.5	6472.6	6518.1
30°	6235.2	6228.0	6216.0	6247.2	6316.7
32.5°	6024.1	5966.6	5957.0	6021.7	6100.9
35°	5731.6	5705.1	5662.0	5774.7	5832.3
37.5°	5453.3	5371.8	5302.3	5369.4	5393.4
40°	5033.7	4971.3	4808.3	4815.4	4781.8
42.5°	4518.1	4472.5	4160.8	4105.6	4012.1
45°	3851.4	3853.8	3484.5	3453.3	3304.6
47.5°	3076.8	3213.5	2892.1	2856.2	2635.5
50°	2354.9	2601.9	2403.0	2345.4	2052.8
52.5°	1767.4	2129.5	2067.2	1942.5	1539.6
55°	1386.1	1753.0	1798.6	1621.1	1201.5
57.5°	1043.2	1443.6	1518.0	1371.7	928.1
60°	774.6	1215.8	1237.4	1179.9	717.1
62.5°	575.5	1033.6	1004.8	1012.0	532.4
65°	422.1	880.1	798.6	877.7	410.0
67.5°	345.4	762.6	621.1	760.2	333.4
70°	302.2	676.3	462.8	669.1	302.2
72.5°	292.6	621.1	366.9	594.7	295.0
75°	295.0	553.9	278.2	518.0	297.3
77.5°	271.0	455.7	211.1	441.2	283.0
80°	242.2	345.4	160.6	350.1	254.2
82.5°	206.2	251.8	129.5	259.0	213.4
85°	141.5	184.6	119.9	184.6	148.7
87.5°	67.1	110.3	74.4	105.5	76.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)