

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: P231815

Luminaire Tested: **24GR-LD5-180-A-UNV-L950-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-A-UNV-L950-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH A LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18280.1 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

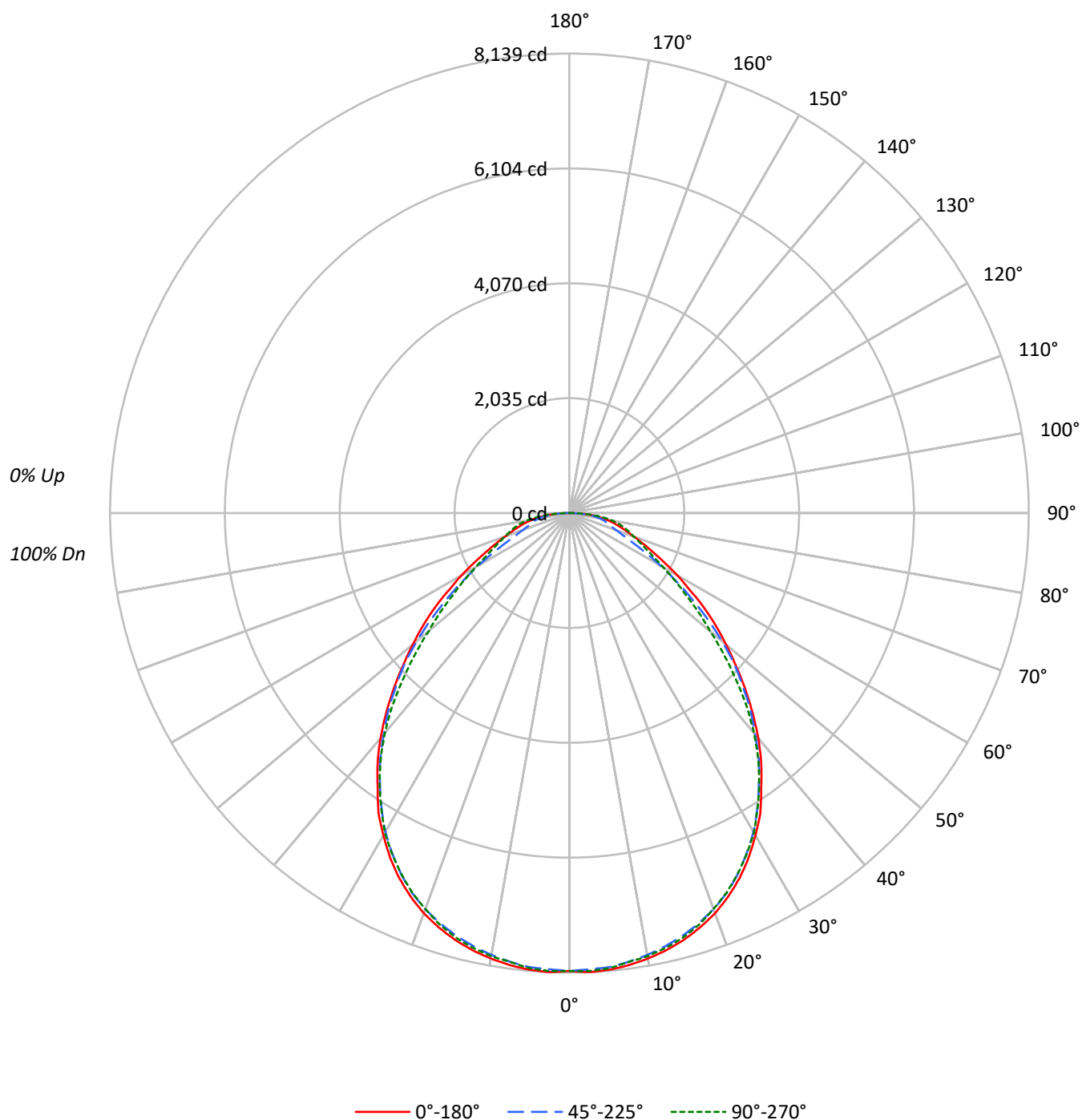
Input Watts (W): 144.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63		
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43		
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35		
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32		
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12422	12422	12422
5°	12483	12414	12444
10°	12460	12359	12394
15°	12413	12288	12341
20°	12294	12170	12166
25°	12056	11927	11917
30°	11657	11537	11562
35°	11073	10946	10962
40°	10412	10231	10169
45°	9543	9414	9041
50°	8627	8391	7759
55°	7745	7051	6689
60°	6782	5675	5883
65°	5916	4462	5414
70°	5413	3895	5413
75°	5415	4144	5966
80°	5879	4883	6800
85°	6451	5509	7295



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	768.0	4.2
10°-20°	2191.9	12.0
20°-30°	3250.1	17.8
30°-40°	3666.5	20.1
40°-50°	3320.8	18.2
50°-60°	2395.8	13.1
60°-70°	1430.5	7.8
70°-80°	884.1	4.8
80°-90°	372.5	2.0
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°	6210.0	34.0
0°-40°	9876.5	54.0
0°-60°	15593.0	85.3
0°-90°	18280.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18280.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8111	8111	8111	8111	8111	
5°	8119	8108	8074	8066	8094	771
15°	7828	7780	7749	7752	7783	2207
25°	7134	7094	7057	7032	7052	3277
35°	5922	5914	5854	5857	5863	3705
45°	4406	4377	4346	4239	4174	3395
55°	2900	2810	2640	2511	2505	2589
65°	1632	1437	1231	1398	1494	1642
75°	915	794	700	873	1008	977
85°	367	322	314	410	415	384
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8110.6	8110.6	8110.6	8110.6	8110.6
2.5°	8138.9	8116.3	8088.1	8105.0	8119.1
5°	8119.1	8107.8	8074.0	8065.5	8093.7
7.5°	8076.8	8048.5	8017.5	8031.6	8020.3
10°	8011.8	7986.4	7946.8	7949.7	7969.4
12.5°	7932.7	7901.7	7859.3	7870.6	7887.5
15°	7828.3	7780.2	7749.2	7752.0	7783.0
17.5°	7695.5	7658.8	7619.2	7627.7	7641.9
20°	7543.0	7523.2	7466.7	7449.8	7463.9
22.5°	7351.0	7314.3	7283.2	7274.7	7277.5
25°	7133.6	7094.0	7057.3	7031.8	7051.7
27.5°	6879.4	6845.5	6797.5	6789.0	6806.0
30°	6591.3	6565.9	6523.5	6512.2	6537.6
32.5°	6297.7	6255.2	6195.9	6195.9	6201.7
35°	5922.0	5913.5	5854.2	5857.0	5862.7
37.5°	5583.1	5543.6	5509.7	5475.8	5492.8
40°	5207.6	5162.3	5117.2	5094.5	5086.1
42.5°	4803.7	4769.9	4750.0	4668.1	4648.4
45°	4405.5	4377.3	4346.3	4238.9	4173.9
47.5°	3998.8	3993.2	3967.8	3778.6	3713.6
50°	3620.4	3612.0	3521.6	3321.0	3256.2
52.5°	3261.8	3205.3	3086.7	2889.0	2877.7
55°	2900.3	2809.9	2640.5	2510.6	2505.0
57.5°	2519.1	2411.8	2239.5	2168.9	2205.6
60°	2214.0	2050.2	1852.6	1861.0	1920.4
62.5°	1897.7	1714.2	1519.3	1604.1	1674.7
65°	1632.3	1437.4	1231.3	1397.9	1493.9
67.5°	1400.8	1219.9	1022.3	1245.4	1338.6
70°	1208.7	1061.9	869.8	1104.2	1208.7
72.5°	1056.2	920.6	771.0	991.3	1112.7
75°	915.0	793.5	700.3	872.6	1008.2
77.5°	793.5	674.9	632.5	771.0	903.7
80°	666.5	559.2	553.6	672.1	771.0
82.5°	519.6	446.2	446.2	562.0	621.3
85°	367.1	322.0	313.5	409.5	415.1
87.5°	189.2	180.7	163.8	214.7	214.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)