

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: P475683

Luminaire Tested: **24GR-LD5-130-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475683
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-130-A19/156-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12575.5 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

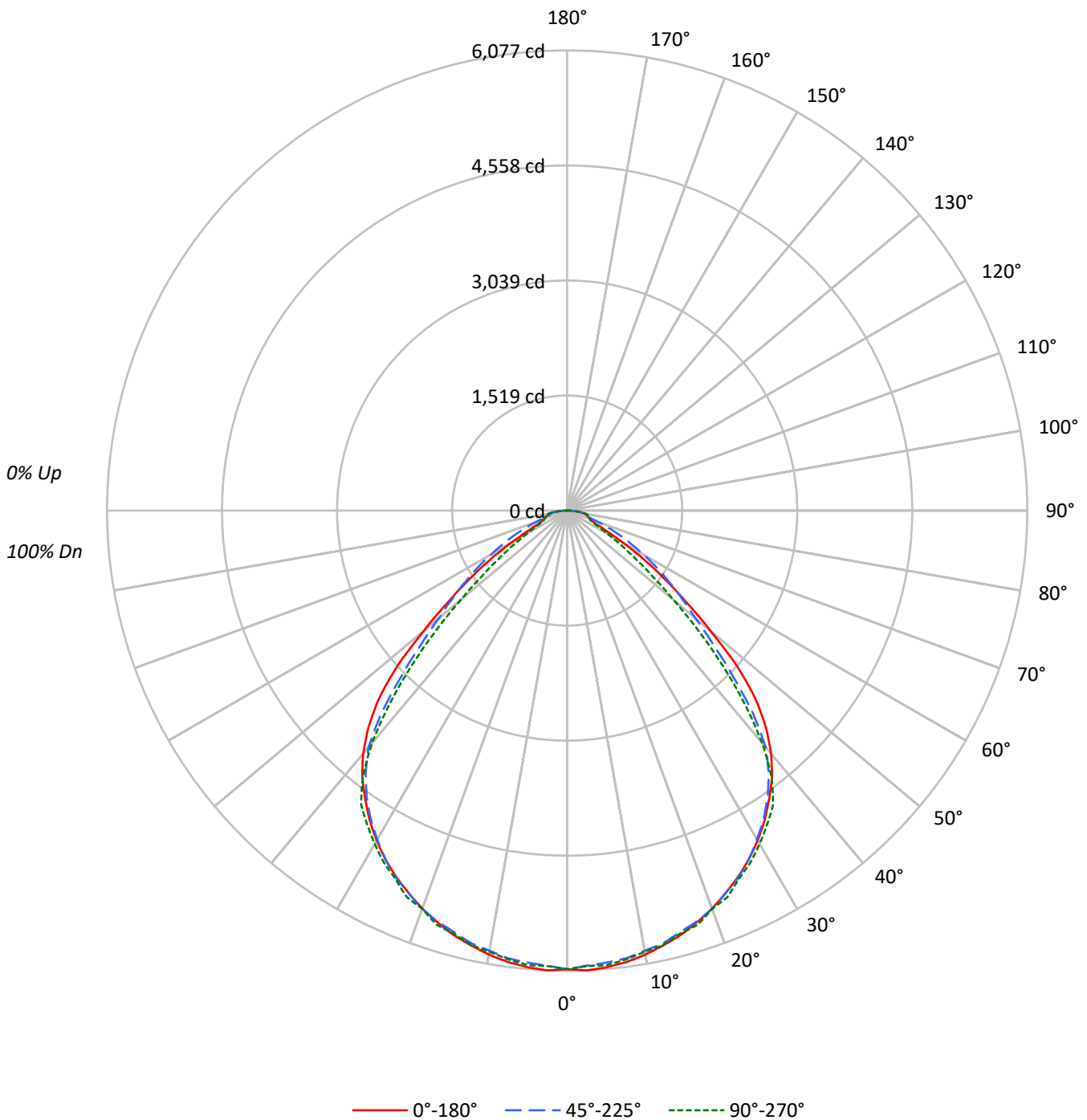
Input Watts (W): 88.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
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	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8148	8148	8148
5°	8174	8094	8136
10°	8134	8064	8083
15°	8080	8029	8055
20°	8011	8016	8013
25°	7926	7939	7966
30°	7815	7791	7894
35°	7638	7581	7791
40°	7360	7167	7038
45°	6699	5895	5562
50°	5169	4623	3821
55°	3673	3856	2529
60°	2326	3114	1650
65°	1349	2450	1207
70°	1249	1687	1279
75°	1437	1285	1524
80°	1795	1776	2014
85°	1956	2075	2154



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	570.7	4.5
10°-20°	1632.3	13.0
20°-30°	2462.9	19.6
30°-40°	2890.9	23.0
40°-50°	2433.7	19.4
50°-60°	1382.5	11.0
60°-70°	690.0	5.5
70°-80°	361.8	2.9
80°-90°	150.8	1.2
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°	4665.8	37.1
0°-40°	7556.7	60.1
0°-60°	11372.9	90.4
0°-90°	12575.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12575.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6056	6056	6056	6056	6056	
5°	6052	6008	5993	6003	6024	575
15°	5801	5787	5764	5779	5783	1636
25°	5339	5341	5348	5362	5366	2459
35°	4650	4624	4615	4693	4743	2904
45°	3521	3380	3098	3044	2923	2651
55°	1566	1675	1644	1417	1078	1425
65°	424	878	769	653	379	482
75°	276	426	247	371	293	293
85°	127	151	134	170	140	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6055.6	6055.6	6055.6	6055.6	6055.6
2.5°	6077.4	6047.9	6014.6	6005.7	6021.0
5°	6051.8	6008.2	5992.9	6003.1	6023.6
7.5°	6012.1	5967.3	5964.7	5946.8	5977.5
10°	5953.2	5923.7	5902.0	5912.2	5916.1
12.5°	5878.9	5870.0	5853.3	5839.2	5873.8
15°	5800.8	5786.7	5763.7	5779.1	5782.9
17.5°	5701.0	5693.3	5689.4	5701.0	5734.3
20°	5594.7	5594.7	5598.6	5601.1	5596.0
22.5°	5468.0	5464.1	5469.2	5479.5	5528.1
25°	5338.7	5341.2	5347.6	5361.7	5365.5
27.5°	5195.3	5196.6	5194.0	5208.1	5241.4
30°	5030.1	5025.0	5014.8	5045.5	5081.3
32.5°	4850.9	4840.6	4829.1	4876.5	4914.9
35°	4649.9	4624.3	4615.3	4693.4	4743.3
37.5°	4443.8	4391.3	4372.1	4429.7	4436.1
40°	4190.3	4112.2	4080.2	4023.8	4007.2
42.5°	3885.6	3804.9	3632.1	3545.0	3483.6
45°	3520.7	3379.9	3098.2	3044.4	2922.8
47.5°	3049.6	2899.8	2618.1	2502.9	2364.6
50°	2469.6	2382.6	2208.4	2065.1	1825.6
52.5°	1974.2	1992.1	1910.1	1711.7	1414.7
55°	1565.8	1674.6	1643.8	1417.2	1078.0
57.5°	1204.7	1439.0	1401.9	1166.3	823.2
60°	864.2	1232.9	1157.3	960.2	613.2
62.5°	592.8	1052.4	948.7	792.5	469.9
65°	423.8	878.3	769.4	652.9	379.0
67.5°	348.2	718.2	590.2	554.4	330.3
70°	317.5	578.7	428.9	483.9	325.2
72.5°	302.1	485.2	314.9	423.8	309.8
75°	276.5	426.3	247.1	371.3	293.2
77.5°	256.1	368.7	230.4	325.2	285.5
80°	231.7	291.9	229.2	275.3	259.9
82.5°	186.9	212.5	193.3	225.3	210.0
85°	126.7	151.1	134.4	170.3	139.5
87.5°	62.7	74.3	60.2	80.7	61.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)