

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: P231784

Luminaire Tested: **24GR-LD5-130-F1-UNV-L930-CD2-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231784  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-130-F1-UNV-L930-CD2-U  
Description: METALUX 2X4 GRLED TROFFER  
WITH F1 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10483.7 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

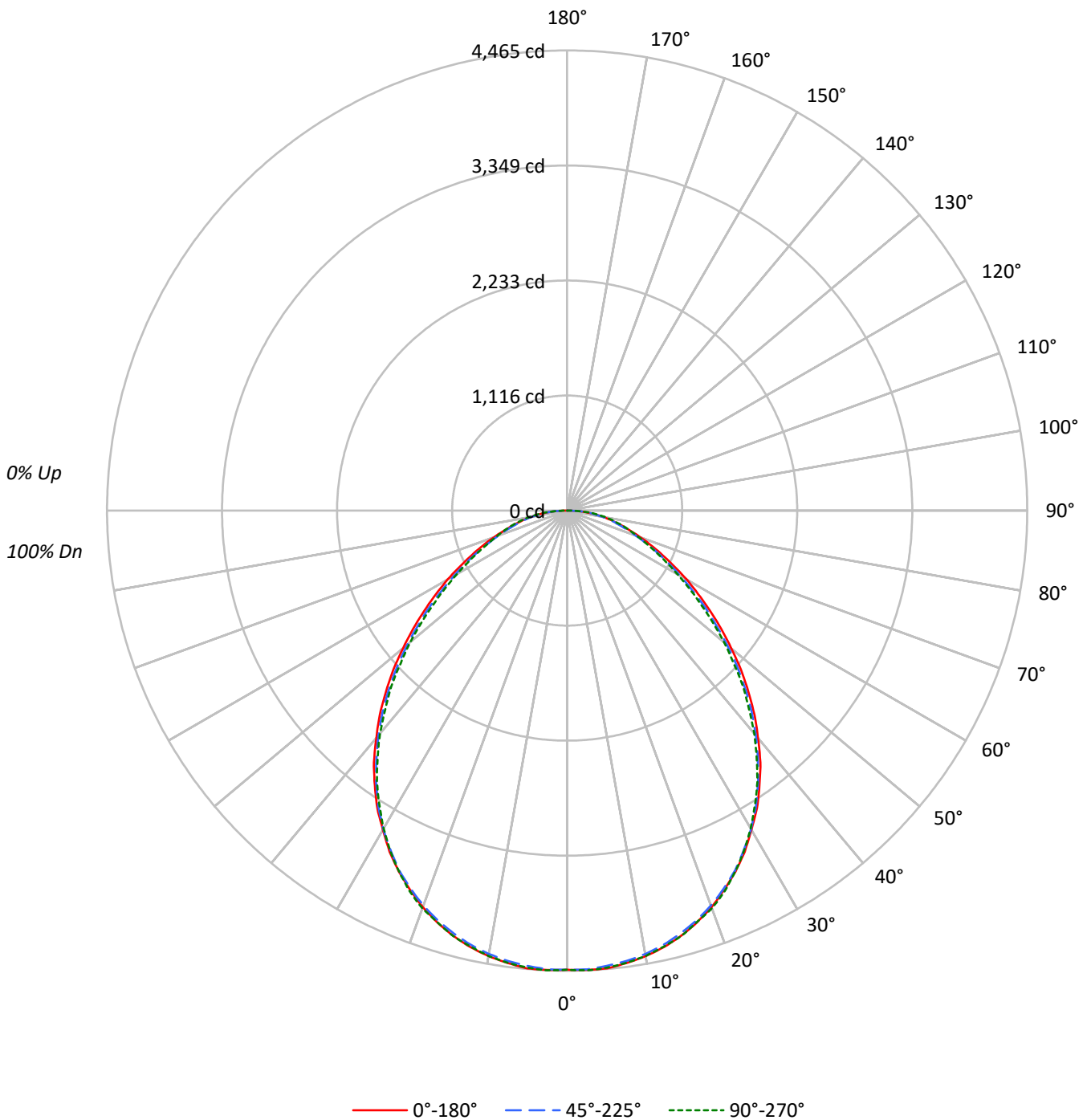
Input Watts (W): 99.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6824	6824	6824
5°	6855	6817	6845
10°	6828	6794	6825
15°	6774	6738	6779
20°	6675	6648	6696
25°	6530	6513	6527
30°	6324	6312	6298
35°	6085	6039	6014
40°	5760	5694	5648
45°	5388	5289	5225
50°	4951	4818	4736
55°	4516	4349	4223
60°	4101	3880	3780
65°	3694	3486	3427
70°	3383	3163	3251
75°	3161	3016	3239
80°	3136	3079	3382
85°	3197	3225	3687



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	421.7	4.0
10°-20°	1198.8	11.4
20°-30°	1771.1	16.9
30°-40°	2013.5	19.2
40°-50°	1880.3	17.9
50°-60°	1462.3	13.9
60°-70°	970.3	9.3
70°-80°	561.5	5.4
80°-90°	204.2	1.9
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°	3391.6	32.4
0°-40°	5405.1	51.6
0°-60°	8747.7	83.4
0°-90°	10483.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10483.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4456	4456	4456	4456	4456	
5°	4459	4436	4434	4442	4452	423
15°	4272	4251	4249	4247	4275	1204
25°	3864	3848	3854	3846	3862	1777
35°	3254	3238	3230	3207	3217	2032
45°	2488	2468	2442	2410	2412	1917
55°	1691	1667	1629	1586	1581	1517
65°	1019	988	962	944	946	1019
75°	534	521	510	533	547	571
85°	182	179	184	208	210	198
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4455.6	4455.6	4455.6	4455.6	4455.6
2.5°	4462.1	4449.0	4455.6	4450.6	4465.4
5°	4458.8	4435.9	4434.2	4442.4	4452.3
7.5°	4427.8	4403.2	4408.1	4408.1	4424.5
10°	4390.0	4365.4	4368.7	4370.4	4388.4
12.5°	4339.2	4314.7	4316.3	4314.7	4332.6
15°	4272.0	4250.7	4249.1	4247.4	4275.3
17.5°	4190.1	4160.6	4170.4	4172.1	4186.8
20°	4095.1	4072.1	4078.7	4077.0	4108.2
22.5°	3982.0	3965.6	3970.5	3967.2	3996.8
25°	3864.0	3847.6	3854.2	3846.0	3862.4
27.5°	3731.2	3719.8	3713.3	3708.4	3719.8
30°	3575.6	3569.0	3569.0	3547.7	3560.8
32.5°	3428.1	3406.9	3406.9	3398.7	3390.5
35°	3254.4	3238.0	3229.8	3206.9	3216.7
37.5°	3080.7	3043.0	3039.7	3021.7	3021.7
40°	2880.8	2859.5	2848.0	2828.3	2825.1
42.5°	2690.7	2669.4	2649.7	2616.9	2610.4
45°	2487.6	2467.9	2441.6	2410.5	2412.1
47.5°	2286.0	2258.1	2233.5	2195.8	2190.9
50°	2077.9	2058.2	2022.1	1989.3	1987.7
52.5°	1882.9	1851.7	1818.9	1779.6	1779.6
55°	1691.1	1666.6	1628.8	1586.2	1581.3
57.5°	1507.6	1484.6	1442.1	1410.9	1402.7
60°	1338.8	1306.0	1266.7	1240.5	1233.9
62.5°	1170.1	1140.5	1111.0	1084.8	1083.1
65°	1019.3	988.1	961.9	943.9	945.5
67.5°	883.2	857.1	827.5	822.6	824.3
70°	755.5	727.6	706.3	717.7	725.9
72.5°	634.2	619.4	604.7	621.1	632.5
75°	534.2	521.1	509.6	532.6	547.4
77.5°	442.5	432.6	431.0	450.7	463.7
80°	355.6	344.2	349.1	372.0	383.4
82.5°	270.4	262.2	263.8	291.7	299.9
85°	181.9	178.6	183.5	208.1	209.8
87.5°	96.7	96.7	100.0	114.7	109.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)