

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: P219033

Luminaire Tested: **24GR-LD5-90-F1-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219033
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35585)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-F1-UNV-L930-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7329.1 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

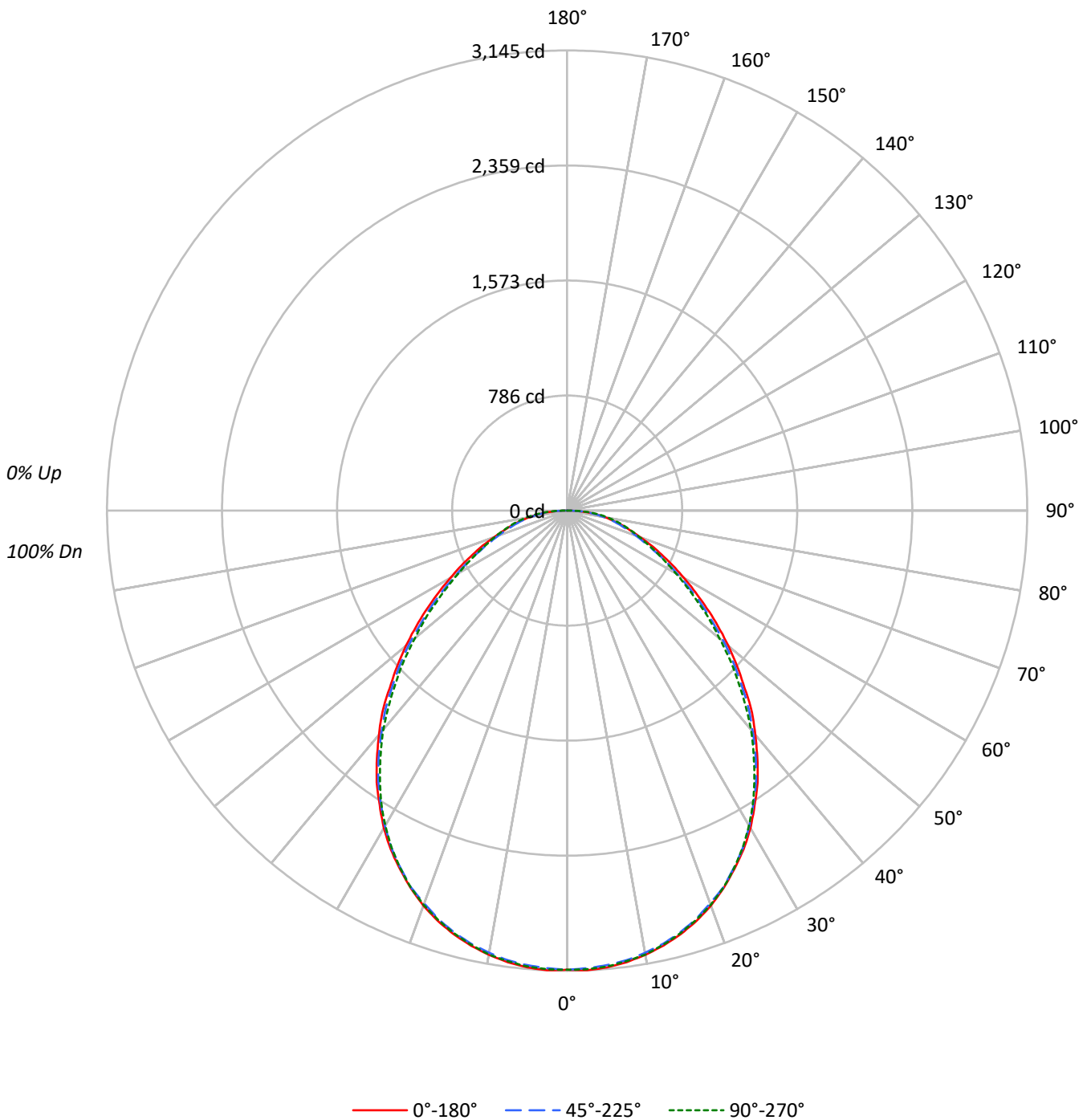
Input Watts (W): 69.117
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	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°	4806	4806	4806
5°	4818	4795	4809
10°	4794	4773	4791
15°	4753	4732	4743
20°	4684	4656	4675
25°	4570	4554	4558
30°	4431	4405	4397
35°	4243	4209	4171
40°	3999	3947	3909
45°	3716	3650	3581
50°	3425	3336	3236
55°	3114	3005	2912
60°	2821	2672	2624
65°	2580	2408	2425
70°	2373	2237	2343
75°	2307	2187	2387
80°	2313	2252	2541
85°	2541	2402	2799



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.5	4.0
10°-20°	841.4	11.5
20°-30°	1239.9	16.9
30°-40°	1402.2	19.1
40°-50°	1300.6	17.7
50°-60°	1010.4	13.8
60°-70°	677.6	9.2
70°-80°	406.1	5.5
80°-90°	154.5	2.1
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°	2377.8	32.4
0°-40°	3779.9	51.6
0°-60°	6091.0	83.1
0°-90°	7329.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7329.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3138	3138	3138	3138	3138	
5°	3134	3124	3119	3116	3128	297
15°	2998	2986	2984	2979	2991	845
25°	2704	2701	2695	2690	2697	1245
35°	2269	2260	2251	2237	2231	1414
45°	1715	1709	1685	1659	1653	1326
55°	1166	1153	1125	1097	1090	1047
65°	712	689	664	662	669	711
75°	390	376	370	388	403	412
85°	145	136	137	160	159	152
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3138.0	3138.0	3138.0	3138.0	3138.0
2.5°	3144.8	3134.6	3130.1	3127.8	3138.0
5°	3133.5	3124.4	3118.8	3116.5	3127.8
7.5°	3113.1	3103.0	3099.6	3095.0	3106.3
10°	3082.6	3073.6	3069.0	3065.7	3080.3
12.5°	3044.2	3036.3	3031.8	3029.5	3038.5
15°	2997.8	2985.5	2984.3	2978.6	2991.1
17.5°	2940.3	2929.0	2926.7	2924.4	2932.3
20°	2873.5	2862.3	2856.6	2855.5	2868.0
22.5°	2793.3	2785.5	2787.7	2780.9	2790.0
25°	2704.0	2700.7	2695.0	2690.5	2697.3
27.5°	2611.4	2600.1	2600.1	2591.0	2597.8
30°	2505.2	2497.3	2490.5	2481.5	2486.0
32.5°	2385.4	2382.0	2371.8	2362.8	2365.0
35°	2269.0	2260.0	2250.9	2237.4	2230.6
37.5°	2135.7	2126.7	2115.4	2096.2	2093.9
40°	2000.1	1992.2	1974.1	1953.7	1954.9
42.5°	1871.2	1858.9	1836.2	1809.1	1803.4
45°	1715.4	1708.6	1684.9	1658.9	1653.2
47.5°	1576.4	1571.8	1542.4	1515.3	1508.6
50°	1437.4	1424.9	1400.1	1372.9	1358.2
52.5°	1300.6	1284.8	1253.1	1235.1	1228.3
55°	1166.1	1152.6	1125.4	1097.2	1090.4
57.5°	1040.7	1026.1	993.3	972.9	969.6
60°	920.9	907.4	872.3	857.6	856.6
62.5°	814.8	792.1	768.4	758.3	759.3
65°	711.9	689.3	664.4	662.2	669.0
67.5°	621.5	597.8	572.9	582.0	588.8
70°	530.0	513.0	499.5	514.1	523.2
72.5°	452.0	441.8	429.4	449.8	461.0
75°	389.8	376.3	369.5	387.6	403.4
77.5°	323.2	311.8	311.8	331.1	348.0
80°	262.2	254.3	255.3	278.0	288.1
82.5°	205.7	194.3	195.5	223.8	230.5
85°	144.6	135.6	136.7	160.5	159.3
87.5°	75.7	72.3	75.7	92.7	88.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)