

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: P219047

Luminaire Tested: **24GR-LD5-85-F1-UNV-L935-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219047
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-LD5-85-F1-UNV-L935-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7281.9 lumens
Efficiency: N/A
Efficacy: 103.5 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

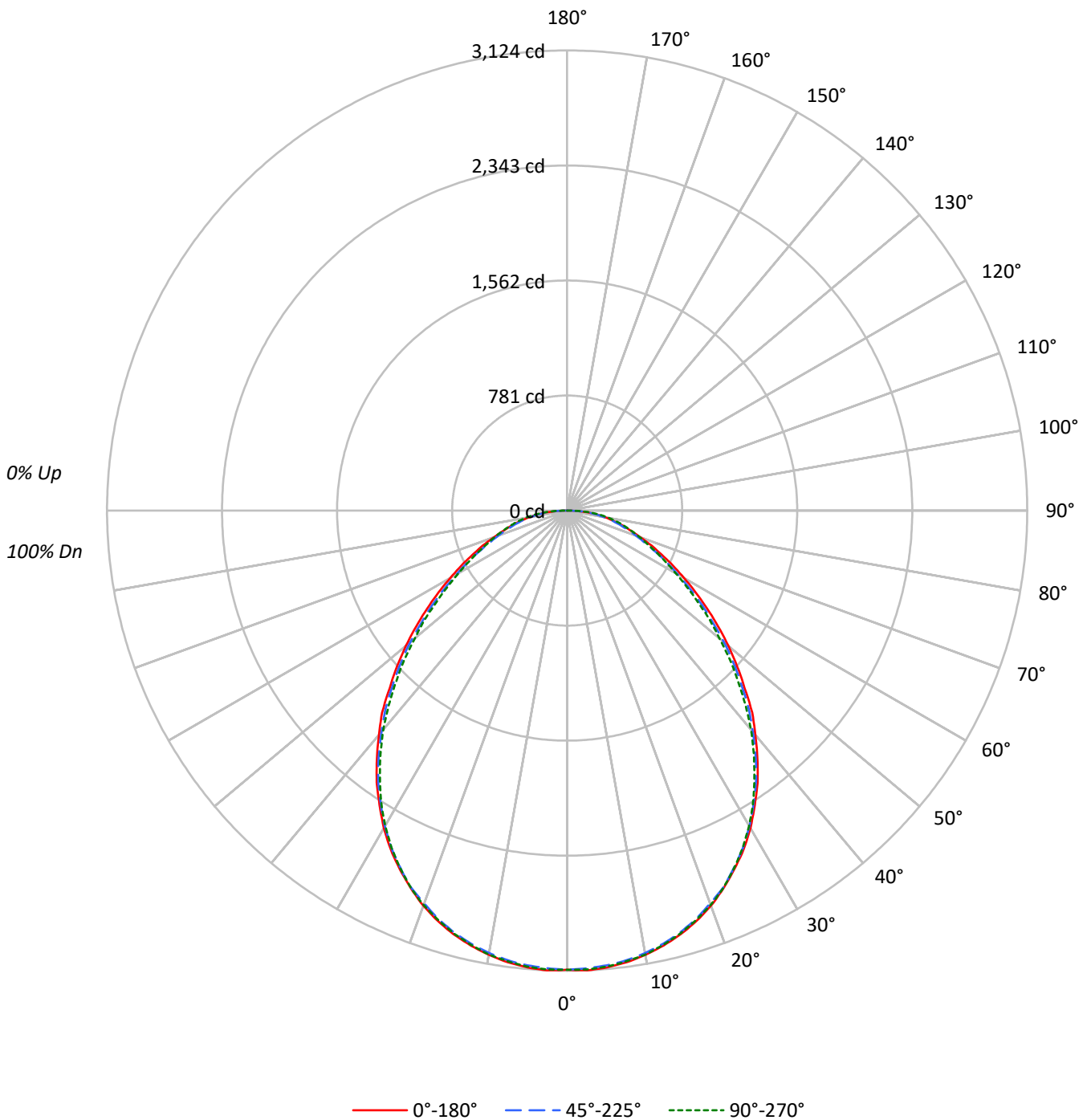
Input Watts (W): 70.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4775	4775	4775
5°	4787	4764	4778
10°	4763	4742	4760
15°	4723	4702	4712
20°	4654	4626	4644
25°	4540	4525	4529
30°	4402	4376	4368
35°	4215	4182	4144
40°	3973	3922	3883
45°	3692	3626	3558
50°	3403	3314	3216
55°	3094	2986	2893
60°	2803	2655	2607
65°	2563	2393	2409
70°	2358	2222	2328
75°	2292	2172	2372
80°	2297	2238	2525
85°	2525	2386	2782



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.6	4.0
10°-20°	836.0	11.5
20°-30°	1231.9	16.9
30°-40°	1393.1	19.1
40°-50°	1292.2	17.7
50°-60°	1003.9	13.8
60°-70°	673.2	9.2
70°-80°	403.5	5.5
80°-90°	153.5	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°	2362.5	32.4
0°-40°	3755.6	51.6
0°-60°	6051.8	83.1
0°-90°	7281.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7281.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3118	3118	3118	3118	3118	
5°	3113	3104	3099	3096	3108	296
15°	2979	2966	2965	2960	2972	839
25°	2687	2683	2678	2673	2680	1237
35°	2254	2245	2236	2223	2216	1405
45°	1704	1698	1674	1648	1642	1318
55°	1159	1145	1118	1090	1083	1040
65°	707	685	660	658	665	706
75°	387	374	367	385	401	409
85°	144	135	136	160	158	151
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3117.8	3117.8	3117.8	3117.8	3117.8
2.5°	3124.5	3114.4	3110.0	3107.7	3117.8
5°	3113.3	3104.4	3098.8	3096.5	3107.7
7.5°	3093.1	3083.0	3079.6	3075.1	3086.4
10°	3062.8	3053.8	3049.3	3046.0	3060.5
12.5°	3024.6	3016.7	3012.2	3010.0	3019.0
15°	2978.6	2966.2	2965.1	2959.5	2971.9
17.5°	2921.4	2910.1	2907.8	2905.6	2913.5
20°	2855.1	2843.8	2838.2	2837.1	2849.5
22.5°	2775.3	2767.5	2769.7	2763.0	2772.0
25°	2686.7	2683.3	2677.7	2673.2	2680.0
27.5°	2594.6	2583.4	2583.4	2574.4	2581.1
30°	2489.1	2481.2	2474.5	2465.5	2470.0
32.5°	2370.1	2366.7	2356.6	2347.6	2349.8
35°	2254.5	2245.4	2236.4	2223.0	2216.3
37.5°	2121.9	2112.9	2101.7	2082.7	2080.4
40°	1987.2	1979.4	1961.4	1941.2	1942.3
42.5°	1859.2	1846.9	1824.4	1797.5	1791.9
45°	1704.3	1697.5	1674.0	1648.2	1642.5
47.5°	1566.2	1561.7	1532.6	1505.6	1498.8
50°	1428.1	1415.8	1391.0	1364.1	1349.5
52.5°	1292.3	1276.5	1245.1	1227.1	1220.4
55°	1158.6	1145.2	1118.3	1090.1	1083.4
57.5°	1034.0	1019.4	986.8	966.7	963.3
60°	915.0	901.5	866.7	852.1	851.0
62.5°	809.5	787.0	763.5	753.4	754.5
65°	707.3	684.8	660.2	657.9	664.6
67.5°	617.5	593.9	569.2	578.2	585.0
70°	526.6	509.7	496.2	510.8	519.9
72.5°	449.1	439.0	426.6	446.8	458.1
75°	387.3	373.8	367.1	385.1	400.8
77.5°	321.1	309.9	309.9	329.0	345.8
80°	260.4	252.6	253.7	276.2	286.3
82.5°	204.3	193.1	194.2	222.3	229.1
85°	143.7	134.7	135.8	159.5	158.3
87.5°	75.2	71.8	75.2	92.1	87.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)