

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: P231790

Luminaire Tested: **24GR-LD5-150-F1-UNV-L940-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P231790
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-LD5-150-F1-UNV-L940-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13192.4 lumens
Efficiency: N/A
Efficacy: 109.7 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

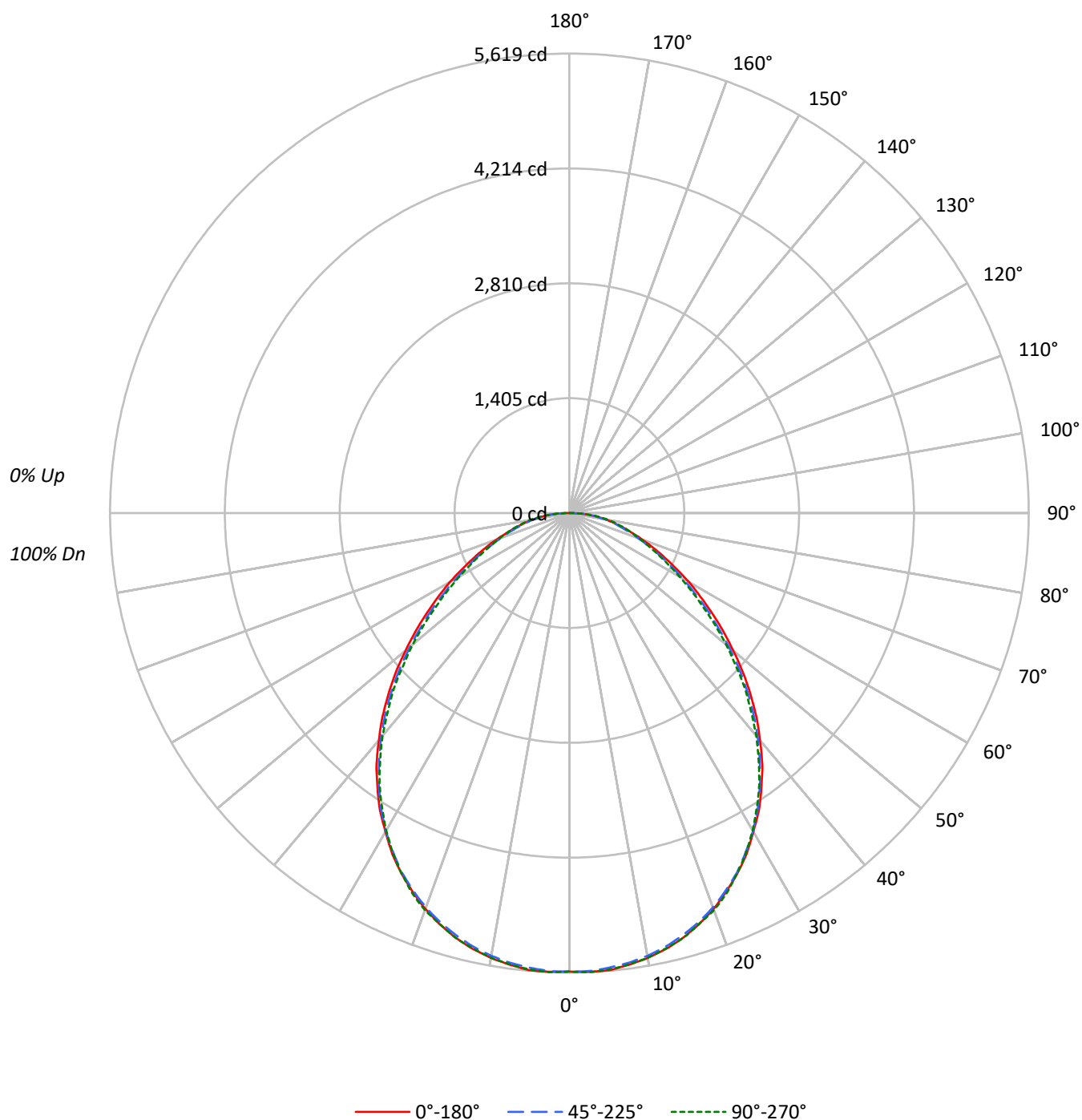
Input Watts (W): 120.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	105	101	97	107	103	99	96		98	95	93		95	92	90		91	89	87
2	100	92	86	81	98	91	85	80		87	82	78		84	80	76		81	77	74
3	92	82	74	68	90	80	73	68		78	71	66		75	70	65		72	68	64
4	85	73	65	59	82	72	64	58		70	63	57		67	61	57		65	60	56
5	78	66	57	51	76	65	57	51		63	56	50		61	55	50		59	54	49
6	72	60	51	45	71	59	51	45		57	50	44		55	49	44		54	48	44
7	67	54	46	40	66	54	46	40		52	45	40		51	44	39		49	44	39
8	63	50	42	36	61	49	41	36		48	41	36		47	40	36		46	40	35
9	59	46	38	33	58	45	38	33		44	37	32		43	37	32		42	36	32
10	55	43	35	30	54	42	35	30		41	34	30		40	34	29		39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8588	8588	8588
5°	8627	8579	8614
10°	8592	8550	8588
15°	8524	8478	8531
20°	8399	8366	8426
25°	8217	8196	8214
30°	7957	7943	7925
35°	7657	7599	7568
40°	7248	7166	7108
45°	6780	6655	6575
50°	6230	6063	5960
55°	5683	5473	5314
60°	5161	4883	4756
65°	4648	4387	4312
70°	4257	3980	4091
75°	3978	3795	4076
80°	3947	3874	4256
85°	4023	4058	4638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.6	4.0
10°-20°	1508.6	11.4
20°-30°	2228.6	16.9
30°-40°	2533.8	19.2
40°-50°	2366.2	17.9
50°-60°	1840.1	13.9
60°-70°	1221.0	9.3
70°-80°	706.6	5.4
80°-90°	256.9	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°	4267.9	32.4
0°-40°	6801.6	51.6
0°-60°	11007.9	83.4
0°-90°	13192.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13192.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5607	5607	5607	5607	5607	
5°	5611	5582	5580	5590	5603	532
15°	5376	5349	5347	5345	5380	1515
25°	4862	4842	4850	4840	4860	2236
35°	4095	4075	4064	4036	4048	2557
45°	3130	3106	3072	3033	3035	2412
55°	2128	2097	2050	1996	1990	1908
65°	1283	1243	1210	1188	1190	1282
75°	672	656	641	670	689	719
85°	229	225	231	262	264	249
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5606.8	5606.8	5606.8	5606.8	5606.8
2.5°	5615.0	5598.5	5606.8	5600.6	5619.2
5°	5610.9	5582.0	5579.9	5590.3	5602.6
7.5°	5571.7	5540.8	5547.0	5547.0	5567.6
10°	5524.3	5493.3	5497.5	5499.5	5522.2
12.5°	5460.4	5429.4	5431.5	5429.4	5452.1
15°	5375.8	5349.0	5347.0	5344.9	5379.9
17.5°	5272.7	5235.6	5248.0	5250.0	5268.6
20°	5153.1	5124.2	5132.5	5130.4	5169.6
22.5°	5010.8	4990.2	4996.4	4992.3	5029.4
25°	4862.4	4841.7	4850.0	4839.6	4860.3
27.5°	4695.3	4680.9	4672.6	4666.4	4680.9
30°	4499.4	4491.2	4491.2	4464.3	4480.9
32.5°	4313.8	4287.0	4287.0	4276.7	4266.5
35°	4095.2	4074.7	4064.4	4035.5	4047.8
37.5°	3876.7	3829.2	3825.1	3802.5	3802.5
40°	3625.2	3598.3	3583.9	3559.1	3555.0
42.5°	3385.9	3359.1	3334.4	3293.1	3284.9
45°	3130.2	3105.5	3072.5	3033.3	3035.4
47.5°	2876.6	2841.5	2810.6	2763.2	2757.0
50°	2614.7	2590.0	2544.6	2503.4	2501.3
52.5°	2369.3	2330.2	2288.9	2239.4	2239.4
55°	2128.1	2097.1	2049.7	1996.1	1989.9
57.5°	1897.1	1868.3	1814.6	1775.5	1765.2
60°	1684.7	1643.5	1594.0	1561.0	1552.7
62.5°	1472.3	1435.2	1398.1	1365.1	1363.0
65°	1282.6	1243.4	1210.4	1187.7	1189.8
67.5°	1111.5	1078.4	1041.4	1035.2	1037.2
70°	950.6	915.6	888.7	903.2	913.5
72.5°	798.0	779.5	760.9	781.5	795.9
75°	672.3	655.8	641.3	670.2	688.8
77.5°	556.8	544.4	542.3	567.1	583.6
80°	447.5	433.0	439.2	468.1	482.5
82.5°	340.2	329.9	332.0	367.0	377.4
85°	228.9	224.8	230.9	261.9	263.9
87.5°	121.7	121.7	125.8	144.3	138.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)