

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: P293024

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7538.0 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

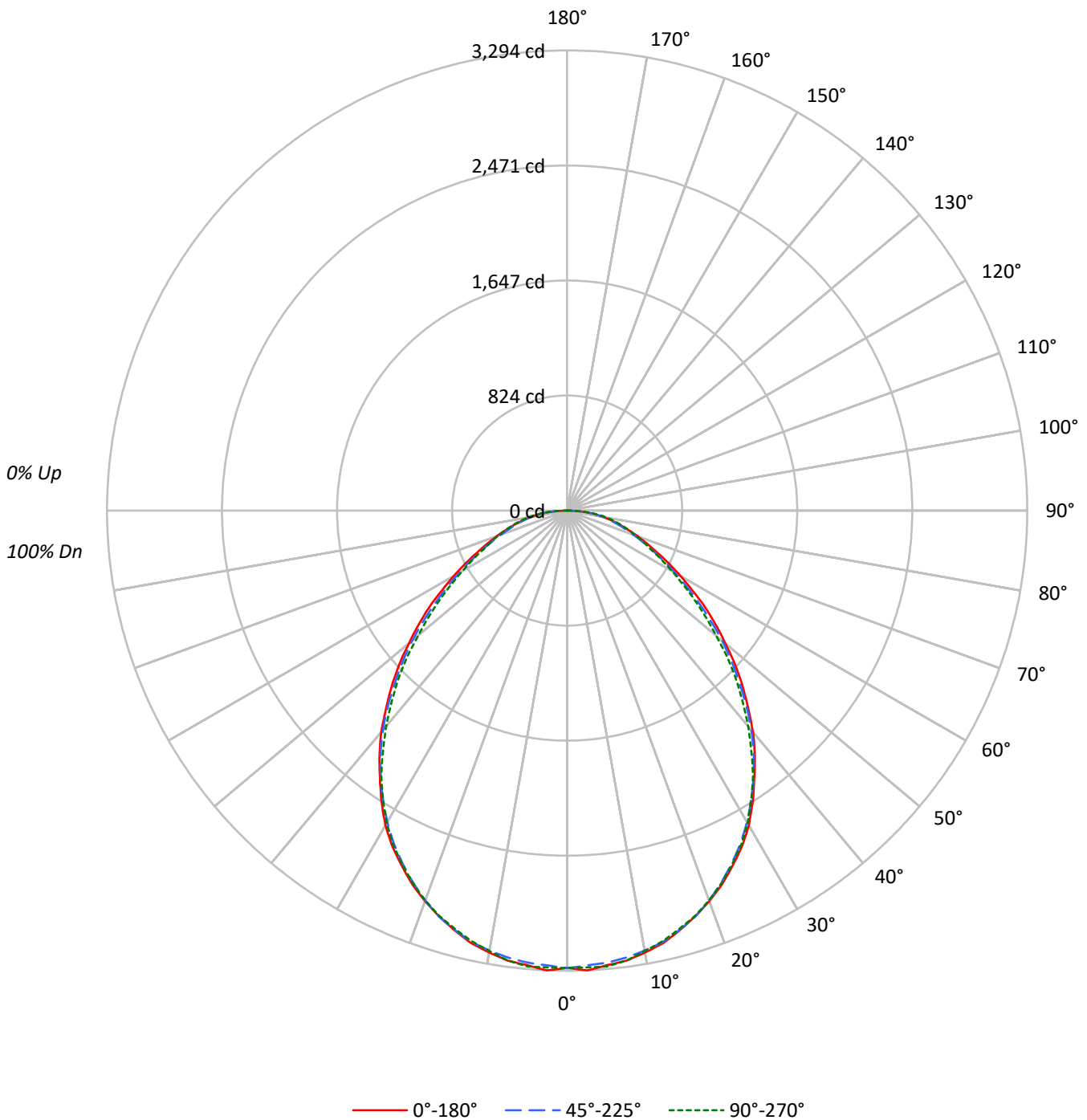
Input Watts (W): 54.033
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4406	4406	4406
5°	4412	4387	4425
10°	4389	4369	4374
15°	4334	4329	4318
20°	4261	4252	4252
25°	4162	4139	4148
30°	4041	4000	4012
35°	3838	3820	3810
40°	3635	3602	3539
45°	3378	3319	3254
50°	3095	3027	2913
55°	2826	2699	2608
60°	2519	2397	2335
65°	2267	2148	2118
70°	2104	1976	2055
75°	2012	1923	2085
80°	2011	2011	2228
85°	2089	2112	2353



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.2	4.1
10°-20°	875.1	11.6
20°-30°	1284.3	17.0
30°-40°	1452.0	19.3
40°-50°	1341.9	17.8
50°-60°	1033.9	13.7
60°-70°	684.6	9.1
70°-80°	407.5	5.4
80°-90°	149.3	2.0
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°	2468.6	32.7
0°-40°	3920.6	52.0
0°-60°	6296.5	83.5
0°-90°	7538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3274	3274	3274	3274	3274	
5°	3267	3267	3248	3250	3276	310
15°	3111	3105	3108	3106	3100	877
25°	2803	2796	2788	2785	2794	1291
35°	2337	2334	2326	2315	2320	1462
45°	1776	1763	1744	1713	1710	1368
55°	1205	1180	1150	1119	1112	1075
65°	712	701	675	668	665	714
75°	387	378	370	387	401	413
85°	135	128	137	151	152	144
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3274.3	3274.3	3274.3	3274.3	3274.3
2.5°	3294.5	3277.4	3258.8	3258.8	3272.8
5°	3266.6	3266.6	3247.9	3249.5	3275.9
7.5°	3249.5	3240.1	3227.7	3227.7	3247.9
10°	3212.1	3204.4	3198.1	3195.0	3201.3
12.5°	3171.7	3159.3	3163.9	3159.3	3157.7
15°	3111.1	3104.9	3108.0	3106.4	3100.2
17.5°	3045.8	3042.7	3048.9	3038.0	3042.7
20°	2975.8	2966.5	2969.6	2963.4	2969.6
22.5°	2896.5	2890.3	2882.5	2874.8	2887.2
25°	2803.2	2795.5	2787.7	2784.6	2793.9
27.5°	2709.9	2697.5	2686.6	2683.5	2697.5
30°	2601.1	2587.1	2574.7	2571.6	2582.5
32.5°	2472.1	2469.0	2453.4	2447.2	2451.9
35°	2336.8	2333.7	2325.9	2315.0	2319.7
37.5°	2207.8	2206.2	2195.3	2176.7	2164.2
40°	2069.4	2058.5	2050.7	2024.3	2015.0
42.5°	1917.0	1913.9	1899.9	1870.4	1859.5
45°	1775.5	1763.1	1744.4	1713.3	1710.2
47.5°	1629.4	1612.3	1595.2	1556.3	1554.8
50°	1478.6	1466.1	1445.9	1407.1	1391.5
52.5°	1338.6	1321.5	1293.6	1256.2	1248.5
55°	1204.9	1180.1	1150.5	1119.4	1111.7
57.5°	1061.9	1051.0	1015.3	990.4	981.1
60°	936.0	926.6	890.9	867.6	867.6
62.5°	822.5	808.5	777.4	761.8	761.8
65°	712.1	701.2	674.8	668.5	665.4
67.5°	617.2	603.2	584.6	583.0	590.8
70°	534.8	517.7	502.2	517.7	522.4
72.5°	457.1	446.2	432.2	452.4	461.8
75°	387.1	377.8	370.0	387.1	401.1
77.5°	323.4	314.1	314.1	332.7	345.2
80°	259.6	253.4	259.6	275.2	287.6
82.5°	199.0	194.3	202.1	217.7	225.4
85°	135.3	127.5	136.8	150.8	152.4
87.5°	63.7	62.2	68.4	77.7	76.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)