

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: P293029

Luminaire Tested: **24GR-LD5-85-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293029
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-LD5-85-F1-UNV-L82765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8274.0 lumens
Efficiency: N/A
Efficacy: 131.0 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

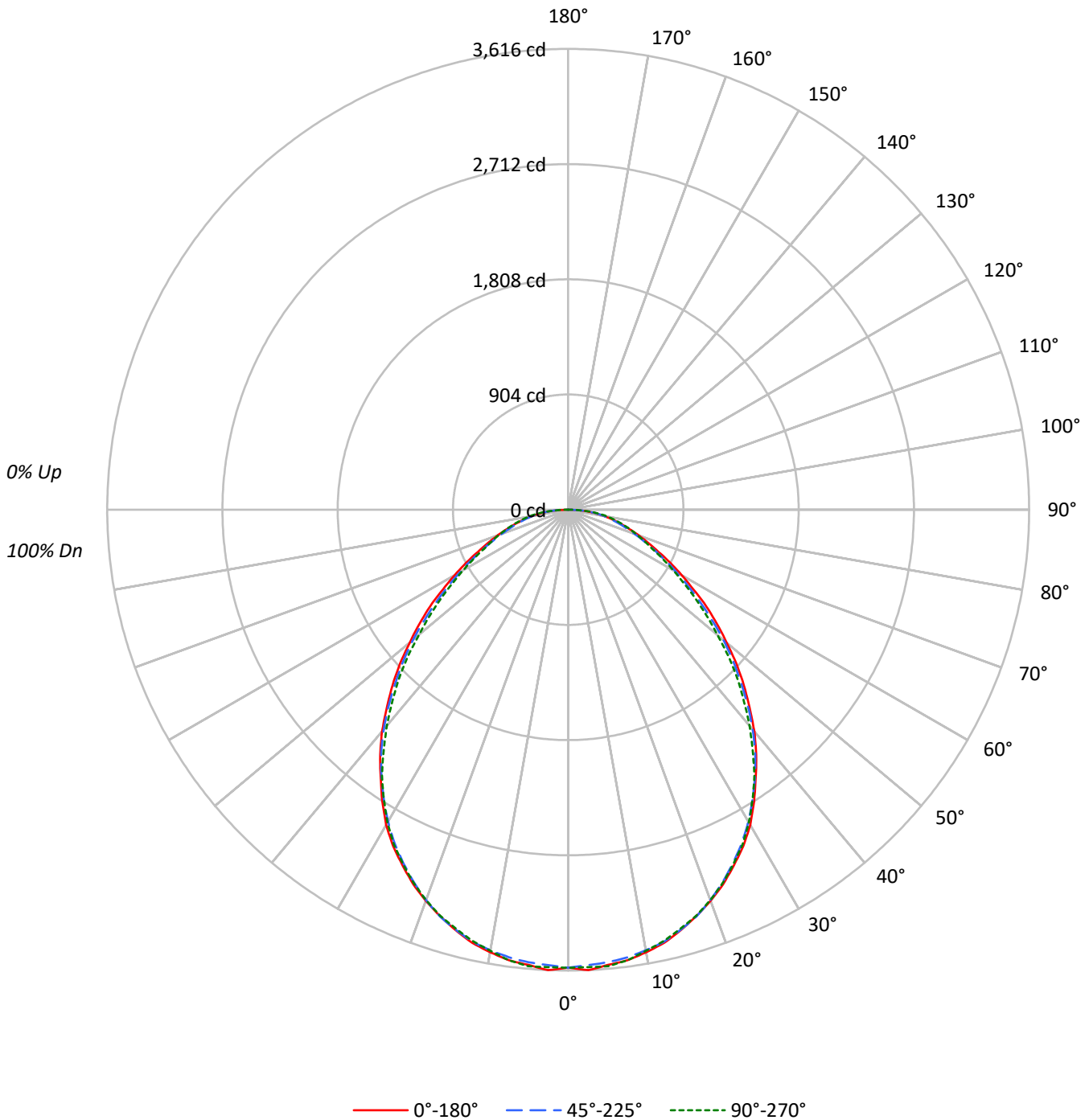
Input Watts (W): 63.147
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4836	4836	4836
5°	4843	4815	4856
10°	4817	4796	4801
15°	4757	4752	4740
20°	4677	4667	4667
25°	4568	4543	4553
30°	4436	4391	4404
35°	4213	4193	4182
40°	3990	3954	3885
45°	3708	3643	3572
50°	3397	3322	3197
55°	3103	2962	2862
60°	2765	2632	2563
65°	2488	2358	2325
70°	2310	2168	2256
75°	2209	2112	2289
80°	2208	2208	2446
85°	2293	2319	2581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.4	4.1
10°-20°	960.5	11.6
20°-30°	1409.7	17.0
30°-40°	1593.8	19.3
40°-50°	1473.0	17.8
50°-60°	1134.9	13.7
60°-70°	751.5	9.1
70°-80°	447.4	5.4
80°-90°	163.9	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°	2709.7	32.7
0°-40°	4303.4	52.0
0°-60°	6911.3	83.5
0°-90°	8274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3594	3594	3594	3594	3594	
5°	3586	3586	3565	3567	3596	341
15°	3415	3408	3411	3410	3403	962
25°	3077	3068	3060	3056	3067	1417
35°	2565	2562	2553	2541	2546	1605
45°	1949	1935	1915	1881	1877	1501
55°	1323	1295	1263	1229	1220	1180
65°	782	770	741	734	730	784
75°	425	415	406	425	440	453
85°	148	140	150	166	167	158
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3594.0	3594.0	3594.0	3594.0	3594.0
2.5°	3616.2	3597.4	3577.0	3577.0	3592.3
5°	3585.5	3585.5	3565.0	3566.7	3595.7
7.5°	3566.7	3556.5	3542.8	3542.8	3565.0
10°	3525.8	3517.2	3510.4	3507.0	3513.8
12.5°	3481.4	3467.7	3472.9	3467.7	3466.0
15°	3414.8	3408.0	3411.4	3409.7	3402.9
17.5°	3343.2	3339.8	3346.6	3334.6	3339.8
20°	3266.4	3256.1	3259.5	3252.7	3259.5
22.5°	3179.3	3172.5	3164.0	3155.4	3169.1
25°	3076.9	3068.4	3059.9	3056.5	3066.7
27.5°	2974.5	2960.9	2948.9	2945.5	2960.9
30°	2855.1	2839.7	2826.1	2822.7	2834.6
32.5°	2713.4	2710.0	2693.0	2686.1	2691.3
35°	2565.0	2561.6	2553.0	2541.1	2546.2
37.5°	2423.3	2421.6	2409.7	2389.2	2375.5
40°	2271.4	2259.5	2251.0	2221.9	2211.7
42.5°	2104.2	2100.8	2085.4	2053.0	2041.1
45°	1948.9	1935.2	1914.8	1880.6	1877.2
47.5°	1788.5	1769.7	1750.9	1708.3	1706.6
50°	1622.9	1609.3	1587.1	1544.4	1527.4
52.5°	1469.4	1450.6	1419.9	1378.9	1370.4
55°	1322.6	1295.3	1262.9	1228.7	1220.2
57.5°	1165.6	1153.6	1114.4	1087.1	1076.8
60°	1027.4	1017.1	977.9	952.3	952.3
62.5°	902.8	887.4	853.3	836.2	836.2
65°	781.6	769.7	740.6	733.8	730.4
67.5°	677.5	662.1	641.7	640.0	648.5
70°	587.1	568.3	551.2	568.3	573.4
72.5°	501.7	489.8	474.4	496.6	506.9
75°	424.9	414.7	406.2	424.9	440.3
77.5°	355.0	344.7	344.7	365.2	378.9
80°	285.0	278.2	285.0	302.1	315.7
82.5°	218.4	213.3	221.9	238.9	247.5
85°	148.5	139.9	150.2	165.5	167.2
87.5°	70.0	68.3	75.1	85.3	83.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)