

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: P293078

Luminaire Tested: **24GR-LD5-85-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293078
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-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7742.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

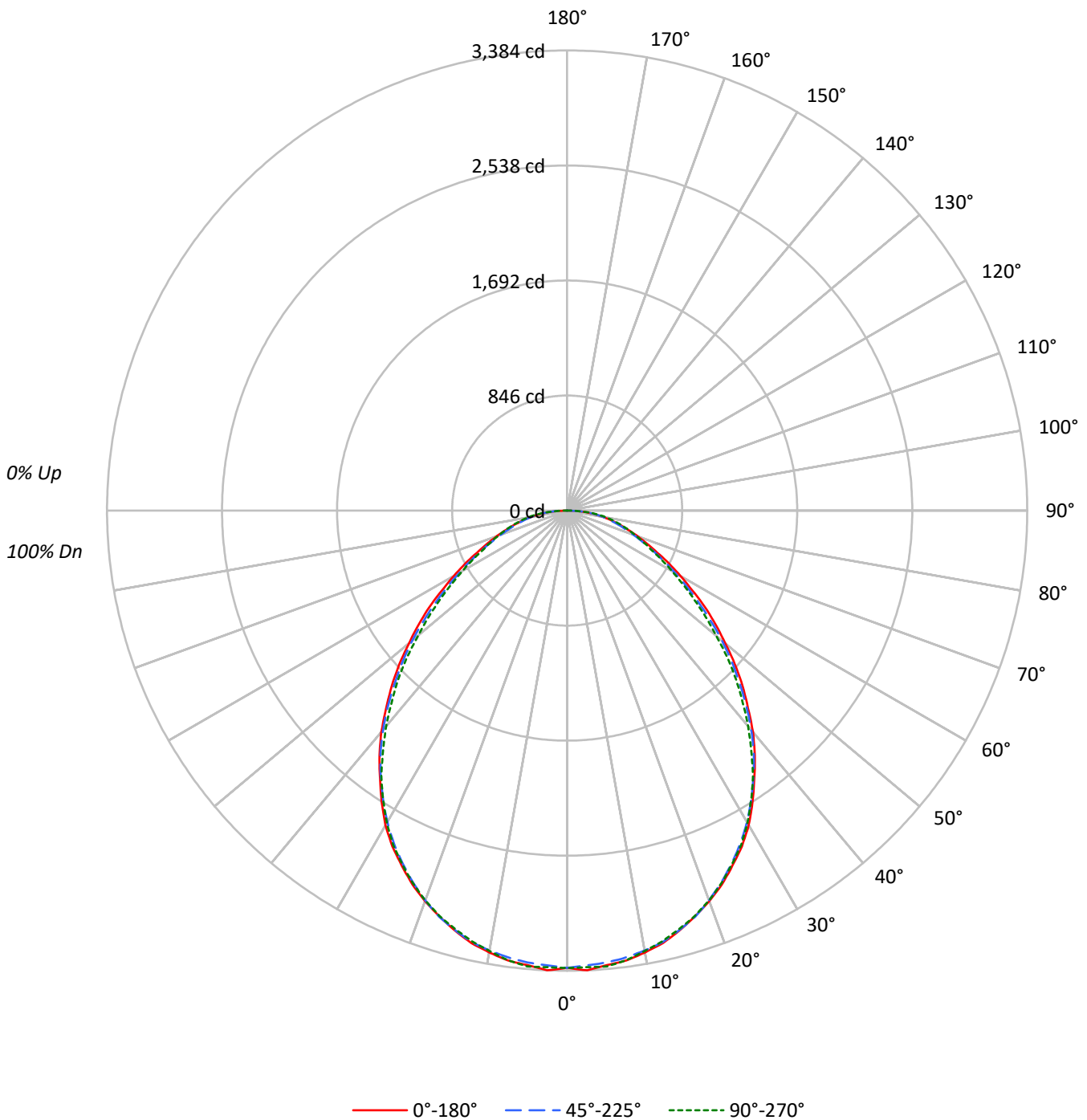
Input Watts (W): 65.023926
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4525	4525	4525
5°	4531	4505	4544
10°	4507	4488	4492
15°	4451	4446	4435
20°	4376	4367	4367
25°	4274	4251	4260
30°	4151	4108	4121
35°	3942	3924	3913
40°	3733	3699	3635
45°	3470	3409	3342
50°	3179	3109	2992
55°	2903	2772	2678
60°	2587	2462	2398
65°	2329	2206	2176
70°	2161	2029	2111
75°	2067	1975	2142
80°	2066	2066	2289
85°	2144	2169	2416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.6	4.1
10°-20°	898.8	11.6
20°-30°	1319.1	17.0
30°-40°	1491.3	19.3
40°-50°	1378.3	17.8
50°-60°	1061.9	13.7
60°-70°	703.2	9.1
70°-80°	418.6	5.4
80°-90°	153.3	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°	2535.4	32.7
0°-40°	4026.7	52.0
0°-60°	6466.9	83.5
0°-90°	7742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3363	3363	3363	3363	3363	
5°	3355	3355	3336	3337	3364	319
15°	3195	3189	3192	3190	3184	901
25°	2879	2871	2863	2860	2870	1326
35°	2400	2397	2389	2378	2382	1502
45°	1824	1811	1792	1760	1756	1405
55°	1238	1212	1182	1150	1142	1104
65°	731	720	693	687	683	733
75°	398	388	380	398	412	424
85°	139	131	140	155	156	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3362.9	3362.9	3362.9	3362.9	3362.9
2.5°	3383.7	3366.1	3347.0	3347.0	3361.3
5°	3355.0	3355.0	3335.8	3337.4	3364.5
7.5°	3337.4	3327.8	3315.0	3315.0	3335.8
10°	3299.1	3291.1	3284.7	3281.5	3287.9
12.5°	3257.5	3244.8	3249.6	3244.8	3243.2
15°	3195.3	3188.9	3192.1	3190.5	3184.1
17.5°	3128.2	3125.0	3131.4	3120.2	3125.0
20°	3056.3	3046.8	3050.0	3043.6	3050.0
22.5°	2974.9	2968.5	2960.5	2952.6	2965.3
25°	2879.1	2871.1	2863.1	2859.9	2869.5
27.5°	2783.3	2770.5	2759.3	2756.1	2770.5
30°	2671.5	2657.1	2644.4	2641.2	2652.3
32.5°	2539.0	2535.8	2519.8	2513.4	2518.2
35°	2400.0	2396.9	2388.9	2377.7	2382.5
37.5°	2267.5	2265.9	2254.7	2235.6	2222.8
40°	2125.4	2114.2	2106.2	2079.1	2069.5
42.5°	1968.9	1965.7	1951.3	1921.0	1909.8
45°	1823.6	1810.8	1791.7	1759.7	1756.5
47.5°	1673.5	1655.9	1638.4	1598.4	1596.8
50°	1518.6	1505.8	1485.1	1445.1	1429.2
52.5°	1374.9	1357.3	1328.6	1290.2	1282.3
55°	1237.5	1212.0	1181.7	1149.7	1141.7
57.5°	1090.6	1079.5	1042.7	1017.2	1007.6
60°	961.3	951.7	915.0	891.0	891.0
62.5°	844.7	830.4	798.4	782.5	782.5
65°	731.4	720.2	693.0	686.6	683.4
67.5°	633.9	619.6	600.4	598.8	606.8
70°	549.3	531.7	515.8	531.7	536.5
72.5°	469.5	458.3	443.9	464.7	474.3
75°	397.6	388.0	380.0	397.6	412.0
77.5°	332.1	322.6	322.6	341.7	354.5
80°	266.7	260.3	266.7	282.6	295.4
82.5°	204.4	199.6	207.6	223.6	231.5
85°	138.9	130.9	140.5	154.9	156.5
87.5°	65.5	63.9	70.3	79.8	78.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)