

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: P294156

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-A19/156-UNV-L92765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6505.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

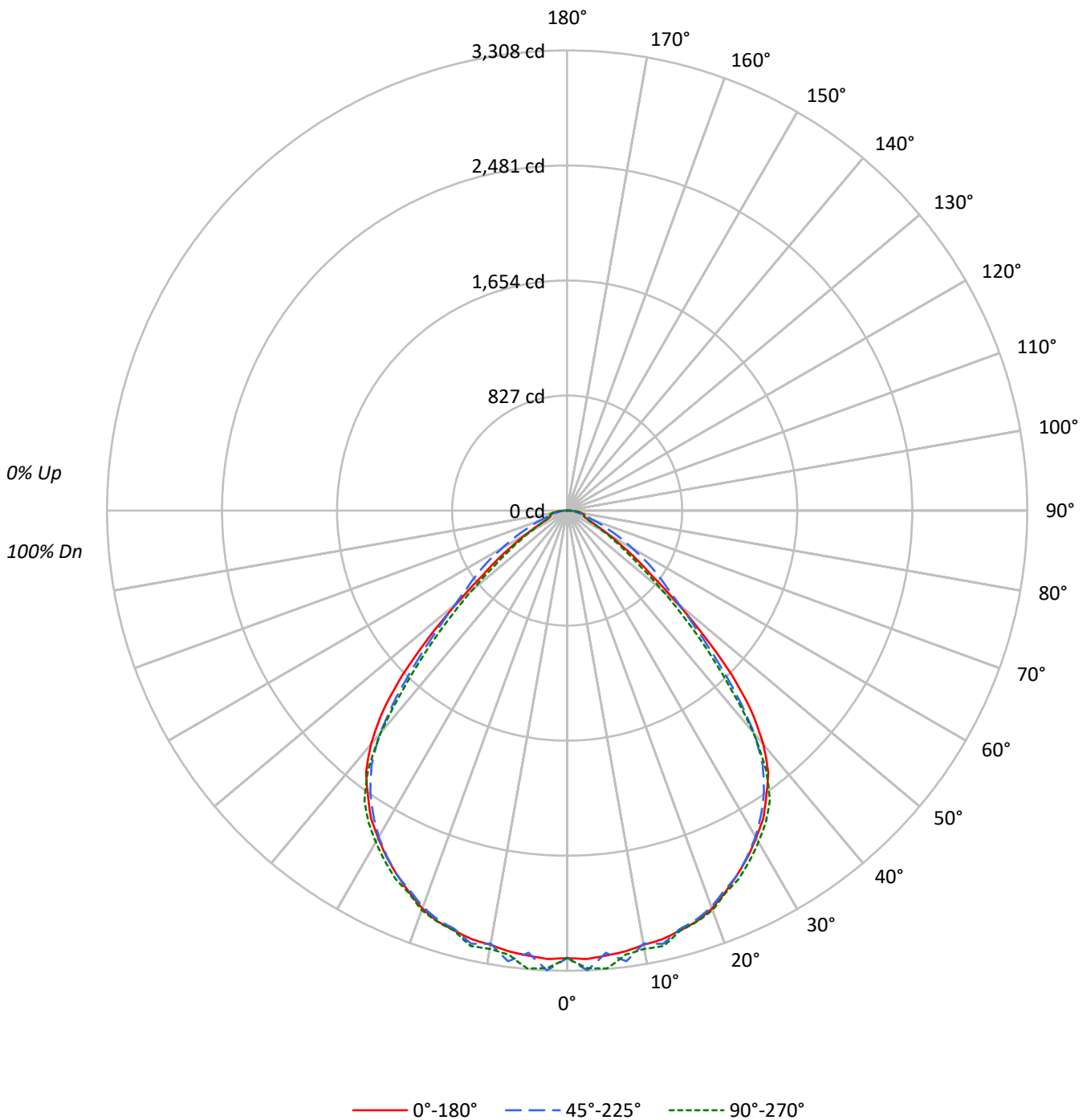
Input Watts (W): 53.754  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53				53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48				48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43				43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4328	4328	4328
5°	4337	4309	4461
10°	4330	4317	4370
15°	4355	4341	4358
20°	4359	4341	4377
25°	4291	4294	4336
30°	4220	4207	4275
35°	4101	4051	4173
40°	3851	3679	3659
45°	3192	2888	2739
50°	2147	2191	1872
55°	1416	1838	1228
60°	908	1450	841
65°	585	1108	569
70°	518	793	518
75°	668	630	673
80°	817	542	858
85°	951	806	1000



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	308.0	4.7
10°-20°	884.3	13.6
20°-30°	1331.3	20.5
30°-40°	1543.1	23.7
40°-50°	1205.4	18.5
50°-60°	643.6	9.9
60°-70°	331.0	5.1
70°-80°	187.2	2.9
80°-90°	71.1	1.1
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°	2523.6	38.8
0°-40°	4066.7	62.5
0°-60°	5915.7	90.9
0°-90°	6505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6505.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3216	3216	3216	3216	3216	
5°	3211	3301	3190	3278	3303	305
15°	3127	3146	3116	3136	3129	883
25°	2891	2881	2893	2888	2921	1332
35°	2497	2485	2466	2516	2541	1557
45°	1678	1679	1518	1504	1440	1264
55°	604	764	784	706	523	557
65°	184	383	348	382	179	202
75°	128	241	121	226	130	130
85°	62	80	52	80	65	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3216.5	3216.5	3216.5	3216.5	3216.5
2.5°	3227.0	3285.5	3308.5	3280.3	3292.8
5°	3211.3	3301.2	3190.4	3278.2	3303.2
7.5°	3196.7	3187.3	3267.7	3184.2	3219.7
10°	3169.5	3175.8	3160.1	3219.7	3198.8
12.5°	3157.0	3193.6	3190.4	3160.1	3206.1
15°	3126.7	3146.5	3116.2	3136.1	3128.8
17.5°	3096.4	3087.0	3083.9	3092.2	3099.5
20°	3044.2	3012.8	3031.6	3033.7	3056.7
22.5°	2968.9	2950.1	2954.3	2973.1	2975.2
25°	2890.6	2881.2	2892.7	2888.5	2920.9
27.5°	2809.1	2796.6	2803.9	2819.6	2839.4
30°	2716.1	2713.0	2707.8	2721.4	2751.7
32.5°	2624.2	2599.1	2595.0	2623.2	2657.6
35°	2496.8	2485.3	2466.5	2515.6	2540.6
37.5°	2375.6	2340.1	2309.8	2339.0	2349.5
40°	2192.8	2165.6	2094.6	2097.7	2083.1
42.5°	1968.2	1948.3	1812.5	1788.5	1747.7
45°	1677.7	1678.8	1517.9	1504.3	1439.6
47.5°	1340.3	1399.9	1259.9	1244.2	1148.1
50°	1025.9	1133.5	1046.8	1021.7	894.2
52.5°	769.9	927.7	900.5	846.2	670.7
55°	603.8	763.7	783.5	706.2	523.4
57.5°	454.4	628.9	661.3	597.6	404.3
60°	337.4	529.6	539.0	514.0	312.4
62.5°	250.7	450.3	437.7	440.9	231.9
65°	183.9	383.4	347.9	382.3	178.6
67.5°	150.4	332.2	270.6	331.2	145.2
70°	131.6	294.6	201.6	291.5	131.6
72.5°	127.4	270.6	159.8	259.1	128.5
75°	128.5	241.3	121.2	225.6	129.5
77.5°	118.0	198.5	91.9	192.2	123.3
80°	105.5	150.4	70.0	152.5	110.7
82.5°	89.8	109.7	56.4	112.8	93.0
85°	61.6	80.4	52.2	80.4	64.8
87.5°	29.3	48.1	32.4	46.0	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)