

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: P294082

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294082
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-L93050-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: 6573.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

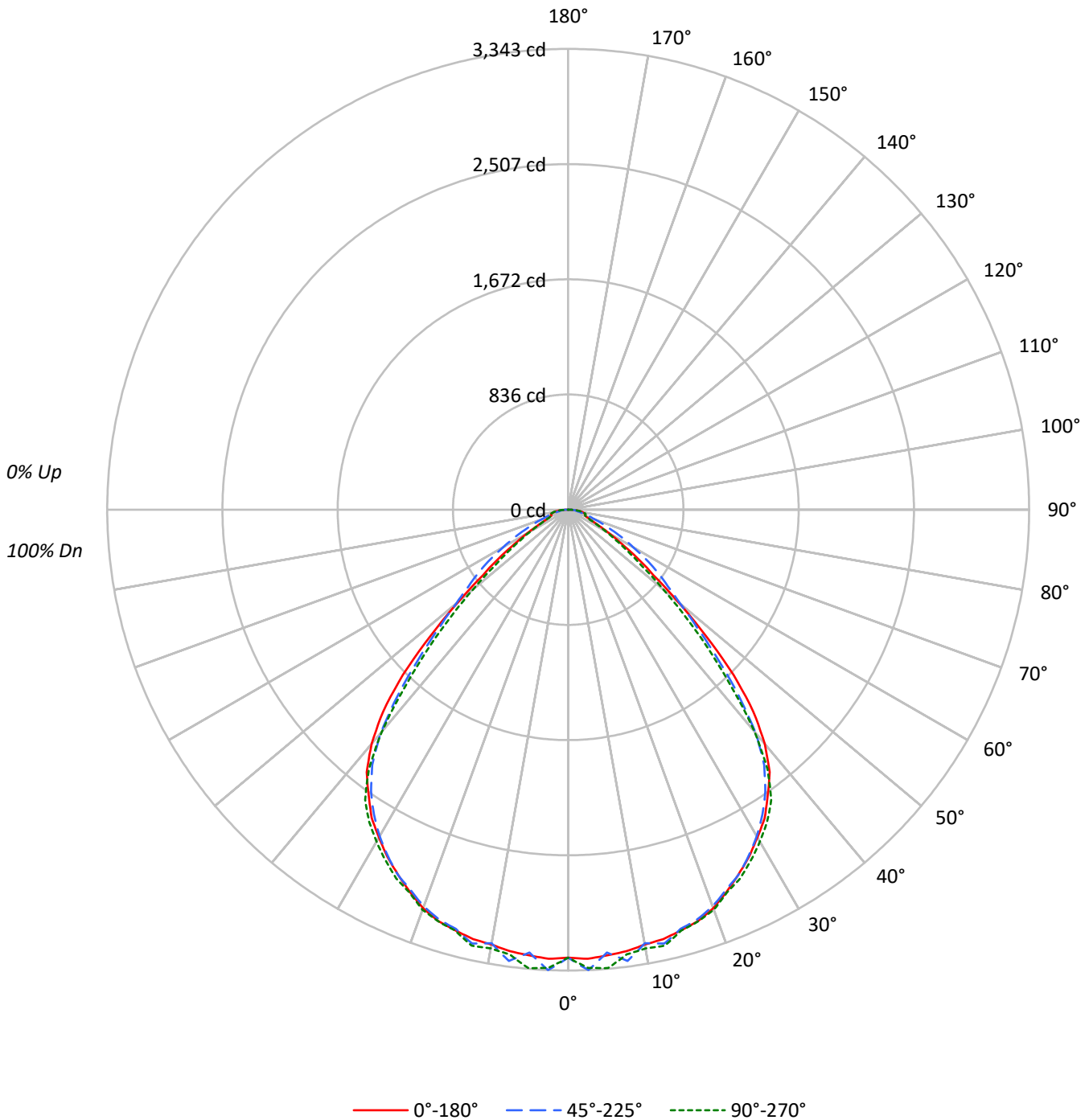
Input Watts (W): 54.75189
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294082

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P294082

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-5000K

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	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°	4373	4373	4373
5°	4383	4354	4508
10°	4376	4363	4416
15°	4401	4386	4404
20°	4404	4386	4423
25°	4336	4339	4382
30°	4264	4251	4320
35°	4144	4094	4217
40°	3892	3717	3697
45°	3226	2919	2768
50°	2170	2214	1891
55°	1431	1857	1241
60°	918	1466	849
65°	592	1119	575
70°	523	801	523
75°	675	636	680
80°	826	548	867
85°	962	815	1010



TEST NUMBER: P294082

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.2	4.7
10°-20°	893.5	13.6
20°-30°	1345.2	20.5
30°-40°	1559.2	23.7
40°-50°	1218.0	18.5
50°-60°	650.4	9.9
60°-70°	334.4	5.1
70°-80°	189.2	2.9
80°-90°	71.8	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°	2550.0	38.8
0°-40°	4109.2	62.5
0°-60°	5977.5	90.9
0°-90°	6573.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6573.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3250	3250	3250	3250	3250	
5°	3245	3336	3224	3312	3338	309
15°	3159	3179	3149	3169	3162	892
25°	2921	2911	2923	2919	2951	1346
35°	2523	2511	2492	2542	2567	1573
45°	1695	1696	1534	1520	1455	1277
55°	610	772	792	714	529	563
65°	186	387	352	386	180	204
75°	130	244	122	228	131	132
85°	62	81	53	81	65	64
90°	0	0	0	0	0	



TEST NUMBER: P294082

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3250.2	3250.2	3250.2	3250.2	3250.2
2.5°	3260.7	3319.8	3343.1	3314.6	3327.2
5°	3244.9	3335.7	3223.8	3312.4	3337.8
7.5°	3230.1	3220.6	3301.9	3217.4	3253.3
10°	3202.7	3209.0	3193.2	3253.3	3232.2
12.5°	3190.0	3226.9	3223.8	3193.2	3239.6
15°	3159.4	3179.4	3148.8	3168.9	3161.5
17.5°	3128.8	3119.3	3116.1	3124.5	3131.9
20°	3076.0	3044.3	3063.3	3065.4	3088.7
22.5°	3000.0	2981.0	2985.2	3004.2	3006.3
25°	2920.8	2911.3	2922.9	2918.7	2951.4
27.5°	2838.5	2825.8	2833.2	2849.0	2869.1
30°	2744.5	2741.4	2736.1	2749.8	2780.4
32.5°	2651.6	2626.3	2622.1	2650.6	2685.4
35°	2522.9	2511.2	2492.2	2541.9	2567.2
37.5°	2400.4	2364.5	2333.9	2363.5	2374.0
40°	2215.7	2188.2	2116.5	2119.6	2104.8
42.5°	1988.7	1968.7	1831.4	1807.2	1766.0
45°	1695.3	1696.3	1533.8	1520.0	1454.6
47.5°	1354.3	1414.5	1273.0	1257.2	1160.1
50°	1036.6	1145.3	1057.7	1032.4	903.6
52.5°	778.0	937.4	909.9	855.0	677.7
55°	610.1	771.6	791.7	713.6	528.9
57.5°	459.2	635.5	668.2	603.8	408.5
60°	341.0	535.2	544.7	519.4	315.6
62.5°	253.3	455.0	442.3	445.5	234.3
65°	185.8	387.4	351.5	386.3	180.5
67.5°	152.0	335.7	273.4	334.6	146.7
70°	133.0	297.7	203.7	294.5	133.0
72.5°	128.8	273.4	161.5	261.8	129.8
75°	129.8	243.8	122.4	228.0	130.9
77.5°	119.3	200.6	92.9	194.2	124.6
80°	106.6	152.0	70.7	154.1	111.9
82.5°	90.8	110.8	57.0	114.0	93.9
85°	62.3	81.3	52.8	81.3	65.4
87.5°	29.6	48.6	32.7	46.4	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)