

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: P294029

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294029
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-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7148.0 lumens
Efficiency: N/A
Efficacy: 133.4 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

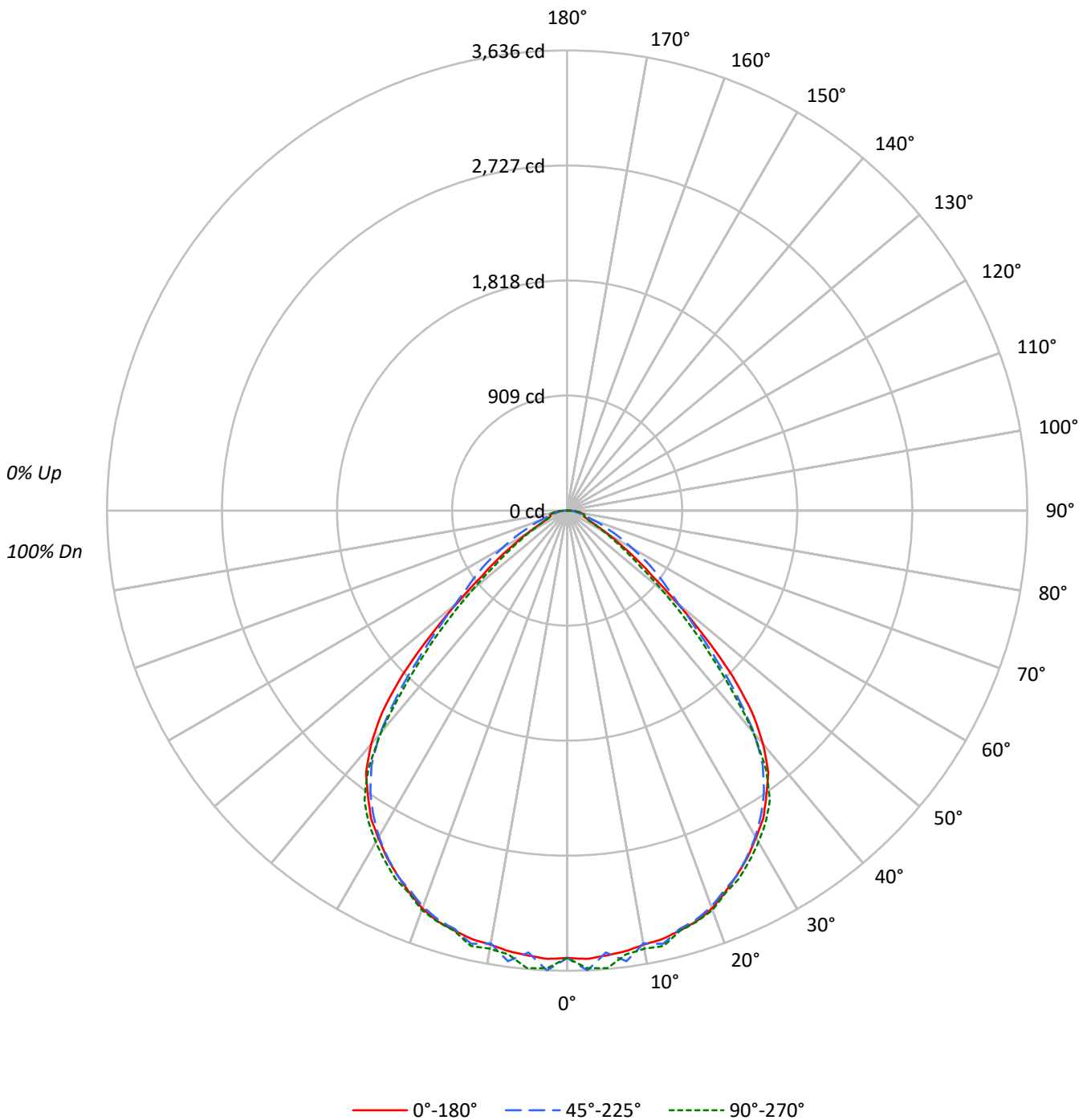
Input Watts (W): 53.568
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4756	4756	4756
5°	4766	4735	4903
10°	4758	4744	4802
15°	4786	4770	4789
20°	4790	4770	4809
25°	4715	4719	4765
30°	4637	4623	4698
35°	4506	4452	4586
40°	4232	4043	4020
45°	3508	3174	3010
50°	2360	2408	2057
55°	1556	2019	1349
60°	998	1594	924
65°	643	1217	625
70°	569	872	569
75°	734	692	740
80°	898	596	943
85°	1045	886	1099



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.4	4.7
10°-20°	971.7	13.6
20°-30°	1462.9	20.5
30°-40°	1695.6	23.7
40°-50°	1324.5	18.5
50°-60°	707.2	9.9
60°-70°	363.7	5.1
70°-80°	205.7	2.9
80°-90°	78.1	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°	2773.0	38.8
0°-40°	4468.6	62.5
0°-60°	6500.4	90.9
0°-90°	7148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3534	3534	3534	3534	3534	
5°	3529	3628	3506	3602	3630	336
15°	3436	3458	3424	3446	3438	970
25°	3176	3166	3179	3174	3210	1464
35°	2744	2731	2710	2764	2792	1710
45°	1844	1845	1668	1653	1582	1389
55°	664	839	861	776	575	612
65°	202	421	382	420	196	222
75°	141	265	133	248	142	143
85°	68	88	57	88	71	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3534.5	3534.5	3534.5	3534.5	3534.5
2.5°	3546.0	3610.2	3635.5	3604.5	3618.3
5°	3528.7	3627.5	3505.8	3602.2	3629.8
7.5°	3512.7	3502.3	3590.7	3498.9	3537.9
10°	3482.8	3489.7	3472.5	3537.9	3515.0
12.5°	3469.0	3509.2	3505.8	3472.5	3523.0
15°	3435.8	3457.6	3424.3	3446.1	3438.1
17.5°	3402.5	3392.1	3388.7	3397.9	3405.9
20°	3345.1	3310.6	3331.3	3333.6	3358.8
22.5°	3262.4	3241.8	3246.4	3267.0	3269.3
25°	3176.3	3166.0	3178.6	3174.0	3209.6
27.5°	3086.8	3073.0	3081.0	3098.3	3120.1
30°	2984.6	2981.2	2975.4	2990.4	3023.7
32.5°	2883.6	2856.1	2851.5	2882.5	2920.3
35°	2743.6	2730.9	2710.3	2764.2	2791.8
37.5°	2610.4	2571.4	2538.1	2570.2	2581.7
40°	2409.5	2379.7	2301.6	2305.0	2289.0
42.5°	2162.7	2140.9	1991.7	1965.3	1920.5
45°	1843.6	1844.7	1667.9	1653.0	1581.8
47.5°	1472.8	1538.2	1384.4	1367.2	1261.6
50°	1127.3	1245.5	1150.2	1122.7	982.6
52.5°	846.0	1019.4	989.5	929.8	737.0
55°	663.5	839.1	860.9	776.0	575.1
57.5°	499.4	691.1	726.6	656.6	444.2
60°	370.8	582.0	592.3	564.8	343.2
62.5°	275.5	494.8	481.0	484.4	254.8
65°	202.0	421.3	382.3	420.1	196.3
67.5°	165.3	365.0	297.3	363.9	159.6
70°	144.6	323.7	221.6	320.3	144.6
72.5°	140.0	297.3	175.6	284.7	141.2
75°	141.2	265.2	133.2	248.0	142.3
77.5°	129.7	218.1	101.0	211.2	135.5
80°	115.9	165.3	76.9	167.6	121.7
82.5°	98.7	120.5	62.0	124.0	102.2
85°	67.7	88.4	57.4	88.4	71.2
87.5°	32.1	52.8	35.6	50.5	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)