

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: P294020

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294020
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-LD5-64-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: 6327.0 lumens
Efficiency: N/A
Efficacy: 135.3 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

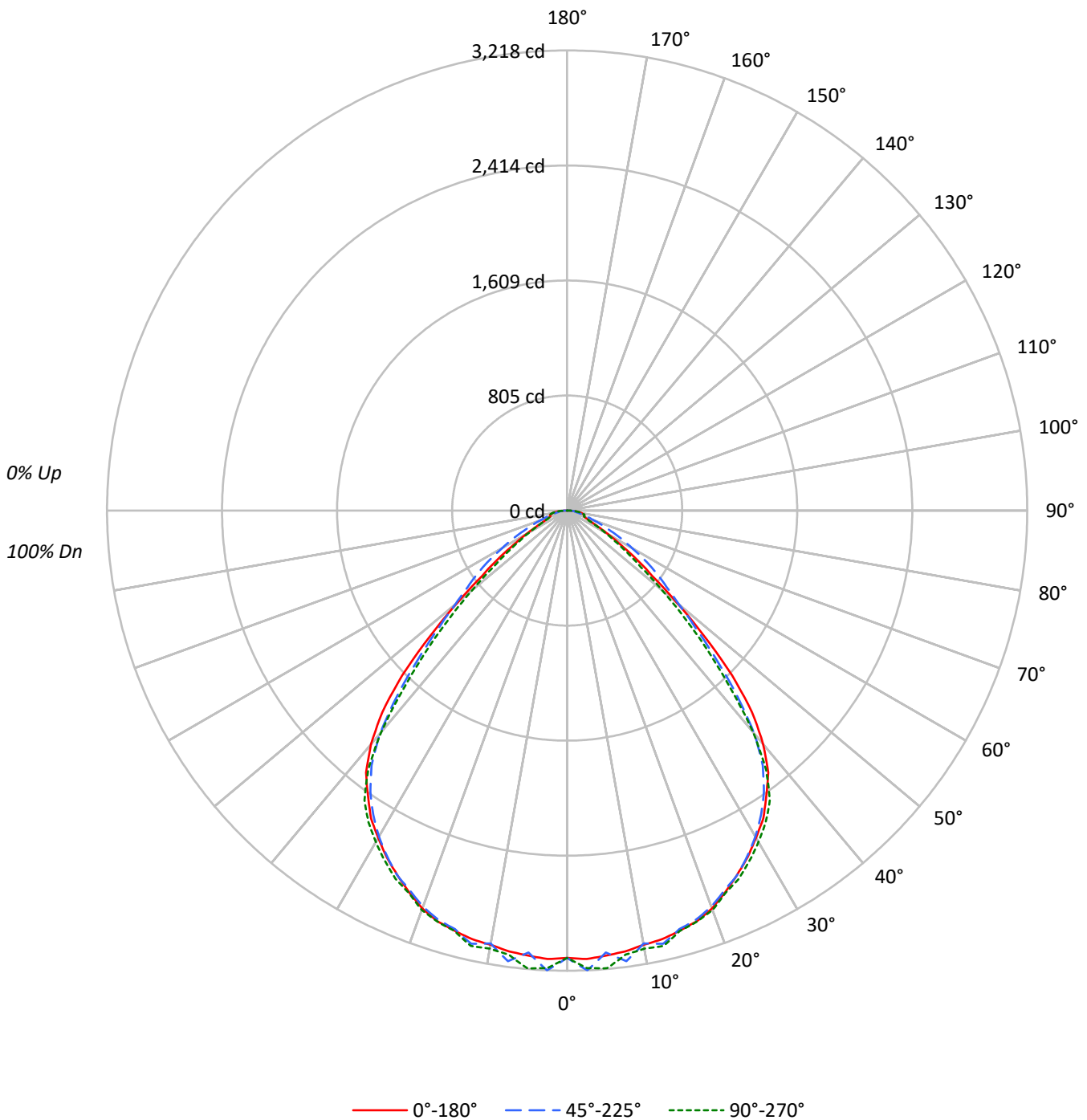
Input Watts (W): 46.779
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4209	4209	4209
5°	4219	4191	4339
10°	4212	4199	4251
15°	4236	4222	4239
20°	4240	4222	4257
25°	4174	4177	4218
30°	4104	4092	4158
35°	3989	3940	4059
40°	3746	3578	3559
45°	3105	2809	2664
50°	2089	2131	1821
55°	1378	1788	1194
60°	883	1411	818
65°	569	1077	553
70°	504	771	504
75°	650	613	655
80°	795	528	834
85°	925	784	973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.5	4.7
10°-20°	860.1	13.6
20°-30°	1294.9	20.5
30°-40°	1500.8	23.7
40°-50°	1172.4	18.5
50°-60°	626.0	9.9
60°-70°	321.9	5.1
70°-80°	182.1	2.9
80°-90°	69.2	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°	2454.5	38.8
0°-40°	3955.4	62.5
0°-60°	5753.8	90.9
0°-90°	6327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3128	3128	3128	3128	3128	
5°	3123	3211	3103	3188	3213	297
15°	3041	3060	3031	3050	3043	859
25°	2812	2802	2814	2810	2841	1296
35°	2428	2417	2399	2447	2471	1514
45°	1632	1633	1476	1463	1400	1230
55°	587	743	762	687	509	542
65°	179	373	338	372	174	197
75°	125	235	118	220	126	127
85°	60	78	51	78	63	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3128.5	3128.5	3128.5	3128.5	3128.5
2.5°	3138.7	3195.6	3217.9	3190.5	3202.7
5°	3123.4	3210.8	3103.1	3188.5	3212.9
7.5°	3109.2	3100.1	3178.3	3097.0	3131.6
10°	3082.8	3088.9	3073.7	3131.6	3111.2
12.5°	3070.6	3106.2	3103.1	3073.7	3118.4
15°	3041.1	3060.4	3031.0	3050.3	3043.2
17.5°	3011.7	3002.5	2999.5	3007.6	3014.7
20°	2960.9	2930.4	2948.7	2950.7	2973.1
22.5°	2887.7	2869.4	2873.5	2891.8	2893.8
25°	2811.5	2802.4	2813.5	2809.5	2841.0
27.5°	2732.2	2720.1	2727.2	2742.4	2761.7
30°	2641.8	2638.8	2633.7	2646.9	2676.4
32.5°	2552.4	2528.0	2524.0	2551.4	2584.9
35°	2428.4	2417.3	2399.0	2446.7	2471.1
37.5°	2310.6	2276.0	2246.6	2275.0	2285.2
40°	2132.8	2106.3	2037.2	2040.3	2026.1
42.5°	1914.3	1895.0	1762.9	1739.5	1699.9
45°	1631.8	1632.8	1476.4	1463.2	1400.2
47.5°	1303.6	1361.6	1225.4	1210.2	1116.7
50°	997.8	1102.5	1018.1	993.7	869.8
52.5°	748.9	902.3	875.9	823.0	652.3
55°	587.3	742.8	762.1	686.9	509.1
57.5°	442.0	611.7	643.2	581.2	393.2
60°	328.2	515.2	524.3	499.9	303.8
62.5°	243.9	437.9	425.7	428.8	225.6
65°	178.8	372.9	338.4	371.9	173.8
67.5°	146.3	323.1	263.2	322.1	141.2
70°	128.0	286.5	196.1	283.5	128.0
72.5°	124.0	263.2	155.5	252.0	125.0
75°	125.0	234.7	117.9	219.5	126.0
77.5°	114.8	193.1	89.4	187.0	119.9
80°	102.6	146.3	68.1	148.3	107.7
82.5°	87.4	106.7	54.9	109.7	90.4
85°	59.9	78.2	50.8	78.2	63.0
87.5°	28.5	46.7	31.5	44.7	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)