

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: P294010

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294010
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-LD5-56-A19/156-UNV-L82765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5474.0 lumens
Efficiency: N/A
Efficacy: 138.8 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

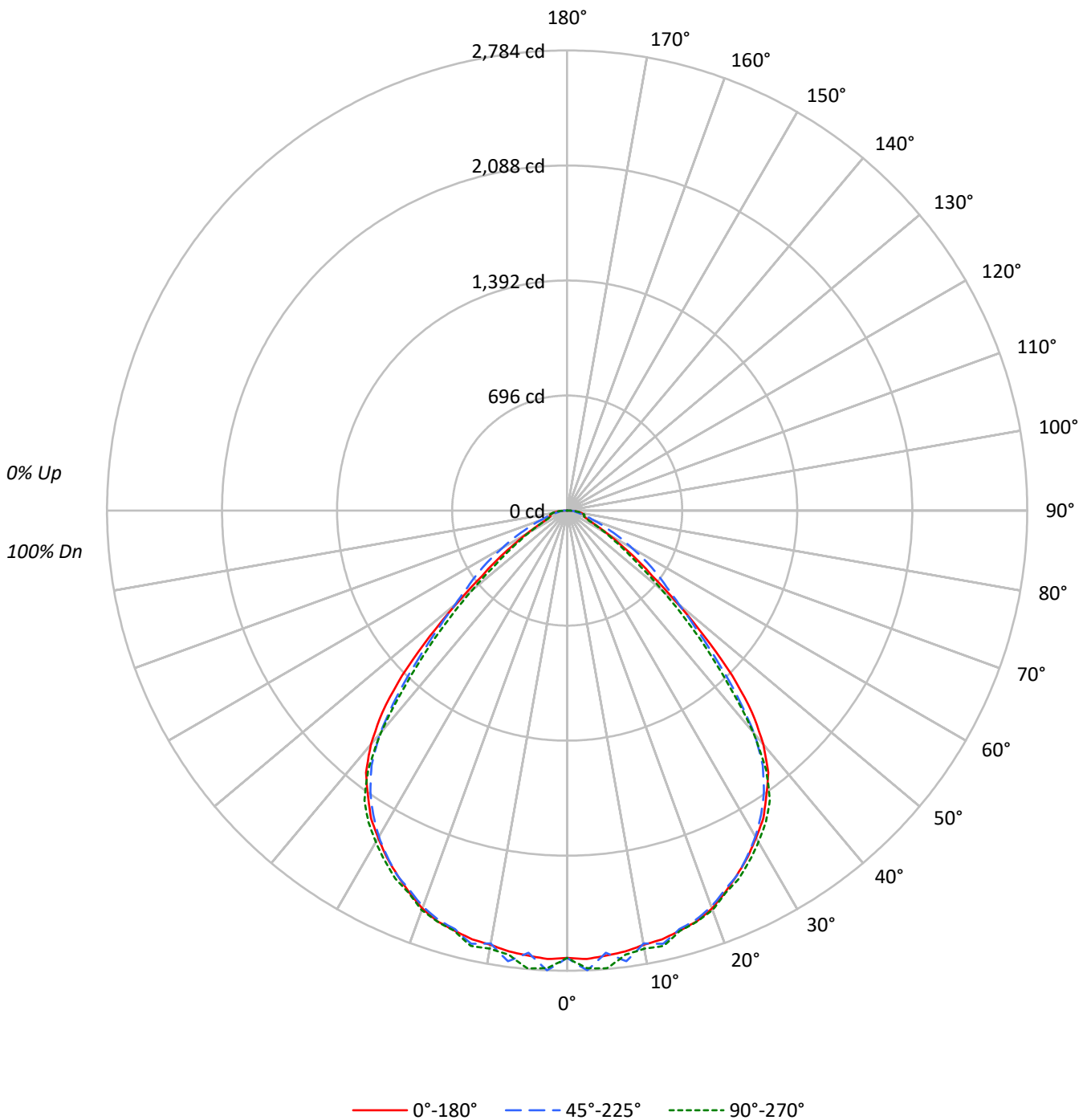
Input Watts (W): 39.432
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3642	3642	3642
5°	3650	3626	3754
10°	3644	3633	3678
15°	3665	3653	3668
20°	3668	3653	3683
25°	3611	3614	3649
30°	3551	3540	3597
35°	3451	3409	3512
40°	3241	3096	3079
45°	2686	2430	2305
50°	1807	1844	1575
55°	1192	1547	1033
60°	764	1221	707
65°	493	932	479
70°	436	668	436
75°	562	530	567
80°	688	456	722
85°	801	679	841



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	4.7
10°-20°	744.1	13.6
20°-30°	1120.3	20.5
30°-40°	1298.5	23.7
40°-50°	1014.3	18.5
50°-60°	541.6	9.9
60°-70°	278.5	5.1
70°-80°	157.6	2.9
80°-90°	59.8	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°	2123.6	38.8
0°-40°	3422.1	62.5
0°-60°	4978.1	90.9
0°-90°	5474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2707	2707	2707	2707	2707	
5°	2702	2778	2685	2759	2780	257
15°	2631	2648	2622	2639	2633	743
25°	2432	2424	2434	2431	2458	1121
35°	2101	2091	2076	2117	2138	1310
45°	1412	1413	1277	1266	1211	1064
55°	508	643	659	594	440	469
65°	155	323	293	322	150	170
75°	108	203	102	190	109	110
85°	52	68	44	68	54	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2706.7	2706.7	2706.7	2706.7	2706.7
2.5°	2715.5	2764.8	2784.1	2760.4	2770.9
5°	2702.3	2777.9	2684.8	2758.6	2779.7
7.5°	2690.0	2682.1	2749.8	2679.5	2709.4
10°	2667.2	2672.5	2659.3	2709.4	2691.8
12.5°	2656.6	2687.4	2684.8	2659.3	2697.9
15°	2631.1	2647.8	2622.3	2639.0	2632.9
17.5°	2605.6	2597.7	2595.1	2602.1	2608.3
20°	2561.7	2535.3	2551.1	2552.9	2572.2
22.5°	2498.4	2482.6	2486.1	2501.9	2503.7
25°	2432.5	2424.5	2434.2	2430.7	2458.0
27.5°	2363.9	2353.3	2359.5	2372.7	2389.4
30°	2285.6	2283.0	2278.6	2290.0	2315.5
32.5°	2208.3	2187.2	2183.7	2207.4	2236.4
35°	2101.0	2091.4	2075.5	2116.9	2138.0
37.5°	1999.1	1969.2	1943.7	1968.3	1977.1
40°	1845.2	1822.4	1762.6	1765.2	1752.9
42.5°	1656.2	1639.5	1525.2	1505.0	1470.7
45°	1411.8	1412.7	1277.3	1265.9	1211.4
47.5°	1127.9	1178.0	1060.2	1047.0	966.1
50°	863.3	953.8	880.9	859.8	752.5
52.5°	647.9	780.6	757.8	712.1	564.4
55°	508.1	642.6	659.3	594.3	440.4
57.5°	382.4	529.2	556.5	502.8	340.2
60°	283.9	445.7	453.6	432.5	262.8
62.5°	211.0	378.9	368.3	371.0	195.2
65°	154.7	322.6	292.7	321.7	150.3
67.5°	126.6	279.6	227.7	278.7	122.2
70°	110.8	247.9	169.7	245.3	110.8
72.5°	107.2	227.7	134.5	218.0	108.1
75°	108.1	203.1	102.0	189.9	109.0
77.5°	99.3	167.0	77.4	161.8	103.7
80°	88.8	126.6	58.9	128.3	93.2
82.5°	75.6	92.3	47.5	94.9	78.2
85°	51.9	67.7	44.0	67.7	54.5
87.5°	24.6	40.4	27.3	38.7	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)