

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: P294078

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294078
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-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5475.0 lumens
Efficiency: N/A
Efficacy: 101.9 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

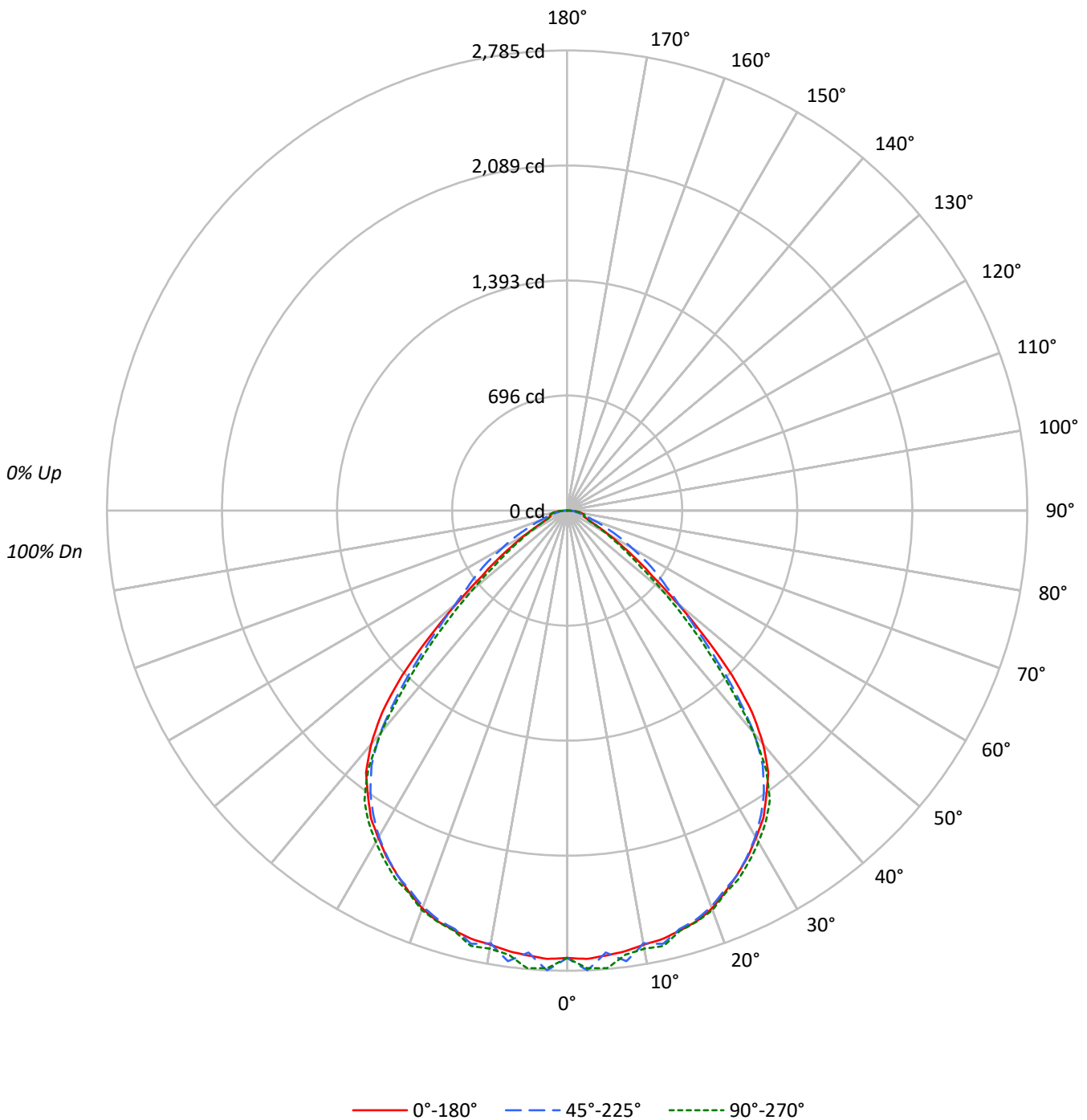
Input Watts (W): 53.753535
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	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°	3643	3643	3643
5°	3650	3627	3755
10°	3645	3634	3678
15°	3666	3653	3668
20°	3669	3653	3684
25°	3612	3615	3650
30°	3552	3541	3598
35°	3452	3410	3512
40°	3242	3096	3079
45°	2687	2431	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°	744.3	13.6
20°-30°	1120.5	20.5
30°-40°	1298.7	23.7
40°-50°	1014.5	18.5
50°-60°	541.7	9.9
60°-70°	278.6	5.1
70°-80°	157.6	2.9
80°-90°	59.9	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°	2124.0	38.8
0°-40°	3422.7	62.5
0°-60°	4979.0	90.9
0°-90°	5475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5475.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2707	2707	2707	2707	2707	
5°	2703	2778	2685	2759	2780	257
15°	2632	2648	2623	2640	2633	743
25°	2433	2425	2435	2431	2458	1121
35°	2101	2092	2076	2117	2138	1310
45°	1412	1413	1278	1266	1212	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°	2707.2	2707.2	2707.2	2707.2	2707.2
2.5°	2716.0	2765.3	2784.6	2760.9	2771.4
5°	2702.8	2778.5	2685.2	2759.1	2780.2
7.5°	2690.5	2682.6	2750.3	2680.0	2709.9
10°	2667.7	2672.9	2659.8	2709.9	2692.3
12.5°	2657.1	2687.9	2685.2	2659.8	2698.4
15°	2631.6	2648.3	2622.8	2639.5	2633.4
17.5°	2606.1	2598.2	2595.6	2602.6	2608.8
20°	2562.2	2535.8	2551.6	2553.4	2572.7
22.5°	2498.8	2483.0	2486.5	2502.4	2504.1
25°	2432.9	2425.0	2434.7	2431.1	2458.4
27.5°	2364.3	2353.8	2359.9	2373.1	2389.8
30°	2286.1	2283.4	2279.0	2290.5	2316.0
32.5°	2208.7	2187.6	2184.1	2207.8	2236.8
35°	2101.4	2091.8	2075.9	2117.2	2138.4
37.5°	1999.4	1969.5	1944.0	1968.7	1977.4
40°	1845.6	1822.7	1762.9	1765.5	1753.2
42.5°	1656.5	1639.8	1525.5	1505.3	1471.0
45°	1412.1	1413.0	1277.6	1266.1	1211.6
47.5°	1128.1	1178.2	1060.4	1047.2	966.3
50°	863.4	954.0	881.0	859.9	752.6
52.5°	648.0	780.8	757.9	712.2	564.5
55°	508.2	642.7	659.4	594.4	440.5
57.5°	382.5	529.3	556.6	502.9	340.3
60°	284.0	445.8	453.7	432.6	262.9
62.5°	211.0	379.0	368.4	371.0	195.2
65°	154.7	322.7	292.8	321.8	150.4
67.5°	126.6	279.6	227.7	278.7	122.2
70°	110.8	248.0	169.7	245.3	110.8
72.5°	107.3	227.7	134.5	218.1	108.1
75°	108.1	203.1	102.0	189.9	109.0
77.5°	99.4	167.1	77.4	161.8	103.8
80°	88.8	126.6	58.9	128.4	93.2
82.5°	75.6	92.3	47.5	95.0	78.3
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)