

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: P293947

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293947
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-L83050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5885.0 lumens
Efficiency: N/A
Efficacy: 128.4 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

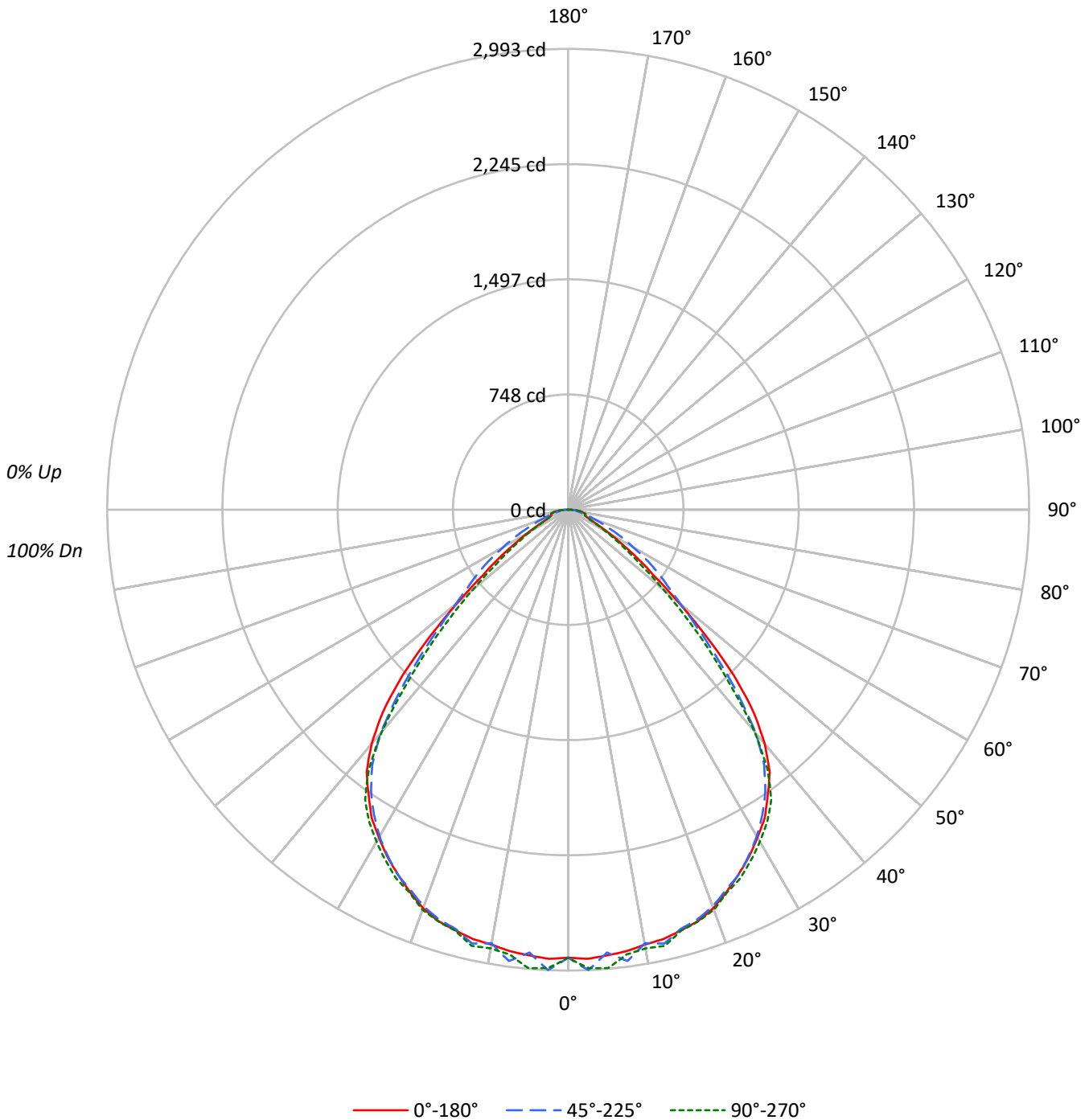
Input Watts (W): 45.849
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	3915	3915	3915
5°	3924	3898	4036
10°	3918	3906	3954
15°	3940	3927	3943
20°	3943	3927	3960
25°	3882	3885	3923
30°	3818	3806	3868
35°	3710	3665	3775
40°	3484	3328	3310
45°	2888	2613	2478
50°	1943	1982	1693
55°	1282	1663	1111
60°	822	1312	760
65°	529	1002	514
70°	469	718	469
75°	604	570	609
80°	740	490	776
85°	861	730	905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.6	4.7
10°-20°	800.0	13.6
20°-30°	1204.4	20.5
30°-40°	1396.0	23.7
40°-50°	1090.5	18.5
50°-60°	582.3	9.9
60°-70°	299.4	5.1
70°-80°	169.4	2.9
80°-90°	64.3	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°	2283.1	38.8
0°-40°	3679.1	62.5
0°-60°	5351.8	90.9
0°-90°	5885.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5885.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2910	2910	2910	2910	2910	
5°	2905	2986	2886	2966	2988	276
15°	2829	2847	2819	2837	2831	799
25°	2615	2607	2617	2613	2642	1205
35°	2259	2248	2231	2276	2298	1408
45°	1518	1519	1373	1361	1302	1144
55°	546	691	709	639	474	504
65°	166	347	315	346	162	183
75°	116	218	110	204	117	118
85°	56	73	47	73	59	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2910.0	2910.0	2910.0	2910.0	2910.0
2.5°	2919.4	2972.3	2993.1	2967.6	2979.0
5°	2905.2	2986.5	2886.3	2965.7	2988.4
7.5°	2892.0	2883.5	2956.3	2880.7	2912.8
10°	2867.4	2873.1	2858.9	2912.8	2893.9
12.5°	2856.1	2889.2	2886.3	2858.9	2900.5
15°	2828.7	2846.6	2819.2	2837.2	2830.6
17.5°	2801.3	2792.8	2789.9	2797.5	2804.1
20°	2754.0	2725.7	2742.7	2744.6	2765.4
22.5°	2686.0	2669.0	2672.7	2689.8	2691.6
25°	2615.1	2606.6	2617.0	2613.2	2642.5
27.5°	2541.4	2530.0	2536.6	2550.8	2568.8
30°	2457.3	2454.4	2449.7	2462.0	2489.4
32.5°	2374.1	2351.4	2347.6	2373.1	2404.3
35°	2258.8	2248.4	2231.4	2275.8	2298.5
37.5°	2149.2	2117.0	2089.6	2116.1	2125.5
40°	1983.8	1959.2	1894.9	1897.8	1884.5
42.5°	1780.6	1762.6	1639.7	1618.0	1581.2
45°	1517.8	1518.8	1373.2	1360.9	1302.3
47.5°	1212.6	1266.4	1139.8	1125.6	1038.7
50°	928.1	1025.4	947.0	924.3	809.0
52.5°	696.5	839.2	814.7	765.5	606.8
55°	546.3	690.9	708.8	638.9	473.5
57.5°	411.1	569.0	598.2	540.6	365.8
60°	305.3	479.2	487.7	465.0	282.6
62.5°	226.8	407.3	396.0	398.8	209.8
65°	166.3	346.9	314.7	345.9	161.6
67.5°	136.1	300.5	244.8	299.6	131.4
70°	119.1	266.5	182.4	263.7	119.1
72.5°	115.3	244.8	144.6	234.4	116.2
75°	116.2	218.3	109.6	204.1	117.2
77.5°	106.8	179.6	83.2	173.9	111.5
80°	95.5	136.1	63.3	138.0	100.2
82.5°	81.3	99.2	51.0	102.1	84.1
85°	55.8	72.8	47.3	72.8	58.6
87.5°	26.5	43.5	29.3	41.6	30.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)