

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: P294167

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294167  
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-LD5-85-A19/156-UNV-L92765-W2A1-U-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7605.0 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

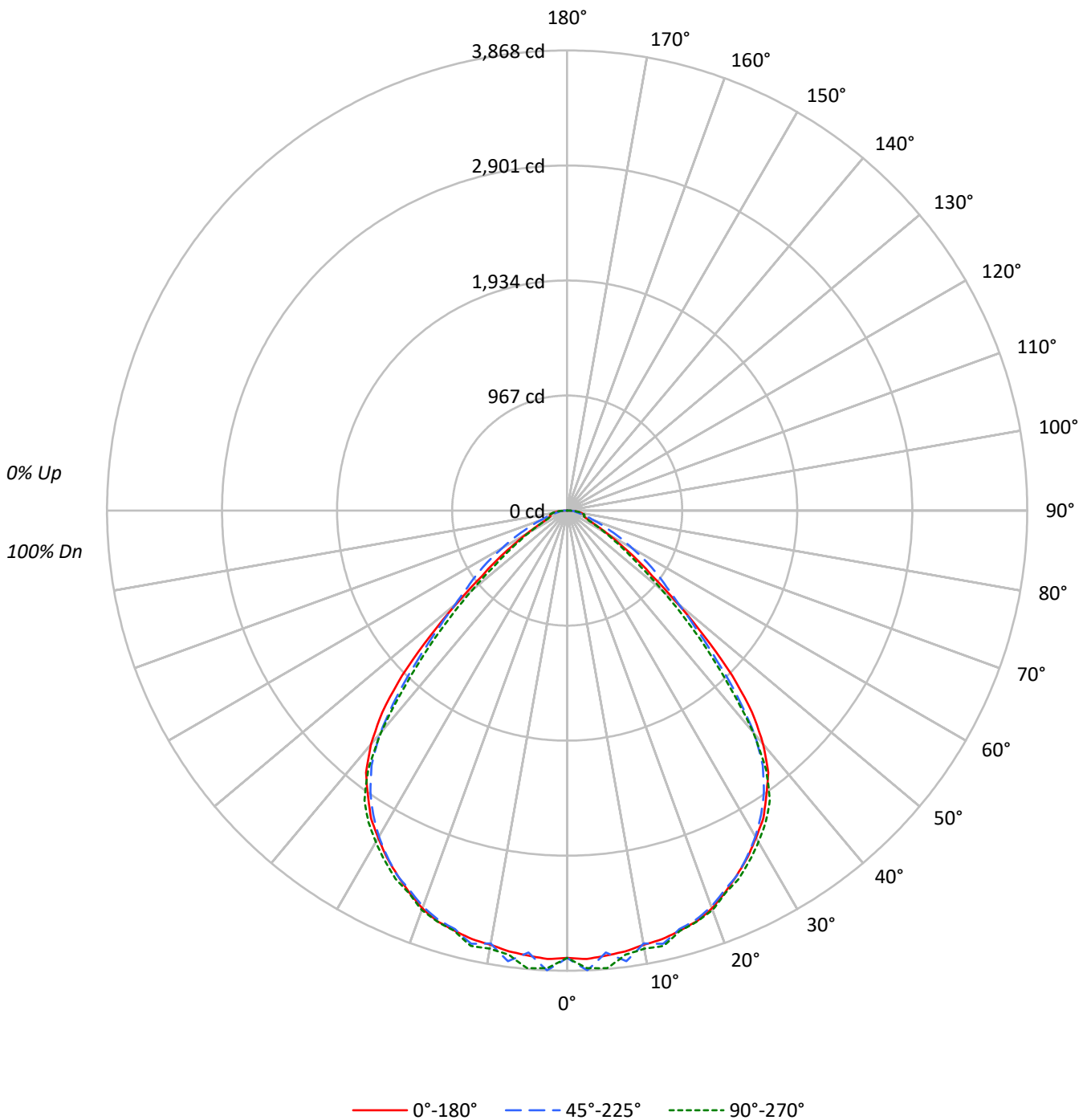
Input Watts (W): 64.263  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5060	5060	5060
5°	5071	5038	5216
10°	5063	5048	5109
15°	5092	5075	5095
20°	5096	5075	5117
25°	5017	5021	5070
30°	4933	4918	4998
35°	4795	4736	4879
40°	4503	4301	4277
45°	3732	3377	3202
50°	2510	2562	2188
55°	1656	2149	1435
60°	1062	1696	983
65°	684	1295	665
70°	605	927	605
75°	781	737	787
80°	956	634	1003
85°	1113	943	1169



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.0	4.7
10°-20°	1033.8	13.6
20°-30°	1556.4	20.5
30°-40°	1804.0	23.7
40°-50°	1409.2	18.5
50°-60°	752.5	9.9
60°-70°	386.9	5.1
70°-80°	218.9	2.9
80°-90°	83.1	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°	2950.3	38.8
0°-40°	4754.3	62.5
0°-60°	6916.0	90.9
0°-90°	7605.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7605.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3760	3760	3760	3760	3760	
5°	3754	3859	3730	3832	3862	357
15°	3655	3679	3643	3666	3658	1032
25°	3379	3368	3382	3377	3415	1557
35°	2919	2906	2884	2941	2970	1820
45°	1961	1963	1775	1759	1683	1478
55°	706	893	916	826	612	651
65°	215	448	407	447	209	236
75°	150	282	142	264	151	152
85°	72	94	61	94	76	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3760.5	3760.5	3760.5	3760.5	3760.5
2.5°	3772.7	3841.1	3867.9	3835.0	3849.6
5°	3754.3	3859.4	3729.9	3832.5	3861.8
7.5°	3737.2	3726.3	3820.3	3722.6	3764.1
10°	3705.5	3712.8	3694.5	3764.1	3739.7
12.5°	3690.8	3733.6	3729.9	3694.5	3748.2
15°	3655.4	3678.6	3643.2	3666.4	3657.9
17.5°	3620.0	3609.0	3605.3	3615.1	3623.7
20°	3558.9	3522.3	3544.3	3546.7	3573.6
22.5°	3471.0	3449.0	3453.9	3475.9	3478.3
25°	3379.4	3368.4	3381.8	3377.0	3414.8
27.5°	3284.1	3269.5	3278.0	3296.4	3319.6
30°	3175.4	3171.8	3165.7	3181.5	3217.0
32.5°	3068.0	3038.7	3033.8	3066.7	3107.0
35°	2919.0	2905.5	2883.5	2940.9	2970.3
37.5°	2777.3	2735.8	2700.3	2734.5	2746.8
40°	2563.6	2531.8	2448.8	2452.4	2435.3
42.5°	2301.0	2277.8	2119.0	2090.9	2043.3
45°	1961.4	1962.7	1774.6	1758.7	1683.0
47.5°	1567.0	1636.6	1472.9	1454.6	1342.2
50°	1199.3	1325.1	1223.8	1194.5	1045.5
52.5°	900.1	1084.5	1052.8	989.3	784.1
55°	705.9	892.8	916.0	825.6	611.9
57.5°	531.3	735.2	773.1	698.6	472.7
60°	394.5	619.2	630.2	600.9	365.2
62.5°	293.1	526.4	511.7	515.4	271.1
65°	215.0	448.2	406.7	447.0	208.8
67.5°	175.9	388.4	316.3	387.2	169.8
70°	153.9	344.4	235.7	340.7	153.9
72.5°	149.0	316.3	186.9	302.9	150.2
75°	150.2	282.1	141.7	263.8	151.4
77.5°	138.0	232.1	107.5	224.7	144.1
80°	123.4	175.9	81.8	178.3	129.5
82.5°	105.0	128.2	66.0	131.9	108.7
85°	72.1	94.0	61.1	94.0	75.7
87.5°	34.2	56.2	37.9	53.7	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)