

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: P294038

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294038
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-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: 8195.0 lumens
Efficiency: N/A
Efficacy: 128.8 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

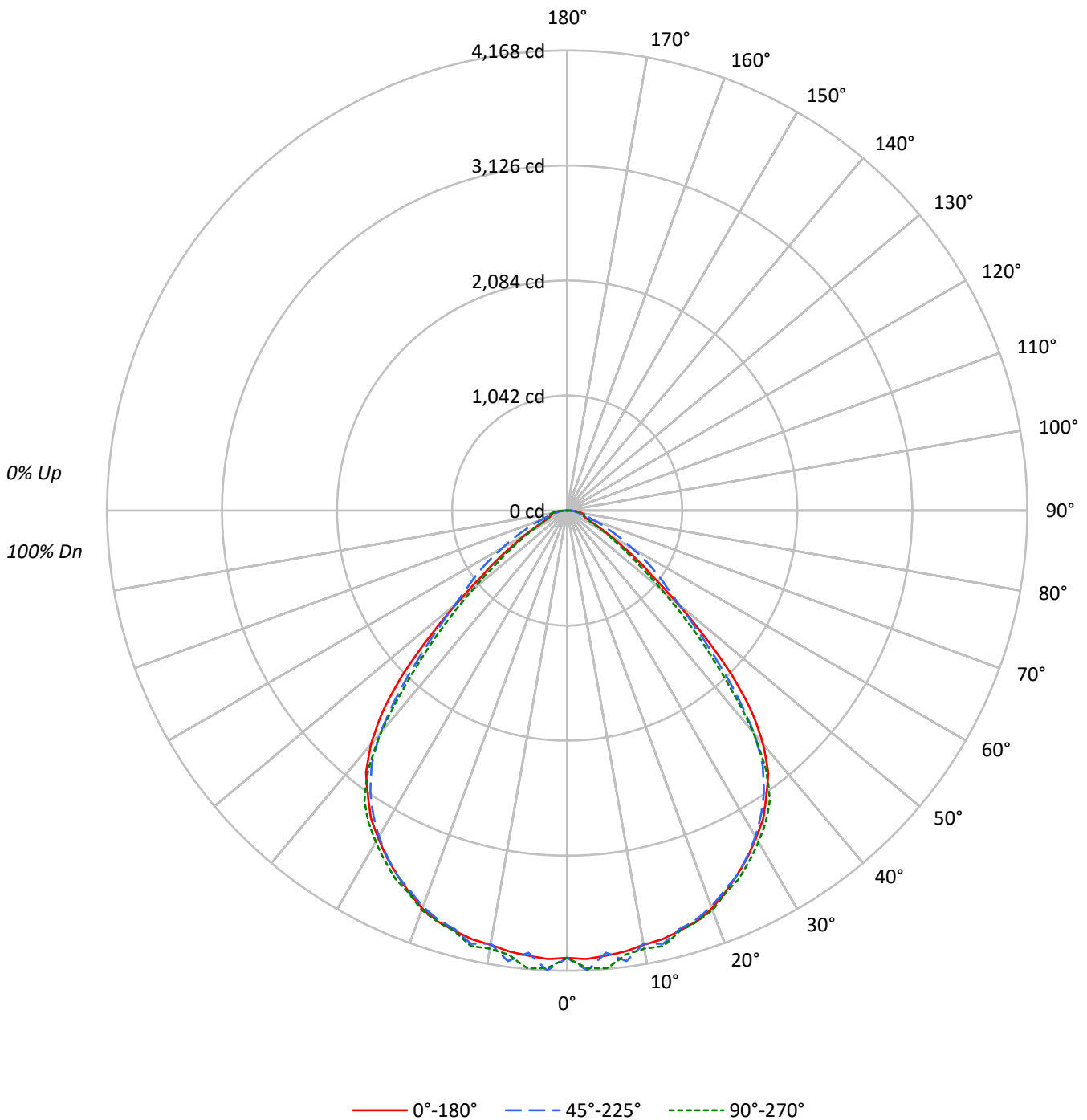
Input Watts (W): 63.612
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5452	5452	5452
5°	5464	5429	5621
10°	5455	5439	5506
15°	5487	5468	5490
20°	5491	5468	5514
25°	5406	5410	5463
30°	5316	5300	5386
35°	5166	5104	5257
40°	4852	4635	4609
45°	4022	3639	3451
50°	2705	2760	2358
55°	1784	2316	1547
60°	1144	1827	1059
65°	737	1395	716
70°	652	999	652
75°	842	794	848
80°	1030	683	1081
85°	1198	1016	1260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.0	4.7
10°-20°	1114.0	13.6
20°-30°	1677.2	20.5
30°-40°	1944.0	23.7
40°-50°	1518.5	18.5
50°-60°	810.9	9.9
60°-70°	417.0	5.1
70°-80°	235.9	2.9
80°-90°	89.6	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°	3179.2	38.8
0°-40°	5123.2	62.5
0°-60°	7452.6	90.9
0°-90°	8195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4052	4052	4052	4052	4052	
5°	4046	4159	4019	4130	4161	385
15°	3939	3964	3926	3951	3942	1113
25°	3642	3630	3644	3639	3680	1678
35°	3145	3131	3107	3169	3201	1961
45°	2114	2115	1912	1895	1814	1593
55°	761	962	987	890	659	702
65°	232	483	438	482	225	255
75°	162	304	153	284	163	164
85°	78	101	66	101	82	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4052.2	4052.2	4052.2	4052.2	4052.2
2.5°	4065.4	4139.1	4168.0	4132.5	4148.3
5°	4045.6	4158.8	4019.3	4129.8	4161.4
7.5°	4027.2	4015.3	4116.7	4011.4	4056.1
10°	3993.0	4000.9	3981.1	4056.1	4029.8
12.5°	3977.2	4023.2	4019.3	3981.1	4039.0
15°	3939.0	3964.0	3925.8	3950.9	3941.6
17.5°	3900.8	3889.0	3885.1	3895.6	3904.8
20°	3835.0	3795.6	3819.2	3821.9	3850.8
22.5°	3740.3	3716.6	3721.9	3745.5	3748.2
25°	3641.6	3629.7	3644.2	3638.9	3679.7
27.5°	3538.9	3523.1	3532.3	3552.1	3577.1
30°	3421.8	3417.8	3411.3	3428.4	3466.5
32.5°	3306.0	3274.4	3269.1	3304.7	3348.1
35°	3145.4	3130.9	3107.3	3169.1	3200.7
37.5°	2992.8	2948.0	2909.8	2946.7	2959.9
40°	2762.4	2728.2	2638.7	2642.7	2624.3
42.5°	2479.5	2454.5	2283.4	2253.1	2201.8
45°	2113.6	2114.9	1912.3	1895.1	1813.6
47.5°	1688.5	1763.5	1587.2	1567.4	1446.4
50°	1292.4	1427.9	1318.7	1287.1	1126.6
52.5°	969.9	1168.7	1134.5	1066.0	844.9
55°	760.7	962.1	987.1	889.7	659.4
57.5°	572.5	792.3	833.1	752.8	509.3
60°	425.1	667.2	679.1	647.5	393.5
62.5°	315.9	567.2	551.4	555.4	292.2
65°	231.6	483.0	438.3	481.7	225.0
67.5°	189.5	418.5	340.9	417.2	182.9
70°	165.8	371.1	254.0	367.2	165.8
72.5°	160.6	340.9	201.4	326.4	161.9
75°	161.9	304.0	152.7	284.3	163.2
77.5°	148.7	250.1	115.8	242.2	155.3
80°	132.9	189.5	88.2	192.1	139.5
82.5°	113.2	138.2	71.1	142.1	117.1
85°	77.6	101.3	65.8	101.3	81.6
87.5°	36.9	60.5	40.8	57.9	42.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)