

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: P294086

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294086
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-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7535.0 lumens
Efficiency: N/A
Efficacy: 115.9 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

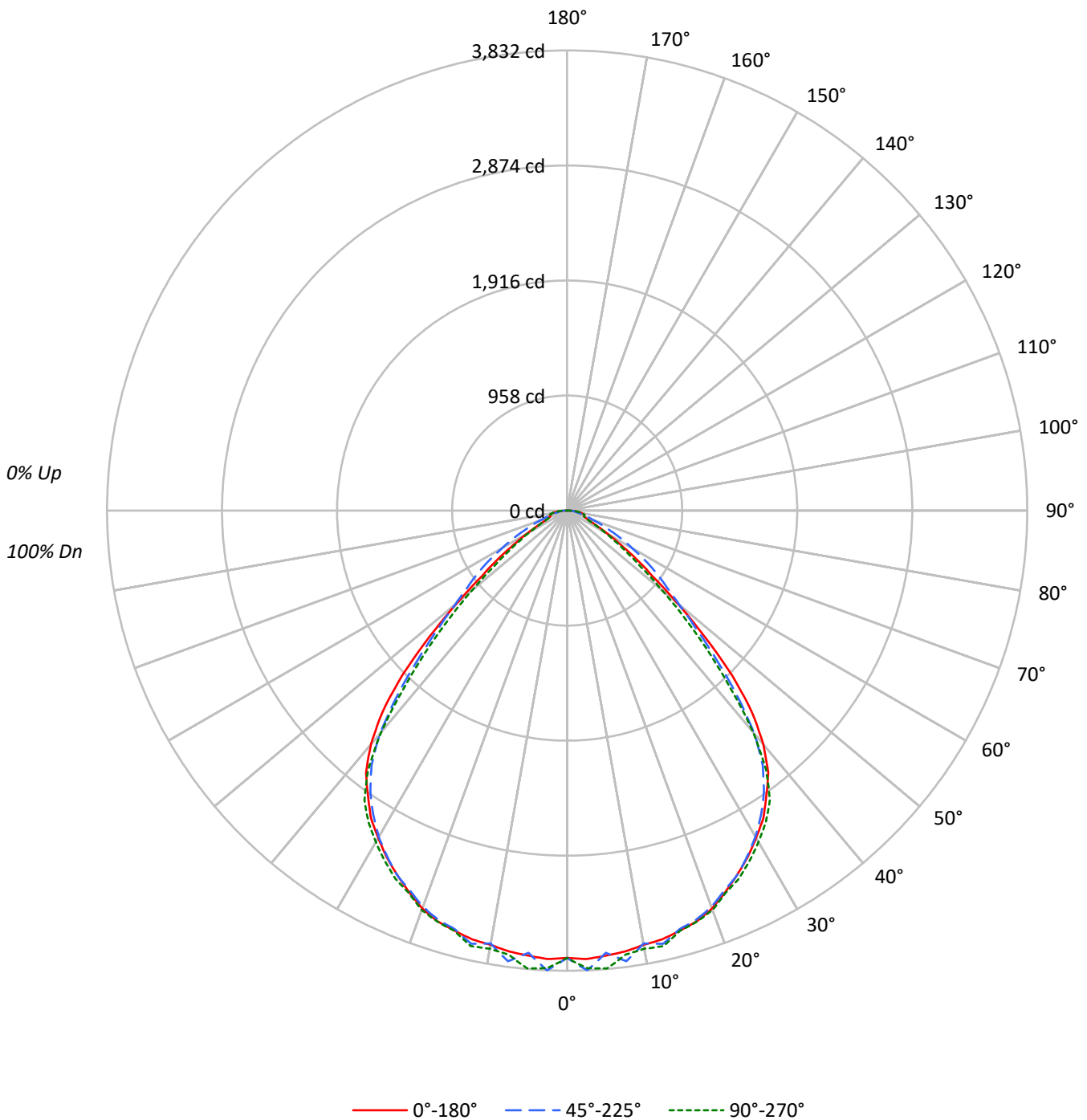
Input Watts (W): 65.023926
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5013	5013	5013
5°	5024	4991	5168
10°	5016	5001	5062
15°	5045	5028	5048
20°	5049	5028	5070
25°	4971	4974	5023
30°	4888	4873	4952
35°	4750	4693	4834
40°	4461	4261	4238
45°	3698	3346	3173
50°	2487	2538	2168
55°	1641	2129	1422
60°	1052	1680	974
65°	678	1283	659
70°	600	919	600
75°	774	730	780
80°	947	628	994
85°	1102	934	1158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.7	4.7
10°-20°	1024.3	13.6
20°-30°	1542.1	20.5
30°-40°	1787.4	23.7
40°-50°	1396.3	18.5
50°-60°	745.6	9.9
60°-70°	383.4	5.1
70°-80°	216.9	2.9
80°-90°	82.4	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°	2923.2	38.8
0°-40°	4710.6	62.5
0°-60°	6852.4	90.9
0°-90°	7535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3726	3726	3726	3726	3726	
5°	3720	3824	3696	3797	3826	354
15°	3622	3645	3610	3633	3624	1023
25°	3348	3337	3351	3346	3383	1543
35°	2892	2879	2857	2914	2943	1803
45°	1943	1945	1758	1742	1668	1464
55°	699	885	908	818	606	645
65°	213	444	403	443	207	234
75°	149	280	140	261	150	151
85°	71	93	60	93	75	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3725.8	3725.8	3725.8	3725.8	3725.8
2.5°	3737.9	3805.7	3832.3	3799.7	3814.2
5°	3719.8	3823.9	3695.6	3797.2	3826.3
7.5°	3702.8	3692.0	3785.1	3688.3	3729.5
10°	3671.4	3678.6	3660.5	3729.5	3705.3
12.5°	3656.9	3699.2	3695.6	3660.5	3713.7
15°	3621.8	3644.8	3609.7	3632.7	3624.2
17.5°	3586.7	3575.8	3572.2	3581.8	3590.3
20°	3526.2	3489.9	3511.7	3514.1	3540.7
22.5°	3439.1	3417.3	3422.1	3443.9	3446.3
25°	3348.3	3337.4	3350.7	3345.9	3383.4
27.5°	3253.9	3239.4	3247.9	3266.0	3289.0
30°	3146.2	3142.6	3136.5	3152.3	3187.4
32.5°	3039.7	3010.7	3005.8	3038.5	3078.4
35°	2892.1	2878.8	2857.0	2913.9	2942.9
37.5°	2751.7	2710.6	2675.5	2709.4	2721.5
40°	2540.0	2508.5	2426.2	2429.8	2412.9
42.5°	2279.8	2256.8	2099.5	2071.7	2024.5
45°	1943.4	1944.6	1758.2	1742.5	1667.5
47.5°	1552.5	1621.5	1459.4	1441.2	1329.9
50°	1188.3	1312.9	1212.5	1183.5	1035.8
52.5°	891.8	1074.6	1043.1	980.2	776.9
55°	699.4	884.6	907.6	818.0	606.3
57.5°	526.4	728.5	766.0	692.2	468.3
60°	390.9	613.5	624.4	595.4	361.8
62.5°	290.4	521.5	507.0	510.7	268.6
65°	213.0	444.1	403.0	442.9	206.9
67.5°	174.3	384.8	313.4	383.6	168.2
70°	152.5	341.2	233.5	337.6	152.5
72.5°	147.6	313.4	185.1	300.1	148.8
75°	148.8	279.5	140.4	261.4	150.1
77.5°	136.7	229.9	106.5	222.7	142.8
80°	122.2	174.3	81.1	176.7	128.3
82.5°	104.1	127.1	65.3	130.7	107.7
85°	71.4	93.2	60.5	93.2	75.0
87.5°	33.9	55.7	37.5	53.2	38.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)