

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: P294037

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294037
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-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8053.0 lumens
Efficiency: N/A
Efficacy: 127.5 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

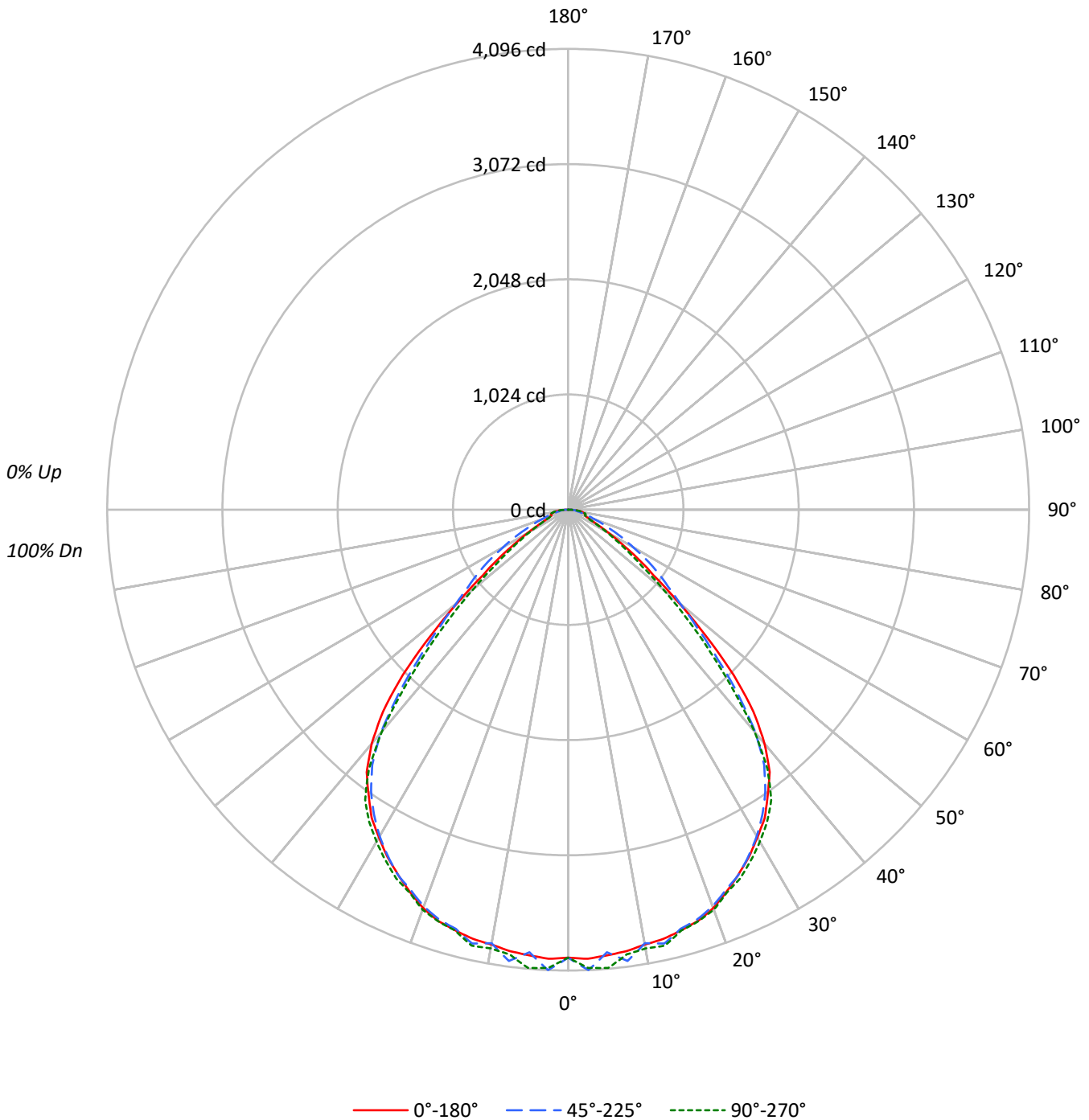
Input Watts (W): 63.147
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294037

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P294037

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4000K

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°	5358	5358	5358
5°	5369	5334	5523
10°	5361	5345	5410
15°	5392	5374	5395
20°	5396	5374	5418
25°	5313	5316	5368
30°	5224	5208	5292
35°	5077	5015	5166
40°	4768	4554	4529
45°	3952	3576	3391
50°	2658	2713	2317
55°	1753	2275	1520
60°	1124	1796	1041
65°	725	1371	704
70°	641	982	641
75°	827	780	834
80°	1012	671	1062
85°	1178	999	1238



TEST NUMBER: P294037

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.3	4.7
10°-20°	1094.7	13.6
20°-30°	1648.1	20.5
30°-40°	1910.3	23.7
40°-50°	1492.2	18.5
50°-60°	796.8	9.9
60°-70°	409.8	5.1
70°-80°	231.8	2.9
80°-90°	88.0	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°	3124.1	38.8
0°-40°	5034.4	62.5
0°-60°	7323.4	90.9
0°-90°	8053.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8053.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3982	3982	3982	3982	3982	
5°	3976	4087	3950	4058	4089	378
15°	3871	3895	3858	3882	3873	1093
25°	3578	3567	3581	3576	3616	1649
35°	3091	3077	3053	3114	3145	1927
45°	2077	2078	1879	1862	1782	1565
55°	748	945	970	874	648	690
65°	228	475	431	473	221	250
75°	159	299	150	279	160	161
85°	76	100	65	100	80	79
90°	0	0	0	0	0	



TEST NUMBER: P294037

CATALOG NUMBER: 24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3982.0	3982.0	3982.0	3982.0	3982.0
2.5°	3994.9	4067.3	4095.8	4060.9	4076.4
5°	3975.5	4086.7	3949.6	4058.3	4089.3
7.5°	3957.4	3945.8	4045.3	3941.9	3985.9
10°	3923.8	3931.5	3912.1	3985.9	3960.0
12.5°	3908.3	3953.5	3949.6	3912.1	3969.0
15°	3870.8	3895.3	3857.8	3882.4	3873.3
17.5°	3833.3	3821.6	3817.7	3828.1	3837.1
20°	3768.6	3729.8	3753.1	3755.7	3784.1
22.5°	3675.5	3652.2	3657.4	3680.6	3683.2
25°	3578.5	3566.8	3581.1	3575.9	3616.0
27.5°	3477.6	3462.1	3471.1	3490.5	3515.1
30°	3362.5	3358.6	3352.2	3369.0	3406.5
32.5°	3248.7	3217.7	3212.5	3247.4	3290.1
35°	3090.9	3076.7	3053.4	3114.2	3145.2
37.5°	2940.9	2896.9	2859.4	2895.6	2908.6
40°	2714.6	2680.9	2593.0	2596.9	2578.8
42.5°	2436.5	2411.9	2243.8	2214.1	2163.6
45°	2077.0	2078.3	1879.1	1862.3	1782.1
47.5°	1659.3	1733.0	1559.7	1540.3	1421.3
50°	1270.0	1403.2	1295.9	1264.8	1107.0
52.5°	953.1	1148.4	1114.8	1047.5	830.3
55°	747.5	945.4	970.0	874.3	647.9
57.5°	562.6	778.5	818.6	739.8	500.5
60°	417.7	655.7	667.3	636.3	386.7
62.5°	310.4	557.4	541.9	545.8	287.1
65°	227.6	474.6	430.7	473.3	221.1
67.5°	186.2	411.3	335.0	410.0	179.8
70°	163.0	364.7	249.6	360.8	163.0
72.5°	157.8	335.0	197.9	320.7	159.1
75°	159.1	298.7	150.0	279.3	160.4
77.5°	146.1	245.7	113.8	238.0	152.6
80°	130.6	186.2	86.6	188.8	137.1
82.5°	111.2	135.8	69.8	139.7	115.1
85°	76.3	99.6	64.7	99.6	80.2
87.5°	36.2	59.5	40.1	56.9	41.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)