

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: P294165

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294165
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-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7458.0 lumens
Efficiency: N/A
Efficacy: 116.7 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

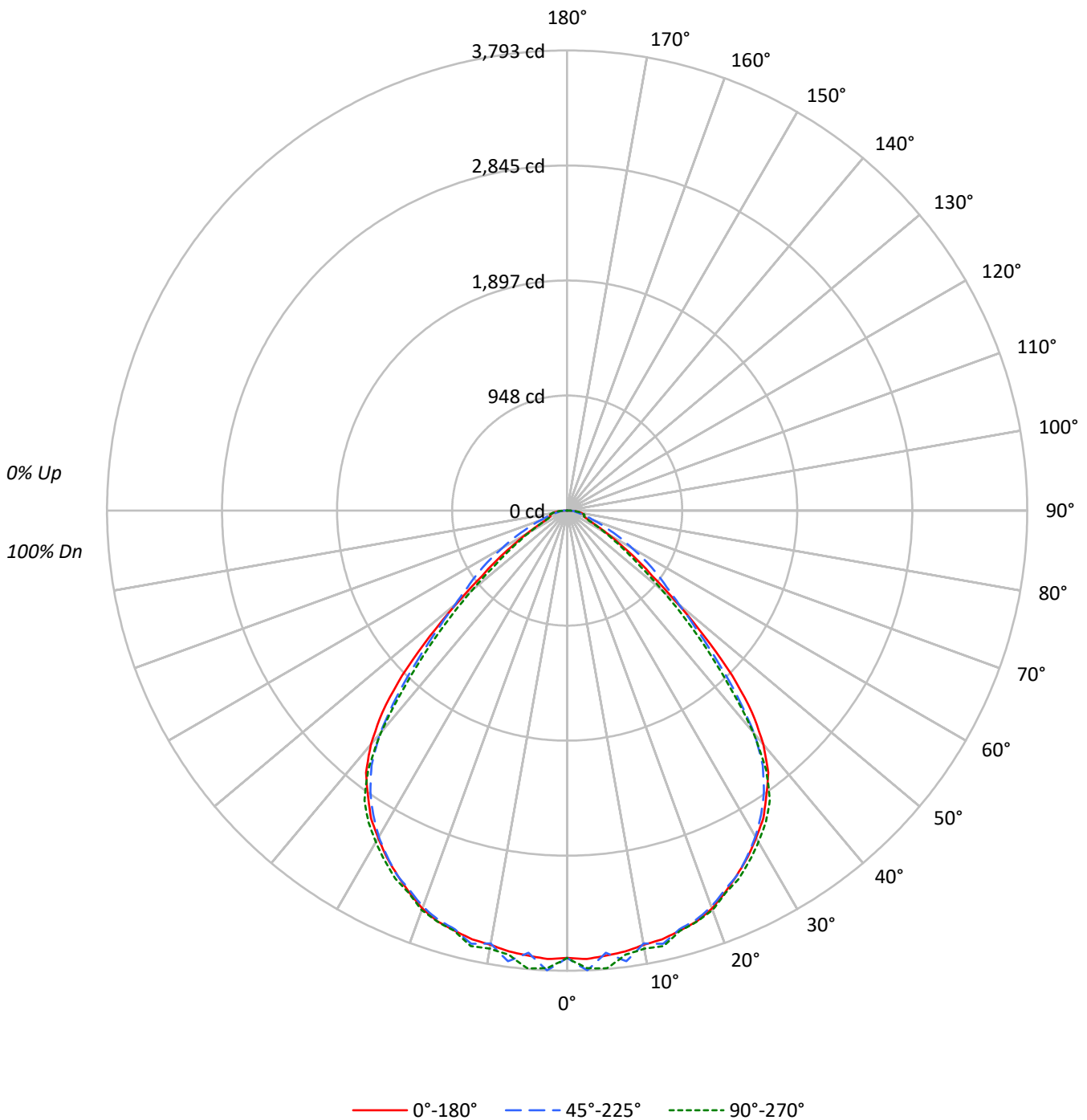
Input Watts (W): 63.891
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4962	4962	4962
5°	4973	4940	5115
10°	4965	4950	5011
15°	4993	4977	4997
20°	4997	4977	5018
25°	4920	4924	4972
30°	4838	4823	4901
35°	4702	4645	4784
40°	4416	4218	4195
45°	3660	3311	3141
50°	2462	2512	2146
55°	1624	2107	1408
60°	1041	1663	964
65°	671	1270	652
70°	594	910	594
75°	766	722	772
80°	938	621	984
85°	1091	925	1147



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.1	4.7
10°-20°	1013.9	13.6
20°-30°	1526.4	20.5
30°-40°	1769.1	23.7
40°-50°	1382.0	18.5
50°-60°	737.9	9.9
60°-70°	379.5	5.1
70°-80°	214.7	2.9
80°-90°	81.5	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°	2893.3	38.8
0°-40°	4662.4	62.5
0°-60°	6782.3	90.9
0°-90°	7458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3688	3688	3688	3688	3688	
5°	3682	3785	3658	3758	3787	350
15°	3585	3608	3573	3596	3587	1013
25°	3314	3303	3316	3312	3349	1527
35°	2862	2849	2828	2884	2913	1785
45°	1924	1925	1740	1725	1650	1450
55°	692	876	898	810	600	639
65°	211	440	399	438	205	232
75°	147	277	139	259	148	149
85°	71	92	60	92	74	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3687.8	3687.8	3687.8	3687.8	3687.8
2.5°	3699.7	3766.8	3793.2	3760.8	3775.2
5°	3681.8	3784.8	3657.8	3758.4	3787.2
7.5°	3665.0	3654.2	3746.5	3650.6	3691.4
10°	3633.9	3641.1	3623.1	3691.4	3667.4
12.5°	3619.5	3661.4	3657.8	3623.1	3675.8
15°	3584.8	3607.5	3572.8	3595.5	3587.2
17.5°	3550.0	3539.3	3535.7	3545.2	3553.6
20°	3490.1	3454.2	3475.8	3478.2	3504.5
22.5°	3403.9	3382.3	3387.1	3408.7	3411.1
25°	3314.1	3303.3	3316.5	3311.7	3348.8
27.5°	3220.7	3206.3	3214.7	3232.6	3255.4
30°	3114.1	3110.5	3104.5	3120.0	3154.8
32.5°	3008.7	2979.9	2975.1	3007.5	3047.0
35°	2862.5	2849.4	2827.8	2884.1	2912.8
37.5°	2723.6	2682.9	2648.1	2681.7	2693.7
40°	2514.0	2482.9	2401.4	2405.0	2388.2
42.5°	2256.5	2233.7	2078.0	2050.5	2003.8
45°	1923.5	1924.7	1740.3	1724.7	1650.5
47.5°	1536.7	1604.9	1444.4	1426.5	1316.3
50°	1176.2	1299.5	1200.1	1171.4	1025.2
52.5°	882.7	1063.6	1032.4	970.1	768.9
55°	692.3	875.5	898.3	809.7	600.1
57.5°	521.0	721.0	758.2	685.1	463.5
60°	386.9	607.2	618.0	589.3	358.1
62.5°	287.5	516.2	501.8	505.4	265.9
65°	210.8	439.6	398.8	438.4	204.8
67.5°	172.5	380.9	310.2	379.7	166.5
70°	150.9	337.8	231.2	334.2	150.9
72.5°	146.1	310.2	183.3	297.0	147.3
75°	147.3	276.7	138.9	258.7	148.5
77.5°	135.3	227.6	105.4	220.4	141.3
80°	121.0	172.5	80.2	174.9	127.0
82.5°	103.0	125.8	64.7	129.4	106.6
85°	70.7	92.2	59.9	92.2	74.3
87.5°	33.5	55.1	37.1	52.7	38.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)