

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: P294039

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294039
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-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8307.0 lumens
Efficiency: N/A
Efficacy: 130.0 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

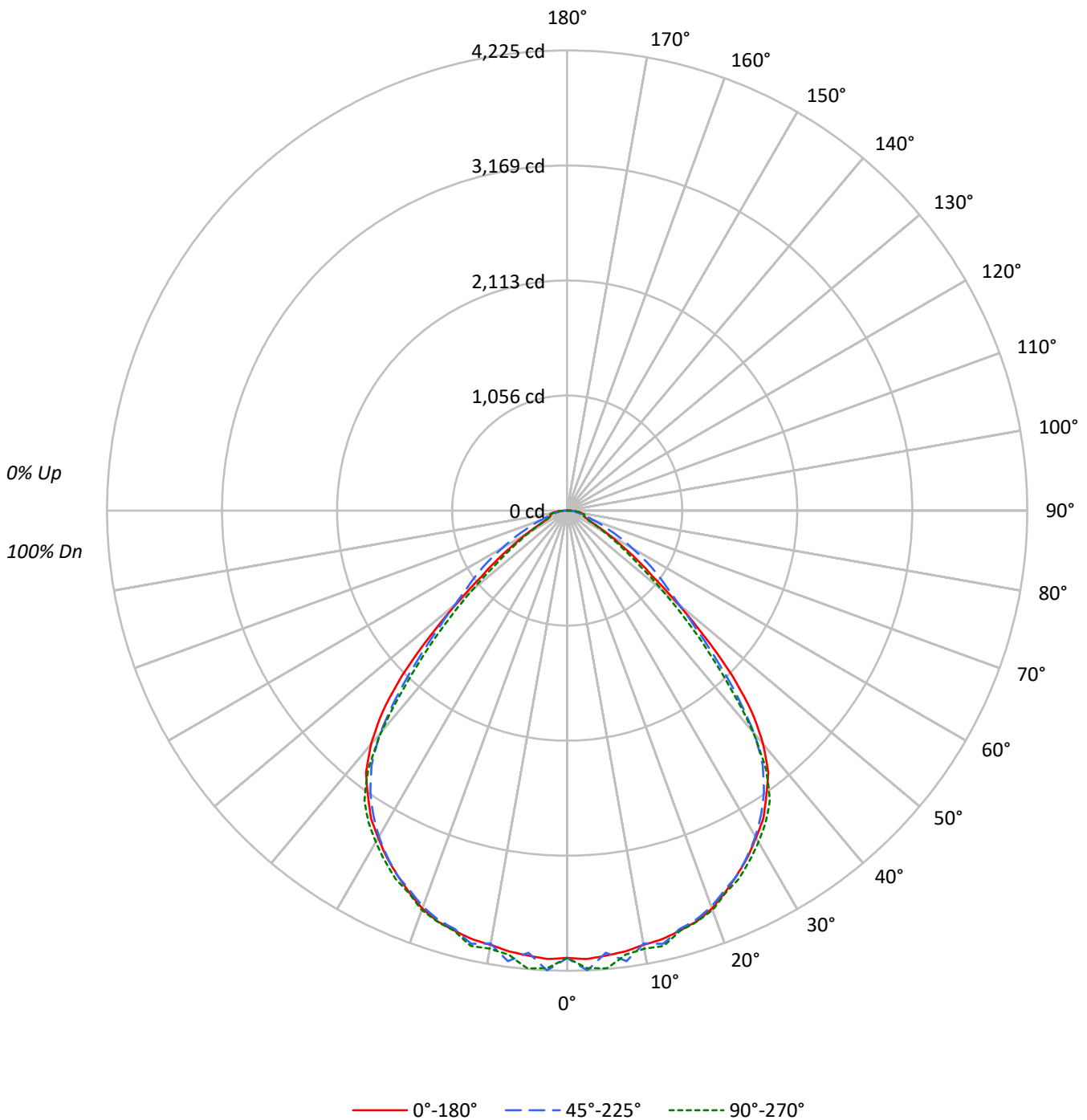
Input Watts (W): 63.891
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5527	5527	5527
5°	5539	5503	5697
10°	5530	5513	5581
15°	5562	5543	5566
20°	5566	5543	5589
25°	5480	5484	5537
30°	5389	5372	5459
35°	5237	5174	5329
40°	4918	4698	4672
45°	4077	3688	3498
50°	2742	2798	2390
55°	1809	2347	1568
60°	1160	1852	1073
65°	748	1414	726
70°	661	1013	661
75°	853	805	860
80°	1044	693	1096
85°	1215	1030	1277



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.3	4.7
10°-20°	1129.3	13.6
20°-30°	1700.1	20.5
30°-40°	1970.5	23.7
40°-50°	1539.3	18.5
50°-60°	821.9	9.9
60°-70°	422.7	5.1
70°-80°	239.1	2.9
80°-90°	90.8	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°	3222.7	38.8
0°-40°	5193.2	62.5
0°-60°	7554.4	90.9
0°-90°	8307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8307.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4108	4108	4108	4108	4108	
5°	4101	4216	4074	4186	4218	390
15°	3993	4018	3980	4005	3996	1128
25°	3691	3679	3694	3689	3730	1701
35°	3188	3174	3150	3212	3244	1988
45°	2142	2144	1938	1921	1838	1615
55°	771	975	1000	902	668	712
65°	235	490	444	488	228	258
75°	164	308	155	288	165	166
85°	79	103	67	103	83	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4107.6	4107.6	4107.6	4107.6	4107.6
2.5°	4120.9	4195.6	4225.0	4189.0	4205.0
5°	4100.9	4215.6	4074.2	4186.3	4218.3
7.5°	4082.2	4070.2	4172.9	4066.2	4111.6
10°	4047.5	4055.5	4035.5	4111.6	4084.9
12.5°	4031.5	4078.2	4074.2	4035.5	4094.2
15°	3992.8	4018.2	3979.5	4004.9	3995.5
17.5°	3954.2	3942.1	3938.1	3948.8	3958.2
20°	3887.5	3847.4	3871.4	3874.1	3903.5
22.5°	3791.4	3767.4	3772.7	3796.7	3799.4
25°	3691.3	3679.3	3694.0	3688.7	3730.0
27.5°	3587.3	3571.3	3580.6	3600.6	3626.0
30°	3468.6	3464.6	3457.9	3475.2	3513.9
32.5°	3351.2	3319.1	3313.8	3349.8	3393.9
35°	3188.4	3173.7	3149.7	3212.4	3244.4
37.5°	3033.7	2988.3	2949.6	2987.0	3000.3
40°	2800.2	2765.5	2674.8	2678.8	2660.1
42.5°	2513.4	2488.0	2314.6	2283.9	2231.9
45°	2142.5	2143.8	1938.4	1921.0	1838.3
47.5°	1711.6	1787.6	1608.9	1588.9	1466.1
50°	1310.0	1447.5	1336.7	1304.7	1142.0
52.5°	983.2	1184.6	1150.0	1080.6	856.5
55°	771.1	975.2	1000.5	901.8	668.4
57.5°	580.3	803.1	844.5	763.1	516.3
60°	430.9	676.4	688.4	656.4	398.9
62.5°	320.2	575.0	559.0	563.0	296.2
65°	234.8	489.6	444.2	488.3	228.1
67.5°	192.1	424.2	345.5	422.9	185.4
70°	168.1	376.2	257.5	372.2	168.1
72.5°	162.8	345.5	204.1	330.8	164.1
75°	164.1	308.2	154.8	288.2	165.4
77.5°	150.7	253.5	117.4	245.5	157.4
80°	134.7	192.1	89.4	194.8	141.4
82.5°	114.7	140.1	72.0	144.1	118.7
85°	78.7	102.7	66.7	102.7	82.7
87.5°	37.4	61.4	41.4	58.7	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)