

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: P294041

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294041
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-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8411.0 lumens
Efficiency: N/A
Efficacy: 131.1 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

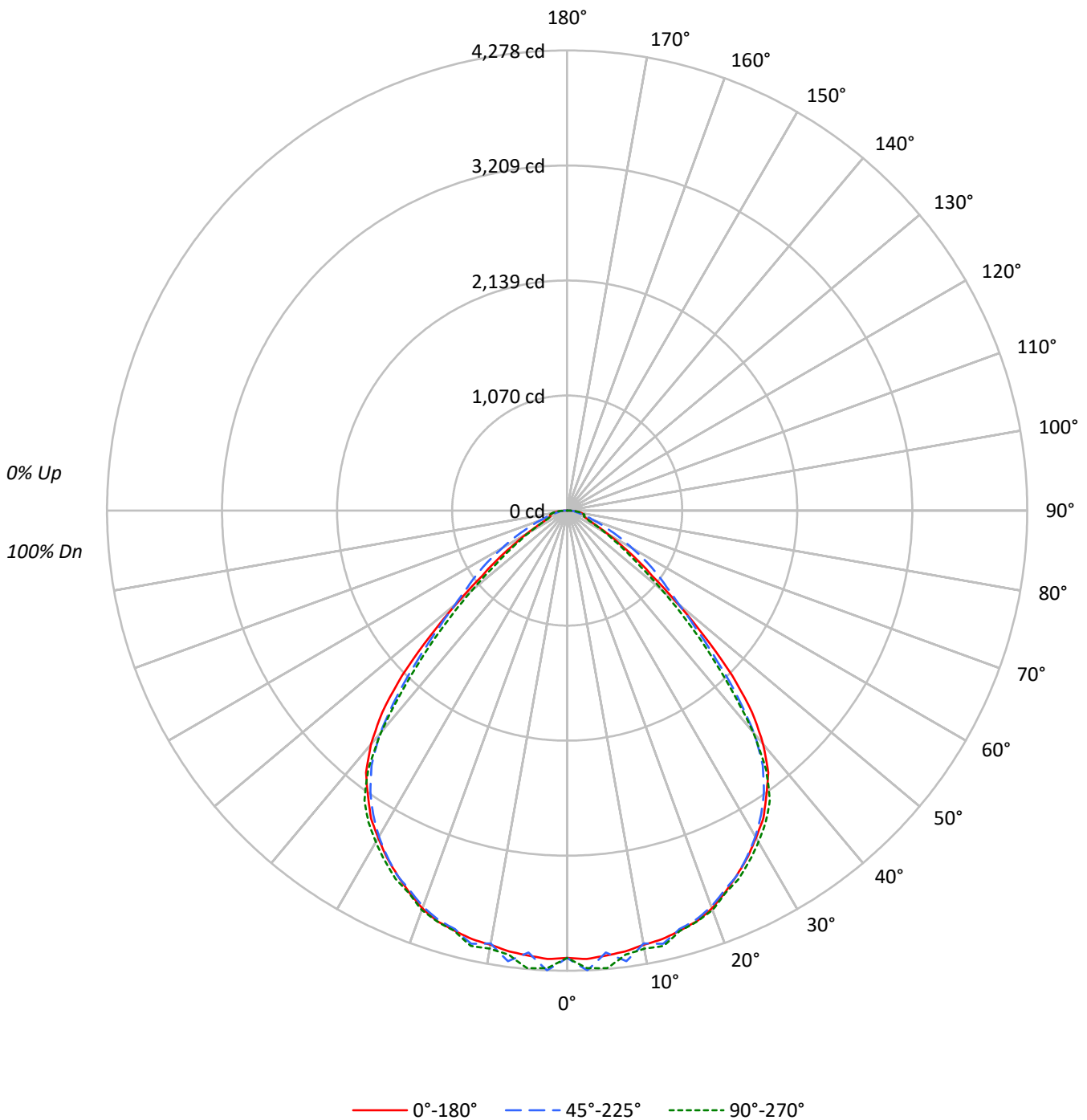
Input Watts (W): 64.17
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5596	5596	5596
5°	5608	5572	5769
10°	5599	5583	5651
15°	5631	5613	5635
20°	5636	5613	5659
25°	5549	5553	5607
30°	5456	5440	5528
35°	5303	5238	5396
40°	4980	4757	4731
45°	4128	3735	3542
50°	2776	2833	2420
55°	1831	2377	1587
60°	1174	1876	1087
65°	757	1432	735
70°	670	1026	670
75°	863	815	871
80°	1057	701	1110
85°	1230	1042	1292



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.2	4.7
10°-20°	1143.4	13.6
20°-30°	1721.4	20.5
30°-40°	1995.2	23.7
40°-50°	1558.6	18.5
50°-60°	832.2	9.9
60°-70°	428.0	5.1
70°-80°	242.1	2.9
80°-90°	91.9	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
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0°-30°	3263.0	38.8
0°-40°	5258.2	62.5
0°-60°	7649.0	90.9
0°-90°	8411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4159	4159	4159	4159	4159	
5°	4152	4268	4125	4239	4271	395
15°	4043	4068	4029	4055	4046	1142
25°	3738	3725	3740	3735	3777	1722
35°	3228	3214	3189	3253	3285	2013
45°	2169	2171	1963	1945	1861	1635
55°	781	987	1013	913	677	720
65°	238	496	450	494	231	261
75°	166	312	157	292	168	168
85°	80	104	68	104	84	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4159.0	4159.0	4159.0	4159.0	4159.0
2.5°	4172.5	4248.1	4277.9	4241.4	4257.6
5°	4152.2	4268.4	4125.2	4238.7	4271.1
7.5°	4133.3	4121.2	4225.2	4117.1	4163.1
10°	4098.2	4106.3	4086.1	4163.1	4136.0
12.5°	4082.0	4129.3	4125.2	4086.1	4145.5
15°	4042.8	4068.5	4029.3	4055.0	4045.5
17.5°	4003.7	3991.5	3987.5	3998.3	4007.7
20°	3936.1	3895.6	3919.9	3922.6	3952.3
22.5°	3838.9	3814.6	3820.0	3844.3	3847.0
25°	3737.6	3725.4	3740.3	3734.9	3776.7
27.5°	3632.2	3616.0	3625.4	3645.7	3671.4
30°	3512.0	3507.9	3501.2	3518.7	3557.9
32.5°	3393.1	3360.7	3355.3	3391.8	3436.3
35°	3228.3	3213.5	3189.2	3252.6	3285.1
37.5°	3071.6	3025.7	2986.5	3024.4	3037.9
40°	2835.3	2800.1	2708.3	2712.3	2693.4
42.5°	2544.8	2519.2	2343.6	2312.5	2259.8
45°	2169.3	2170.7	1962.7	1945.1	1861.4
47.5°	1733.0	1810.0	1629.0	1608.8	1484.5
50°	1326.4	1465.6	1353.5	1321.0	1156.3
52.5°	995.5	1199.5	1164.4	1094.1	867.2
55°	780.7	987.4	1013.1	913.1	676.7
57.5°	587.6	813.2	855.0	772.6	522.7
60°	436.3	684.8	697.0	664.6	403.9
62.5°	324.2	582.2	566.0	570.0	299.9
65°	237.7	495.7	449.8	494.4	231.0
67.5°	194.5	429.5	349.8	428.2	187.8
70°	170.2	380.9	260.7	376.9	170.2
72.5°	164.8	349.8	206.7	335.0	166.1
75°	166.1	312.0	156.7	291.8	167.5
77.5°	152.6	256.6	118.9	248.5	159.4
80°	136.4	194.5	90.5	197.2	143.2
82.5°	116.2	141.8	72.9	145.9	120.2
85°	79.7	104.0	67.5	104.0	83.7
87.5°	37.8	62.1	41.9	59.4	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)