

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: P294090

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294090  
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-LD5-30-A19/156-UNV-L92765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2538.0 lumens  
Efficiency: N/A  
Efficacy: 126.3 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

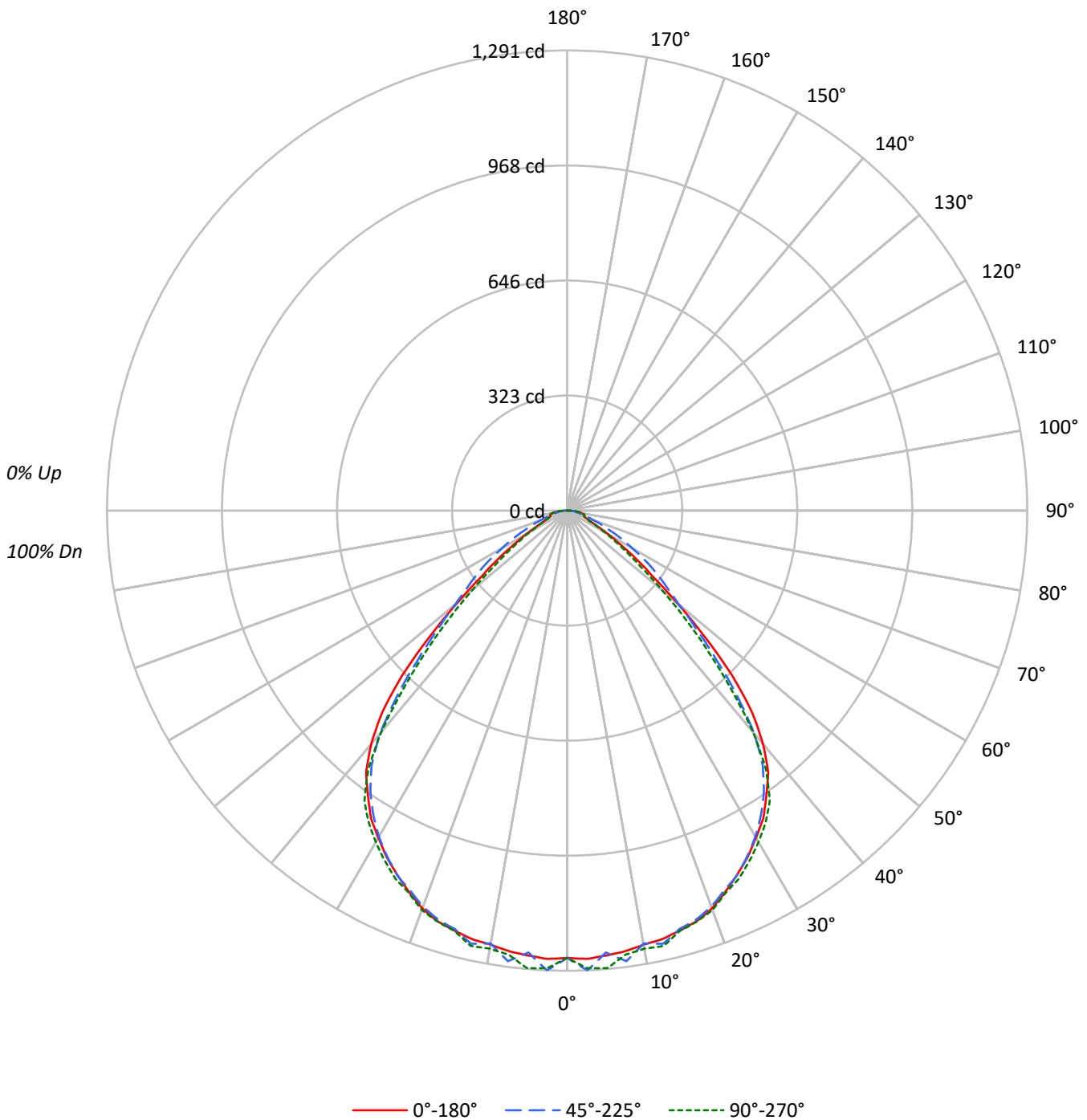
Input Watts (W): 20.088  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1689	1689	1689
5°	1692	1681	1741
10°	1689	1685	1705
15°	1699	1694	1700
20°	1701	1694	1708
25°	1674	1676	1692
30°	1646	1641	1668
35°	1600	1581	1628
40°	1503	1435	1427
45°	1246	1127	1069
50°	838	855	730
55°	553	717	479
60°	354	566	328
65°	228	432	222
70°	202	310	202
75°	260	246	263
80°	319	212	335
85°	371	315	391



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	4.7
10°-20°	345.0	13.6
20°-30°	519.4	20.5
30°-40°	602.1	23.7
40°-50°	470.3	18.5
50°-60°	251.1	9.9
60°-70°	129.1	5.1
70°-80°	73.1	2.9
80°-90°	27.7	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°	984.6	38.8
0°-40°	1586.7	62.5
0°-60°	2308.1	90.9
0°-90°	2538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1253	1288	1245	1279	1289	119
15°	1220	1228	1216	1224	1221	345
25°	1128	1124	1129	1127	1140	520
35°	974	970	962	982	991	607
45°	655	655	592	587	562	493
55°	236	298	306	276	204	217
65°	72	150	136	149	70	79
75°	50	94	47	88	50	51
85°	24	31	20	31	25	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1255.0	1255.0	1255.0	1255.0	1255.0
2.5°	1259.0	1281.9	1290.8	1279.8	1284.7
5°	1252.9	1288.0	1244.8	1279.0	1288.8
7.5°	1247.2	1243.6	1274.9	1242.3	1256.2
10°	1236.6	1239.1	1233.0	1256.2	1248.0
12.5°	1231.7	1246.0	1244.8	1233.0	1250.9
15°	1219.9	1227.7	1215.8	1223.6	1220.7
17.5°	1208.1	1204.4	1203.2	1206.5	1209.3
20°	1187.7	1175.5	1182.8	1183.6	1192.6
22.5°	1158.4	1151.0	1152.7	1160.0	1160.8
25°	1127.8	1124.1	1128.6	1127.0	1139.6
27.5°	1096.0	1091.1	1094.0	1100.1	1107.8
30°	1059.7	1058.5	1056.5	1061.8	1073.6
32.5°	1023.9	1014.1	1012.5	1023.5	1036.9
35°	974.1	969.7	962.3	981.5	991.3
37.5°	926.9	913.0	901.2	912.6	916.7
40°	855.5	844.9	817.2	818.4	812.7
42.5°	767.9	760.2	707.2	697.8	681.9
45°	654.6	655.0	592.2	586.9	561.7
47.5°	522.9	546.2	491.6	485.4	447.9
50°	400.3	442.2	408.4	398.6	348.9
52.5°	300.4	361.9	351.3	330.1	261.7
55°	235.6	297.9	305.7	275.5	204.2
57.5°	177.3	245.4	258.0	233.1	157.7
60°	131.7	206.6	210.3	200.5	121.9
62.5°	97.8	175.7	170.8	172.0	90.5
65°	71.7	149.6	135.7	149.2	69.7
67.5°	58.7	129.6	105.6	129.2	56.7
70°	51.4	114.9	78.7	113.7	51.4
72.5°	49.7	105.6	62.4	101.1	50.1
75°	50.1	94.2	47.3	88.0	50.5
77.5°	46.1	77.4	35.9	75.0	48.1
80°	41.2	58.7	27.3	59.5	43.2
82.5°	35.1	42.8	22.0	44.0	36.3
85°	24.0	31.4	20.4	31.4	25.3
87.5°	11.4	18.7	12.6	17.9	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)