

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: P294116

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294116  
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-LD5-42-A19/156-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3325.0 lumens  
Efficiency: N/A  
Efficacy: 120.0 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

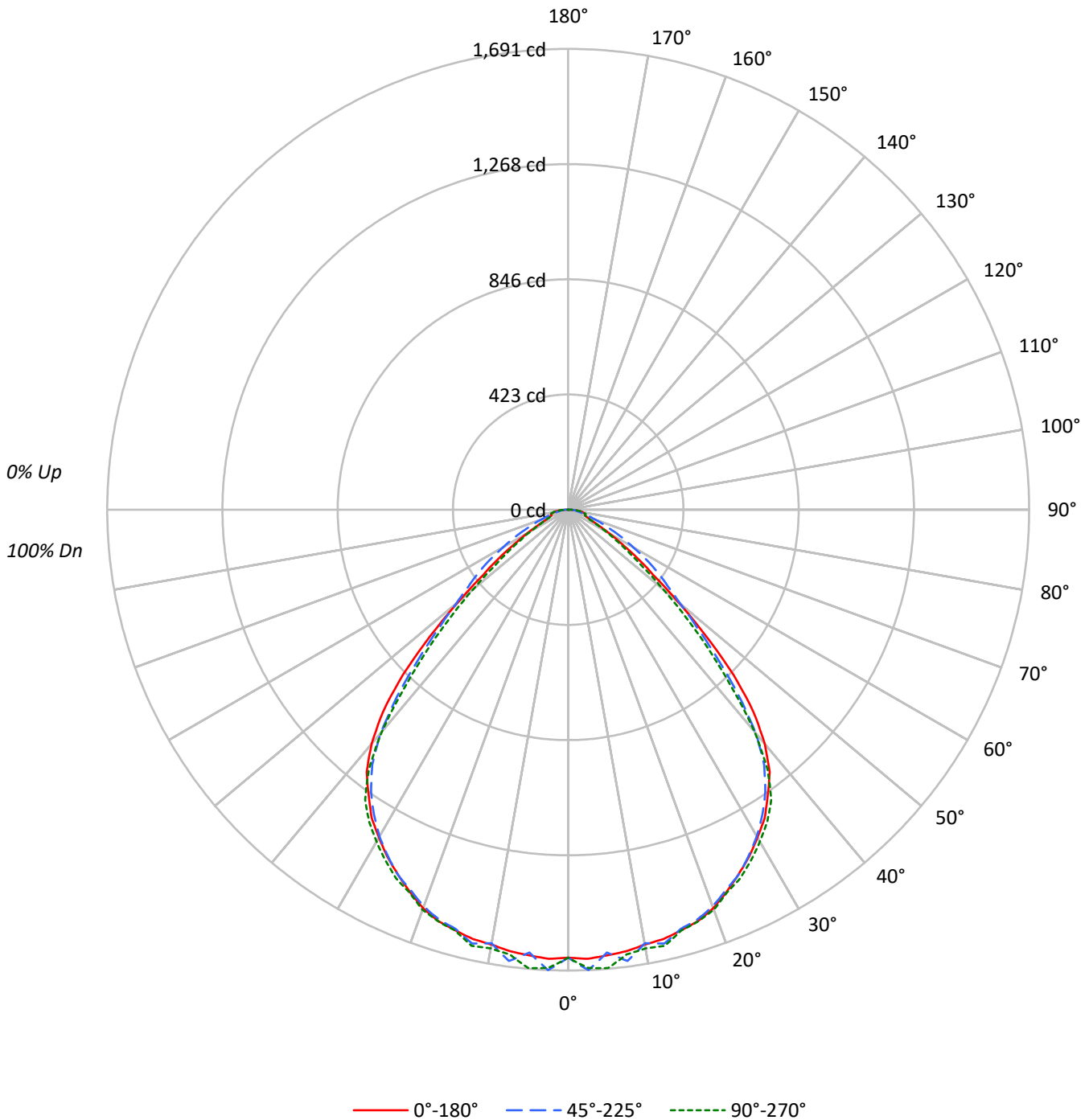
Input Watts (W): 27.714  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2212	2212	2212
5°	2217	2203	2280
10°	2213	2207	2234
15°	2226	2219	2228
20°	2228	2219	2237
25°	2193	2195	2216
30°	2157	2150	2185
35°	2096	2071	2133
40°	1969	1880	1870
45°	1632	1476	1400
50°	1098	1120	957
55°	724	939	627
60°	464	741	430
65°	299	566	291
70°	265	406	265
75°	342	322	344
80°	418	277	439
85°	486	412	511



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.4	4.7
10°-20°	452.0	13.6
20°-30°	680.5	20.5
30°-40°	788.7	23.7
40°-50°	616.1	18.5
50°-60°	329.0	9.9
60°-70°	169.2	5.1
70°-80°	95.7	2.9
80°-90°	36.4	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°	1289.9	38.8
0°-40°	2078.6	62.5
0°-60°	3023.8	90.9
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1644	1644	1644	1644	1644	
5°	1641	1687	1631	1676	1688	156
15°	1598	1608	1593	1603	1599	451
25°	1478	1473	1479	1476	1493	681
35°	1276	1270	1261	1286	1299	796
45°	858	858	776	769	736	646
55°	309	390	400	361	268	285
65°	94	196	178	195	91	103
75°	66	123	62	115	66	67
85°	32	41	27	41	33	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1644.1	1644.1	1644.1	1644.1	1644.1
2.5°	1649.5	1679.4	1691.1	1676.7	1683.1
5°	1641.4	1687.4	1630.8	1675.6	1688.4
7.5°	1634.0	1629.2	1670.3	1627.6	1645.7
10°	1620.1	1623.3	1615.3	1645.7	1635.0
12.5°	1613.7	1632.4	1630.8	1615.3	1638.8
15°	1598.2	1608.3	1592.9	1603.0	1599.3
17.5°	1582.7	1577.9	1576.3	1580.6	1584.3
20°	1556.0	1540.0	1549.6	1550.7	1562.4
22.5°	1517.6	1508.0	1510.1	1519.7	1520.8
25°	1477.5	1472.7	1478.6	1476.4	1493.0
27.5°	1435.9	1429.5	1433.2	1441.2	1451.4
30°	1388.3	1386.7	1384.1	1391.0	1406.5
32.5°	1341.4	1328.5	1326.4	1340.8	1358.4
35°	1276.2	1270.3	1260.7	1285.8	1298.6
37.5°	1214.3	1196.1	1180.6	1195.6	1200.9
40°	1120.8	1106.9	1070.6	1072.2	1064.8
42.5°	1006.0	995.9	926.5	914.2	893.3
45°	857.6	858.1	775.9	768.9	735.8
47.5°	685.1	715.5	644.0	636.0	586.8
50°	524.4	579.4	535.0	522.2	457.1
52.5°	393.5	474.2	460.3	432.5	342.8
55°	308.6	390.3	400.5	361.0	267.5
57.5°	232.3	321.5	338.0	305.4	206.6
60°	172.5	270.7	275.5	262.7	159.7
62.5°	128.2	230.1	223.7	225.3	118.5
65°	94.0	196.0	177.8	195.4	91.3
67.5°	76.9	169.8	138.3	169.3	74.2
70°	67.3	150.6	103.1	149.0	67.3
72.5°	65.1	138.3	81.7	132.4	65.7
75°	65.7	123.3	61.9	115.3	66.2
77.5°	60.3	101.5	47.0	98.3	63.0
80°	53.9	76.9	35.8	78.0	56.6
82.5°	45.9	56.1	28.8	57.7	47.5
85°	31.5	41.1	26.7	41.1	33.1
87.5°	15.0	24.6	16.6	23.5	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)