

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: P293499

Luminaire Tested: **24GR-LD5-48-A-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293499  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-A-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5051.0 lumens  
Efficiency: N/A  
Efficacy: 150.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

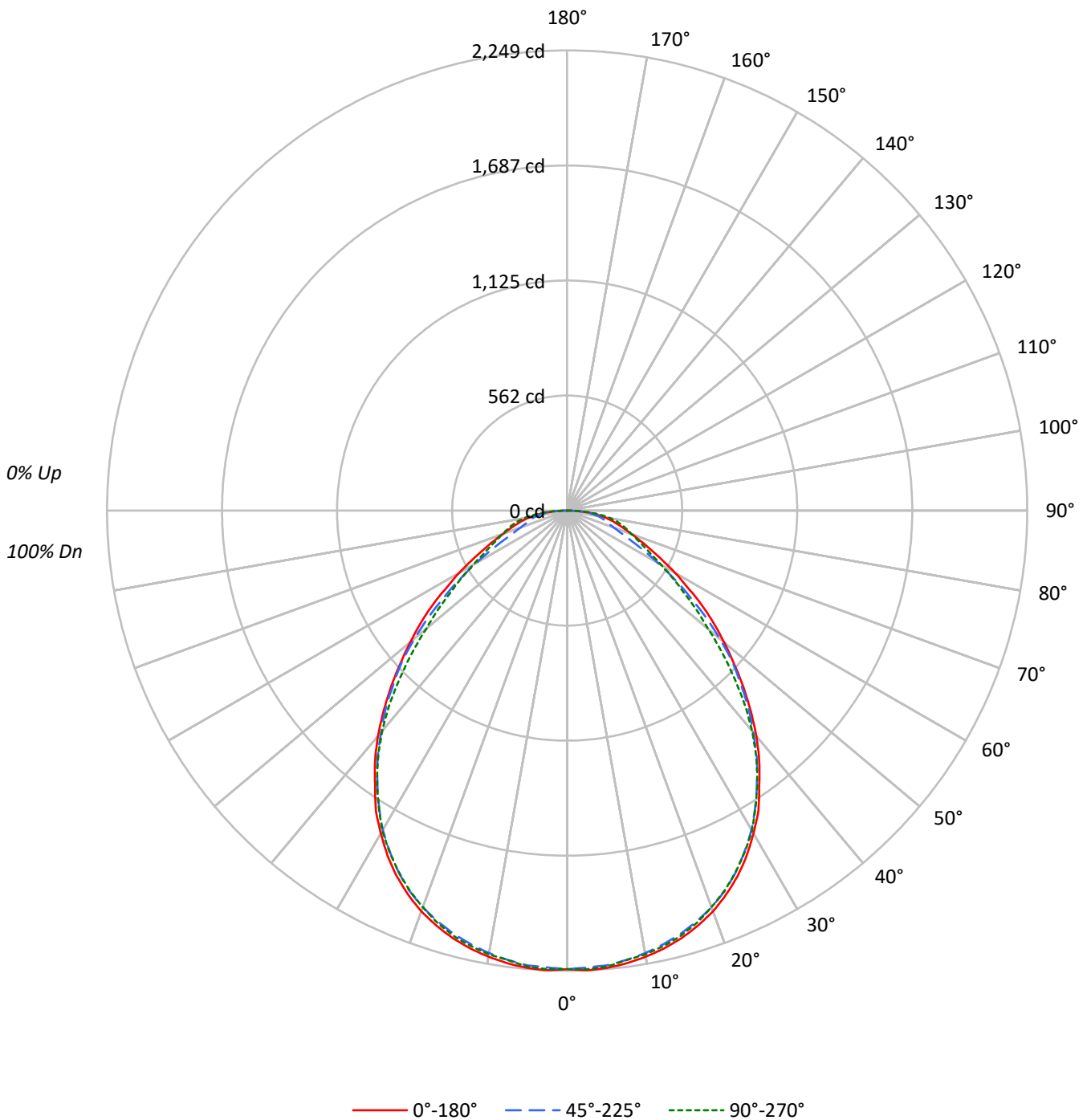
Input Watts (W): 33.573  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3015	3015	3015
5°	3030	3013	3021
10°	3025	3000	3009
15°	3013	2983	2996
20°	2984	2954	2953
25°	2926	2895	2893
30°	2830	2800	2806
35°	2688	2657	2661
40°	2527	2483	2468
45°	2316	2285	2195
50°	2094	2037	1883
55°	1880	1711	1624
60°	1646	1378	1428
65°	1436	1083	1314
70°	1314	945	1314
75°	1314	1006	1448
80°	1427	1185	1650
85°	1565	1337	1771



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.2	4.2
10°-20°	605.6	12.0
20°-30°	898.0	17.8
30°-40°	1013.1	20.1
40°-50°	917.6	18.2
50°-60°	662.0	13.1
60°-70°	395.3	7.8
70°-80°	244.3	4.8
80°-90°	102.9	2.0
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°	1715.9	34.0
0°-40°	2729.0	54.0
0°-60°	4308.6	85.3
0°-90°	5051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5051.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2243	2240	2231	2229	2236	213
15°	2163	2150	2141	2142	2151	610
25°	1971	1960	1950	1943	1948	906
35°	1636	1634	1618	1618	1620	1024
45°	1217	1210	1201	1171	1153	938
55°	801	776	730	694	692	715
65°	451	397	340	386	413	454
75°	253	219	194	241	279	270
85°	101	89	87	113	115	106
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2241.1	2241.1	2241.1	2241.1	2241.1
2.5°	2248.9	2242.6	2234.8	2239.5	2243.4
5°	2243.4	2240.3	2230.9	2228.6	2236.4
7.5°	2231.7	2223.9	2215.3	2219.2	2216.1
10°	2213.8	2206.7	2195.8	2196.6	2202.1
12.5°	2191.9	2183.3	2171.6	2174.7	2179.4
15°	2163.0	2149.8	2141.2	2142.0	2150.6
17.5°	2126.4	2116.2	2105.3	2107.6	2111.5
20°	2084.2	2078.8	2063.2	2058.5	2062.4
22.5°	2031.2	2021.0	2012.4	2010.1	2010.9
25°	1971.1	1960.2	1950.0	1943.0	1948.5
27.5°	1900.9	1891.5	1878.2	1875.9	1880.6
30°	1821.3	1814.2	1802.5	1799.4	1806.4
32.5°	1740.1	1728.4	1712.0	1712.0	1713.6
35°	1636.3	1634.0	1617.6	1618.4	1619.9
37.5°	1542.7	1531.8	1522.4	1513.0	1517.7
40°	1438.9	1426.4	1413.9	1407.7	1405.4
42.5°	1327.3	1318.0	1312.5	1289.9	1284.4
45°	1217.3	1209.5	1200.9	1171.3	1153.3
47.5°	1104.9	1103.4	1096.3	1044.1	1026.1
50°	1000.4	998.0	973.1	917.7	899.7
52.5°	901.3	885.7	852.9	798.3	795.1
55°	801.4	776.4	729.6	693.7	692.1
57.5°	696.0	666.4	618.8	599.3	609.4
60°	611.8	566.5	511.9	514.2	530.6
62.5°	524.4	473.7	419.8	443.2	462.7
65°	451.0	397.2	340.2	386.3	412.8
67.5°	387.0	337.1	282.5	344.1	369.9
70°	334.0	293.4	240.3	305.1	334.0
72.5°	291.8	254.4	213.0	273.9	307.4
75°	252.8	219.3	193.5	241.1	278.6
77.5°	219.3	186.5	174.8	213.0	249.7
80°	184.2	154.5	152.9	185.7	213.0
82.5°	143.6	123.3	123.3	155.3	171.7
85°	101.4	89.0	86.6	113.1	114.7
87.5°	52.3	49.9	45.3	59.3	59.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)