

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: P293502

Luminaire Tested: **24GR-LD5-48-A-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293502  
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-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5128.0 lumens  
Efficiency: N/A  
Efficacy: 149.4 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

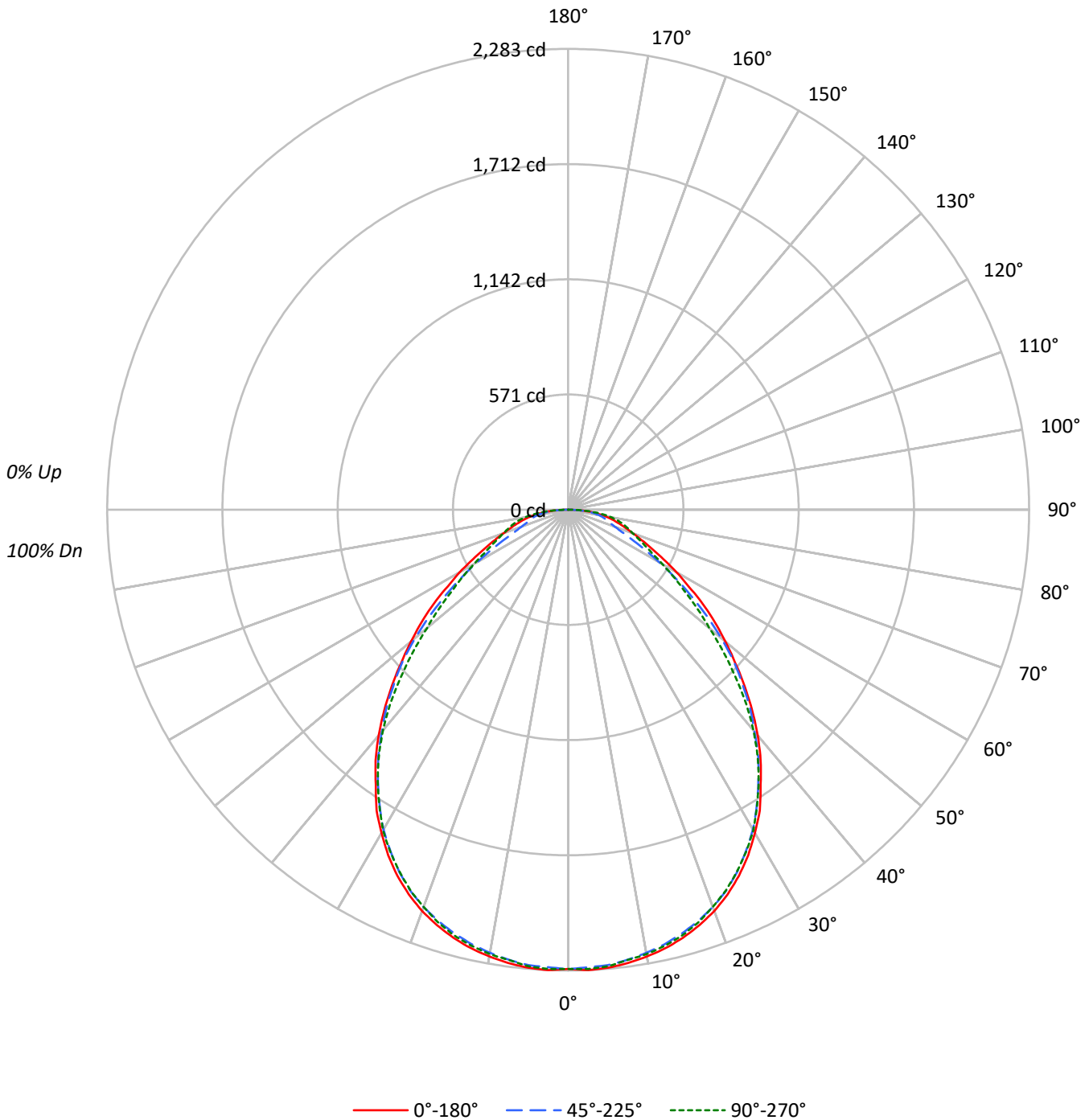
Input Watts (W): 34.317  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3061	3061	3061
5°	3076	3059	3067
10°	3071	3046	3054
15°	3059	3028	3041
20°	3030	2999	2998
25°	2971	2939	2937
30°	2873	2843	2849
35°	2729	2698	2701
40°	2566	2521	2506
45°	2352	2320	2228
50°	2126	2068	1912
55°	1909	1738	1648
60°	1671	1399	1450
65°	1458	1100	1334
70°	1334	960	1334
75°	1334	1022	1470
80°	1449	1203	1676
85°	1590	1357	1798



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.5	4.2
10°-20°	614.9	12.0
20°-30°	911.7	17.8
30°-40°	1028.5	20.1
40°-50°	931.6	18.2
50°-60°	672.1	13.1
60°-70°	401.3	7.8
70°-80°	248.0	4.8
80°-90°	104.5	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°	1742.1	34.0
0°-40°	2770.6	54.0
0°-60°	4374.2	85.3
0°-90°	5128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2275	2275	2275	2275	2275	
5°	2278	2274	2265	2263	2270	216
15°	2196	2182	2174	2175	2183	619
25°	2001	1990	1980	1973	1978	919
35°	1661	1659	1642	1643	1645	1039
45°	1236	1228	1219	1189	1171	952
55°	814	788	741	704	703	726
65°	458	403	345	392	419	461
75°	257	223	196	245	283	274
85°	103	90	88	115	116	108
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2275.2	2275.2	2275.2	2275.2	2275.2
2.5°	2283.2	2276.8	2268.9	2273.6	2277.6
5°	2277.6	2274.4	2264.9	2262.6	2270.5
7.5°	2265.7	2257.8	2249.1	2253.1	2249.9
10°	2247.5	2240.4	2229.3	2230.1	2235.6
12.5°	2225.3	2216.6	2204.7	2207.9	2212.6
15°	2196.0	2182.5	2173.8	2174.6	2183.3
17.5°	2158.8	2148.5	2137.4	2139.8	2143.7
20°	2116.0	2110.5	2094.6	2089.9	2093.8
22.5°	2062.1	2051.8	2043.1	2040.7	2041.5
25°	2001.1	1990.0	1979.7	1972.6	1978.2
27.5°	1929.8	1920.3	1906.9	1904.5	1909.2
30°	1849.0	1841.9	1830.0	1826.8	1834.0
32.5°	1766.6	1754.8	1738.1	1738.1	1739.7
35°	1661.3	1658.9	1642.3	1643.0	1644.6
37.5°	1566.2	1555.1	1545.6	1536.1	1540.9
40°	1460.8	1448.2	1435.5	1429.2	1426.8
42.5°	1347.6	1338.0	1332.5	1309.5	1304.0
45°	1235.9	1227.9	1219.2	1189.1	1170.9
47.5°	1121.8	1120.2	1113.1	1060.0	1041.8
50°	1015.6	1013.2	987.9	931.6	913.4
52.5°	915.0	899.2	865.9	810.4	807.3
55°	813.6	788.3	740.7	704.3	702.7
57.5°	706.7	676.5	628.2	608.4	618.7
60°	621.1	575.1	519.7	522.1	538.7
62.5°	532.4	480.9	426.2	450.0	469.8
65°	457.9	403.2	345.4	392.1	419.1
67.5°	392.9	342.2	286.8	349.4	375.5
70°	339.1	297.9	244.0	309.8	339.1
72.5°	296.3	258.3	216.3	278.1	312.1
75°	256.7	222.6	196.5	244.8	282.8
77.5°	222.6	189.3	177.5	216.3	253.5
80°	187.0	156.9	155.3	188.5	216.3
82.5°	145.8	125.2	125.2	157.7	174.3
85°	103.0	90.3	87.9	114.9	116.5
87.5°	53.1	50.7	45.9	60.2	60.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)