

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: P293504

Luminaire Tested: **24GR-LD5-56-A-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293504  
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-LD5-56-A-UNV-L82765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5382.0 lumens  
Efficiency: N/A  
Efficacy: 139.1 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

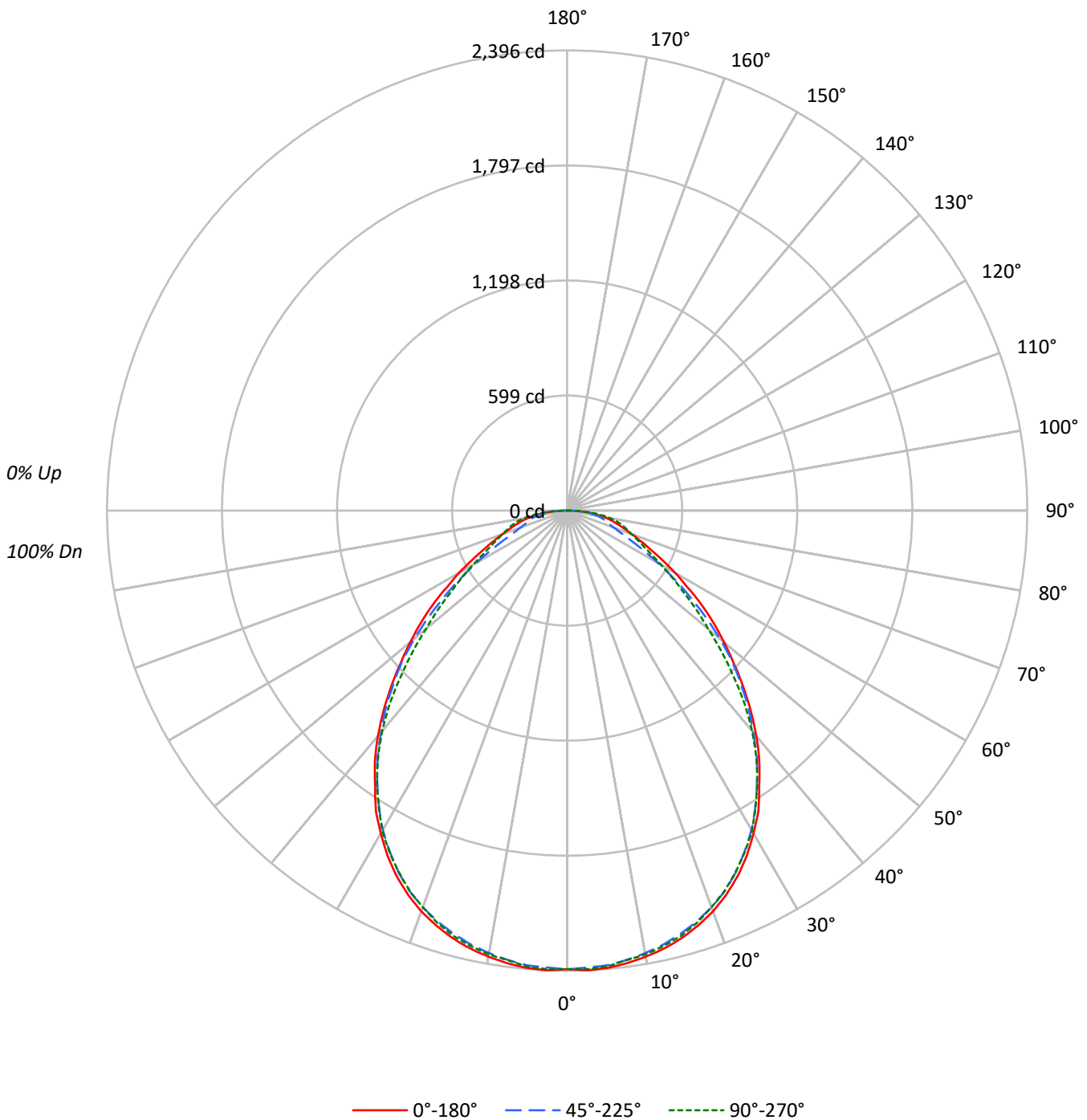
Input Watts (W): 38.688  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3213	3213	3213
5°	3229	3211	3218
10°	3223	3197	3206
15°	3210	3178	3192
20°	3180	3148	3146
25°	3118	3085	3082
30°	3015	2984	2990
35°	2864	2831	2835
40°	2693	2646	2630
45°	2468	2435	2338
50°	2231	2170	2007
55°	2003	1824	1730
60°	1754	1468	1521
65°	1530	1154	1400
70°	1400	1007	1400
75°	1400	1072	1543
80°	1520	1263	1759
85°	1669	1425	1886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.1	4.2
10°-20°	645.3	12.0
20°-30°	956.9	17.8
30°-40°	1079.5	20.1
40°-50°	977.7	18.2
50°-60°	705.4	13.1
60°-70°	421.2	7.8
70°-80°	260.3	4.8
80°-90°	109.7	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°	1828.4	34.0
0°-40°	2907.8	54.0
0°-60°	4590.9	85.3
0°-90°	5382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2388	2388	2388	2388	2388	
5°	2390	2387	2377	2375	2383	227
15°	2305	2291	2282	2282	2292	650
25°	2100	2089	2078	2070	2076	965
35°	1744	1741	1724	1724	1726	1091
45°	1297	1289	1280	1248	1229	1000
55°	854	827	777	739	738	762
65°	481	423	362	412	440	483
75°	269	234	206	257	297	288
85°	108	95	92	121	122	113
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2387.9	2387.9	2387.9	2387.9	2387.9
2.5°	2396.2	2389.6	2381.3	2386.3	2390.4
5°	2390.4	2387.1	2377.1	2374.6	2382.9
7.5°	2378.0	2369.6	2360.5	2364.7	2361.3
10°	2358.8	2351.3	2339.7	2340.5	2346.4
12.5°	2335.5	2326.4	2313.9	2317.3	2322.2
15°	2304.8	2290.7	2281.5	2282.3	2291.5
17.5°	2265.7	2254.9	2243.3	2245.8	2249.9
20°	2220.8	2215.0	2198.4	2193.4	2197.5
22.5°	2164.3	2153.5	2144.3	2141.8	2142.7
25°	2100.2	2088.6	2077.8	2070.3	2076.1
27.5°	2025.4	2015.4	2001.3	1998.8	2003.8
30°	1940.6	1933.1	1920.7	1917.3	1924.8
32.5°	1854.1	1841.7	1824.2	1824.2	1825.9
35°	1743.6	1741.1	1723.6	1724.4	1726.1
37.5°	1643.8	1632.1	1622.2	1612.2	1617.2
40°	1533.2	1519.9	1506.6	1499.9	1497.4
42.5°	1414.3	1404.3	1398.5	1374.4	1368.6
45°	1297.1	1288.8	1279.6	1248.0	1228.9
47.5°	1177.3	1175.7	1168.2	1112.5	1093.4
50°	1065.9	1063.4	1036.8	977.8	958.7
52.5°	960.3	943.7	908.8	850.6	847.2
55°	853.9	827.3	777.4	739.2	737.5
57.5°	741.7	710.1	659.3	638.6	649.4
60°	651.9	603.6	545.4	547.9	565.4
62.5°	558.7	504.7	447.3	472.3	493.1
65°	480.6	423.2	362.5	411.6	439.8
67.5°	412.4	359.2	301.0	366.7	394.1
70°	355.9	312.6	256.1	325.1	355.9
72.5°	311.0	271.1	227.0	291.8	327.6
75°	269.4	233.6	206.2	256.9	296.8
77.5°	233.6	198.7	186.2	227.0	266.1
80°	196.2	164.6	163.0	197.9	227.0
82.5°	153.0	131.4	131.4	165.5	182.9
85°	108.1	94.8	92.3	120.6	122.2
87.5°	55.7	53.2	48.2	63.2	63.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)