

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: P293661

Luminaire Tested: **24GR-LD5-85-A-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293661  
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-LD5-85-A-UNV-L92765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7752.0 lumens  
Efficiency: N/A  
Efficacy: 121.3 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

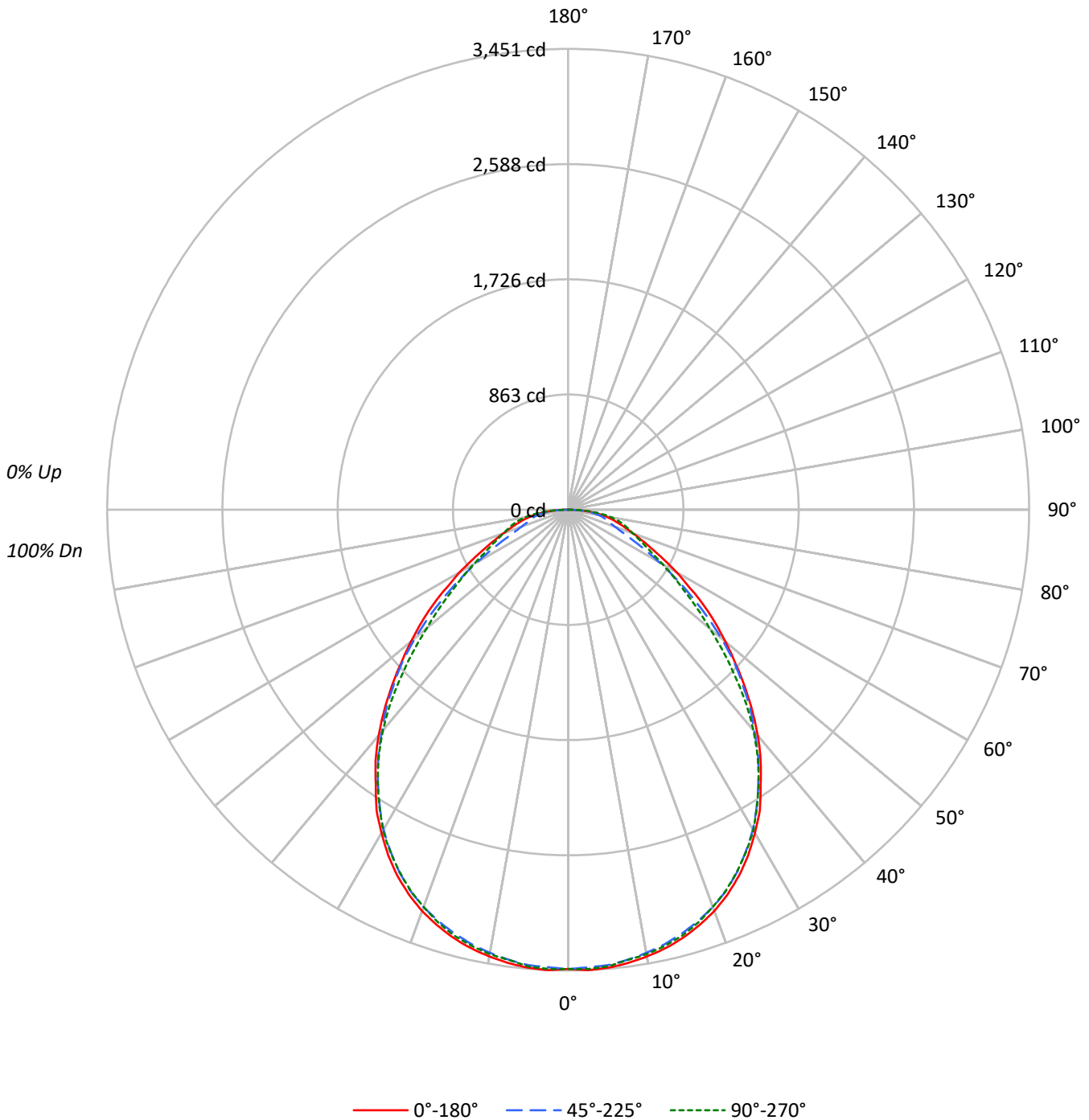
Input Watts (W): 63.891  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4628	4628	4628
5°	4650	4624	4636
10°	4642	4604	4617
15°	4624	4578	4598
20°	4580	4534	4532
25°	4491	4443	4439
30°	4343	4298	4307
35°	4125	4078	4084
40°	3879	3811	3788
45°	3555	3507	3368
50°	3214	3126	2890
55°	2885	2627	2492
60°	2527	2114	2192
65°	2204	1662	2017
70°	2017	1451	2017
75°	2017	1544	2222
80°	2190	1819	2533
85°	2404	2052	2717



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.7	4.2
10°-20°	929.5	12.0
20°-30°	1378.3	17.8
30°-40°	1554.8	20.1
40°-50°	1408.2	18.2
50°-60°	1016.0	13.1
60°-70°	606.6	7.8
70°-80°	374.9	4.8
80°-90°	157.9	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°	2633.5	34.0
0°-40°	4188.3	54.0
0°-60°	6612.5	85.3
0°-90°	7752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7752.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3440	3440	3440	3440	3440	
5°	3443	3438	3424	3420	3432	327
15°	3320	3299	3286	3287	3301	936
25°	3025	3008	2993	2982	2990	1390
35°	2511	2508	2483	2484	2486	1571
45°	1868	1856	1843	1798	1770	1440
55°	1230	1192	1120	1065	1062	1098
65°	692	610	522	593	634	696
75°	388	336	297	370	428	414
85°	156	136	133	174	176	163
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3439.5	3439.5	3439.5	3439.5	3439.5
2.5°	3451.4	3441.9	3429.9	3437.1	3443.1
5°	3443.1	3438.3	3423.9	3420.3	3432.3
7.5°	3425.1	3413.1	3400.0	3405.9	3401.1
10°	3397.6	3386.8	3370.0	3371.2	3379.6
12.5°	3364.0	3350.9	3332.9	3337.7	3344.9
15°	3319.7	3299.4	3286.2	3287.4	3300.6
17.5°	3263.4	3247.9	3231.1	3234.7	3240.7
20°	3198.8	3190.4	3166.4	3159.2	3165.2
22.5°	3117.3	3101.8	3088.6	3085.0	3086.2
25°	3025.1	3008.3	2992.8	2982.0	2990.4
27.5°	2917.3	2903.0	2882.6	2879.0	2886.2
30°	2795.2	2784.4	2766.4	2761.6	2772.4
32.5°	2670.6	2652.7	2627.5	2627.5	2629.9
35°	2511.3	2507.7	2482.6	2483.8	2486.2
37.5°	2367.6	2350.9	2336.5	2322.1	2329.3
40°	2208.4	2189.2	2170.0	2160.4	2156.9
42.5°	2037.1	2022.7	2014.3	1979.6	1971.2
45°	1868.2	1856.3	1843.1	1797.6	1770.0
47.5°	1695.8	1693.4	1682.6	1602.4	1574.8
50°	1535.3	1531.7	1493.4	1408.4	1380.8
52.5°	1383.2	1359.3	1309.0	1225.1	1220.3
55°	1229.9	1191.6	1119.7	1064.7	1062.3
57.5°	1068.2	1022.7	949.7	919.7	935.3
60°	938.9	869.4	785.6	789.2	814.4
62.5°	804.8	726.9	644.3	680.2	710.2
65°	692.2	609.6	522.1	592.8	633.5
67.5°	594.0	517.4	433.5	528.1	567.7
70°	512.6	450.3	368.9	468.3	512.6
72.5°	447.9	390.4	326.9	420.4	471.8
75°	388.0	336.5	297.0	370.1	427.5
77.5°	336.5	286.2	268.3	326.9	383.2
80°	282.6	237.1	234.7	285.0	326.9
82.5°	220.4	189.2	189.2	238.3	263.5
85°	155.7	136.5	132.9	173.7	176.0
87.5°	80.2	76.6	69.5	91.0	91.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)