

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: P475754

Luminaire Tested: **24GR-LD5-85-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475754  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-A-UNV-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8448.6 lumens  
Efficiency: N/A  
Efficacy: 142.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

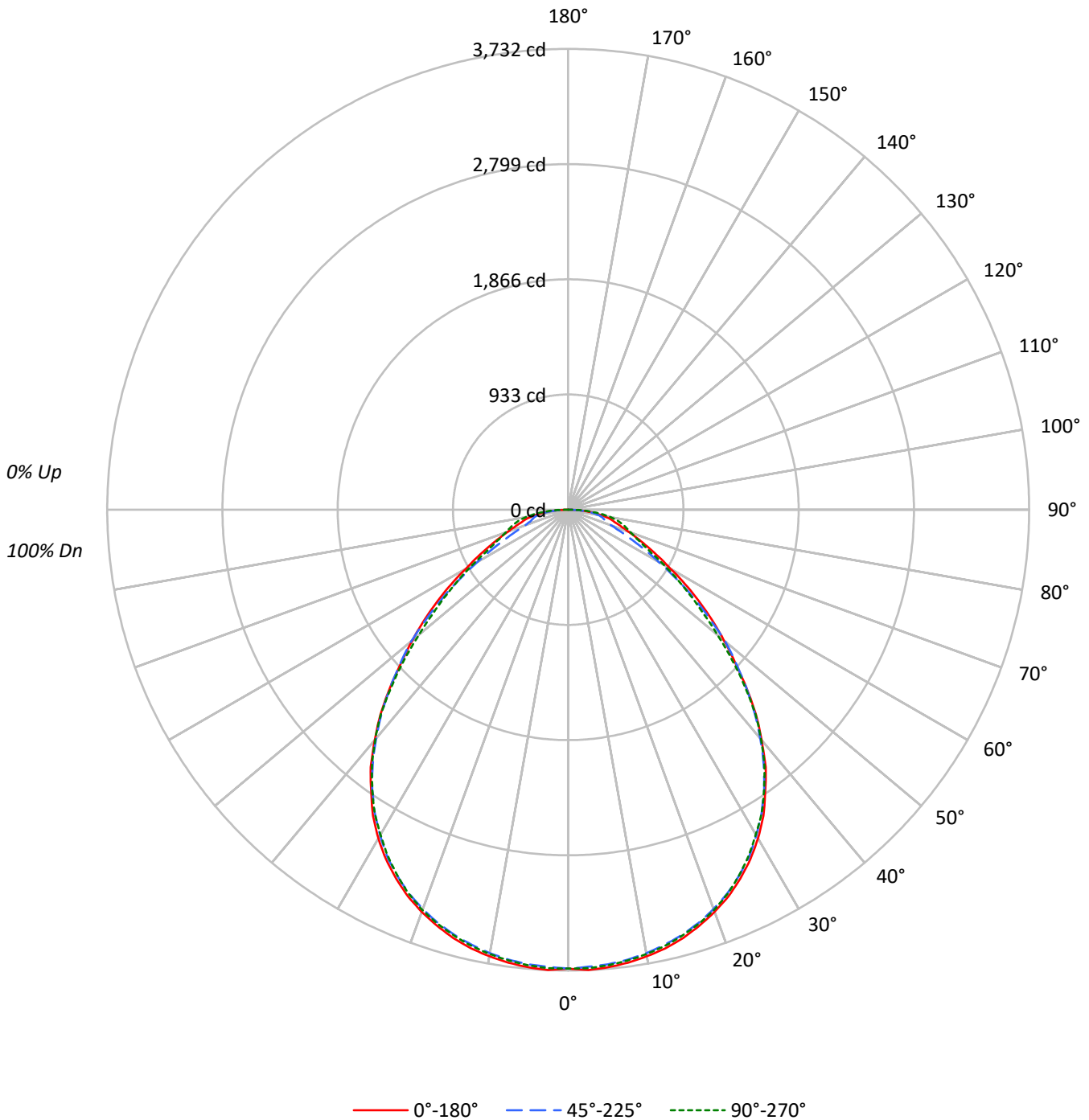
Input Watts (W): 59.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475754

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475754

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L850-CD1-U

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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

	0°	45°	90°
0°	5000	5000	5000
5°	5024	4991	5002
10°	5017	4983	4993
15°	5002	4963	4975
20°	4963	4928	4941
25°	4894	4858	4855
30°	4776	4732	4720
35°	4571	4542	4542
40°	4277	4252	4269
45°	3883	3877	3845
50°	3444	3470	3300
55°	3027	2894	2826
60°	2577	2285	2404
65°	2251	1777	2121
70°	2035	1463	2117
75°	2037	1561	2365
80°	2243	1921	2707
85°	2311	2158	2953



TEST NUMBER: P475754

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L850-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.9	4.2
10°-20°	1007.4	11.9
20°-30°	1506.9	17.8
30°-40°	1724.5	20.4
40°-50°	1562.4	18.5
50°-60°	1106.1	13.1
60°-70°	639.0	7.6
70°-80°	387.4	4.6
80°-90°	163.0	1.9
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°	2866.2	33.9
0°-40°	4590.6	54.3
0°-60°	7259.2	85.9
0°-90°	8448.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8448.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3716	3716	3716	3716	3716	
5°	3720	3707	3695	3694	3704	354
15°	3591	3577	3563	3563	3571	1013
25°	3297	3283	3273	3270	3270	1516
35°	2783	2770	2765	2761	2765	1736
45°	2041	2036	2037	2022	2021	1572
55°	1290	1247	1234	1197	1204	1156
65°	707	634	558	639	666	711
75°	392	351	300	386	455	420
85°	150	135	140	179	191	161
90°	0	0	0	0	0	



TEST NUMBER: P475754

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3716.0	3716.0	3716.0	3716.0	3716.0
2.5°	3731.8	3717.6	3705.2	3706.8	3716.0
5°	3720.1	3706.8	3695.2	3694.3	3703.5
7.5°	3700.2	3688.5	3675.2	3675.2	3682.7
10°	3671.9	3660.2	3646.9	3646.1	3654.4
12.5°	3638.6	3623.6	3609.5	3609.5	3618.6
15°	3591.2	3577.0	3562.9	3562.9	3571.2
17.5°	3533.0	3520.5	3508.8	3509.7	3516.3
20°	3466.4	3453.9	3441.5	3443.1	3450.6
22.5°	3389.9	3374.9	3364.9	3364.1	3369.1
25°	3296.7	3283.4	3272.6	3270.1	3270.1
27.5°	3192.7	3178.6	3171.1	3159.4	3162.8
30°	3073.8	3058.8	3045.5	3038.8	3038.0
32.5°	2939.8	2924.9	2913.2	2912.4	2915.7
35°	2782.6	2770.1	2765.1	2761.0	2765.1
37.5°	2627.1	2603.8	2599.6	2598.8	2609.6
40°	2434.9	2426.6	2420.7	2416.6	2430.7
42.5°	2250.2	2233.6	2235.2	2219.4	2244.4
45°	2040.6	2036.4	2037.3	2022.3	2020.6
47.5°	1832.6	1831.8	1844.3	1802.7	1800.2
50°	1645.4	1637.1	1657.9	1593.9	1576.4
52.5°	1466.6	1443.3	1436.6	1378.4	1378.4
55°	1290.2	1247.0	1233.7	1197.1	1204.5
57.5°	1123.0	1061.5	1034.0	1033.2	1045.7
60°	957.5	887.6	849.3	879.3	893.4
62.5°	826.0	749.5	691.3	747.9	761.2
65°	707.1	633.9	558.2	638.9	666.3
67.5°	604.8	544.0	449.2	554.9	591.5
70°	517.4	463.4	371.8	489.1	538.2
72.5°	448.4	403.5	323.6	436.7	495.8
75°	391.8	351.0	300.3	386.0	455.0
77.5°	346.9	298.6	281.2	337.7	408.4
80°	289.5	245.4	247.9	290.3	349.4
82.5°	222.9	189.7	199.6	240.4	274.5
85°	149.7	134.8	139.8	178.9	191.3
87.5°	74.0	71.5	76.5	104.8	104.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)