

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: P475739

Luminaire Tested: **24GR-LD5-85-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475739
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8440.3 lumens
Efficiency: N/A
Efficacy: 142.6 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

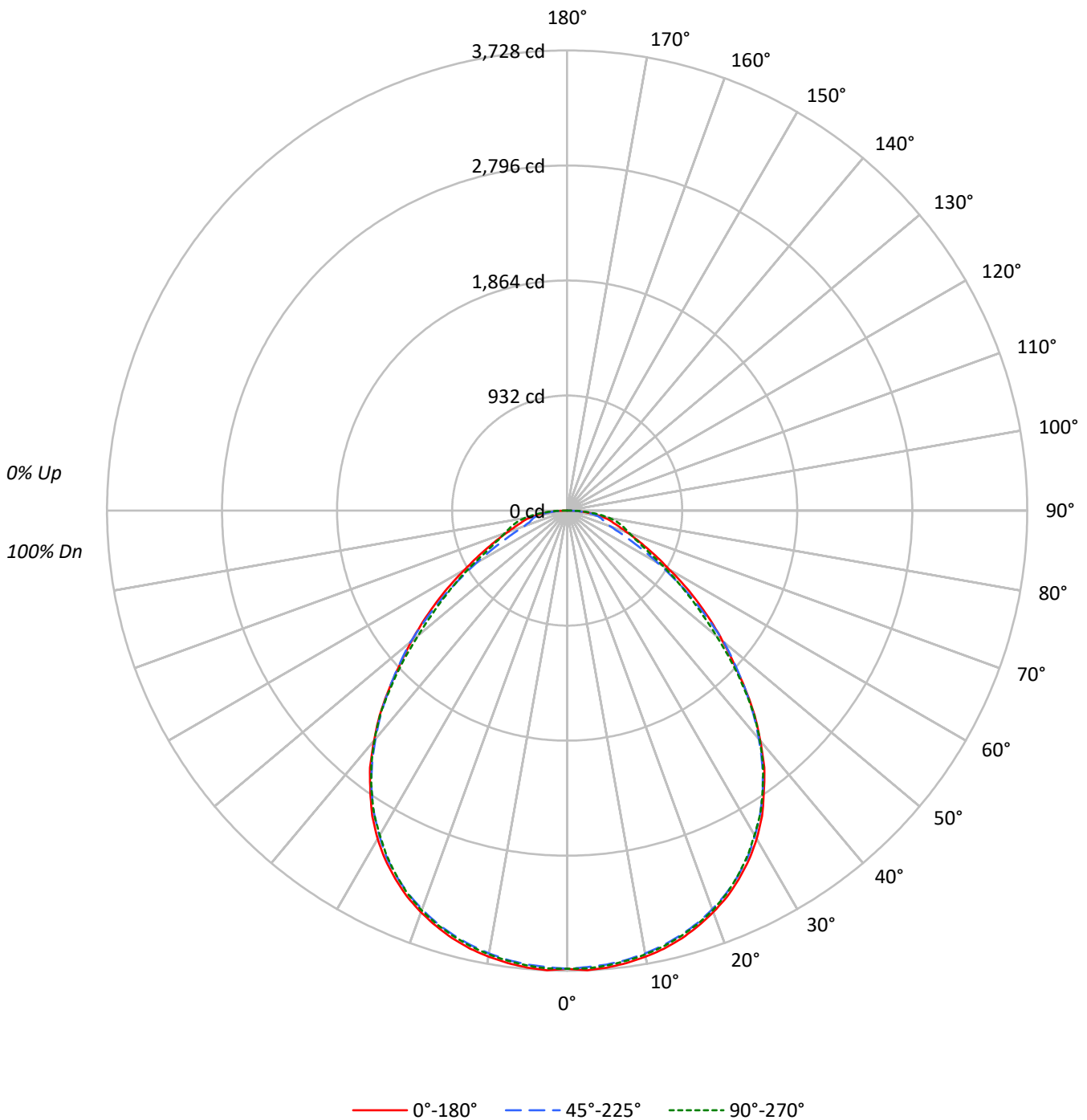
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4995	4995	4995
5°	5020	4986	4997
10°	5012	4978	4988
15°	4997	4958	4970
20°	4958	4923	4936
25°	4889	4854	4850
30°	4771	4727	4715
35°	4566	4537	4537
40°	4272	4248	4265
45°	3879	3873	3841
50°	3441	3467	3297
55°	3024	2891	2823
60°	2574	2283	2402
65°	2249	1775	2119
70°	2033	1461	2115
75°	2035	1560	2363
80°	2241	1919	2704
85°	2309	2155	2950



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.5	4.2
10°-20°	1006.4	11.9
20°-30°	1505.5	17.8
30°-40°	1722.8	20.4
40°-50°	1560.9	18.5
50°-60°	1105.1	13.1
60°-70°	638.4	7.6
70°-80°	387.0	4.6
80°-90°	162.9	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°	2863.4	33.9
0°-40°	4586.1	54.3
0°-60°	7252.1	85.9
0°-90°	8440.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8440.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3712	3712	3712	3712	3712	
5°	3716	3703	3692	3691	3700	353
15°	3588	3574	3559	3559	3568	1012
25°	3294	3280	3269	3267	3267	1515
35°	2780	2767	2762	2758	2762	1734
45°	2039	2034	2035	2020	2019	1570
55°	1289	1246	1232	1196	1203	1155
65°	706	633	558	638	666	710
75°	391	351	300	386	455	419
85°	150	135	140	179	191	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3712.3	3712.3	3712.3	3712.3	3712.3
2.5°	3728.1	3714.0	3701.5	3703.2	3712.3
5°	3716.5	3703.2	3691.6	3690.7	3699.9
7.5°	3696.5	3684.9	3671.6	3671.6	3679.1
10°	3668.3	3656.6	3643.3	3642.5	3650.8
12.5°	3635.0	3620.1	3606.0	3606.0	3615.1
15°	3587.7	3573.5	3559.4	3559.4	3567.7
17.5°	3529.5	3517.0	3505.4	3506.2	3512.9
20°	3463.0	3450.5	3438.1	3439.7	3447.2
22.5°	3386.6	3371.6	3361.6	3360.8	3365.8
25°	3293.5	3280.2	3269.4	3266.9	3266.9
27.5°	3189.6	3175.5	3168.0	3156.4	3159.7
30°	3070.8	3055.8	3042.5	3035.8	3035.0
32.5°	2937.0	2922.0	2910.4	2909.5	2912.9
35°	2779.9	2767.4	2762.4	2758.3	2762.4
37.5°	2624.5	2601.2	2597.0	2596.2	2607.0
40°	2432.5	2424.2	2418.4	2414.2	2428.3
42.5°	2248.0	2231.4	2233.0	2217.3	2242.2
45°	2038.6	2034.4	2035.3	2020.3	2018.6
47.5°	1830.8	1830.0	1842.5	1800.9	1798.4
50°	1643.8	1635.5	1656.3	1592.3	1574.9
52.5°	1465.2	1441.9	1435.2	1377.1	1377.1
55°	1289.0	1245.8	1232.5	1195.9	1203.4
57.5°	1121.9	1060.4	1033.0	1032.2	1044.6
60°	956.5	886.7	848.5	878.4	892.6
62.5°	825.2	748.8	690.6	747.1	760.4
65°	706.4	633.3	557.6	638.3	665.7
67.5°	604.2	543.5	448.8	554.3	590.9
70°	516.9	462.9	371.5	488.7	537.7
72.5°	447.9	403.1	323.3	436.3	495.3
75°	391.4	350.7	300.0	385.6	454.6
77.5°	346.6	298.3	280.9	337.4	408.0
80°	289.2	245.2	247.7	290.0	349.0
82.5°	222.7	189.5	199.5	240.2	274.2
85°	149.6	134.6	139.6	178.7	191.1
87.5°	74.0	71.5	76.5	104.7	104.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)