

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: P475927

Luminaire Tested: **22GR-LD5-85-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475927
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-85-F1-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8714.1 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

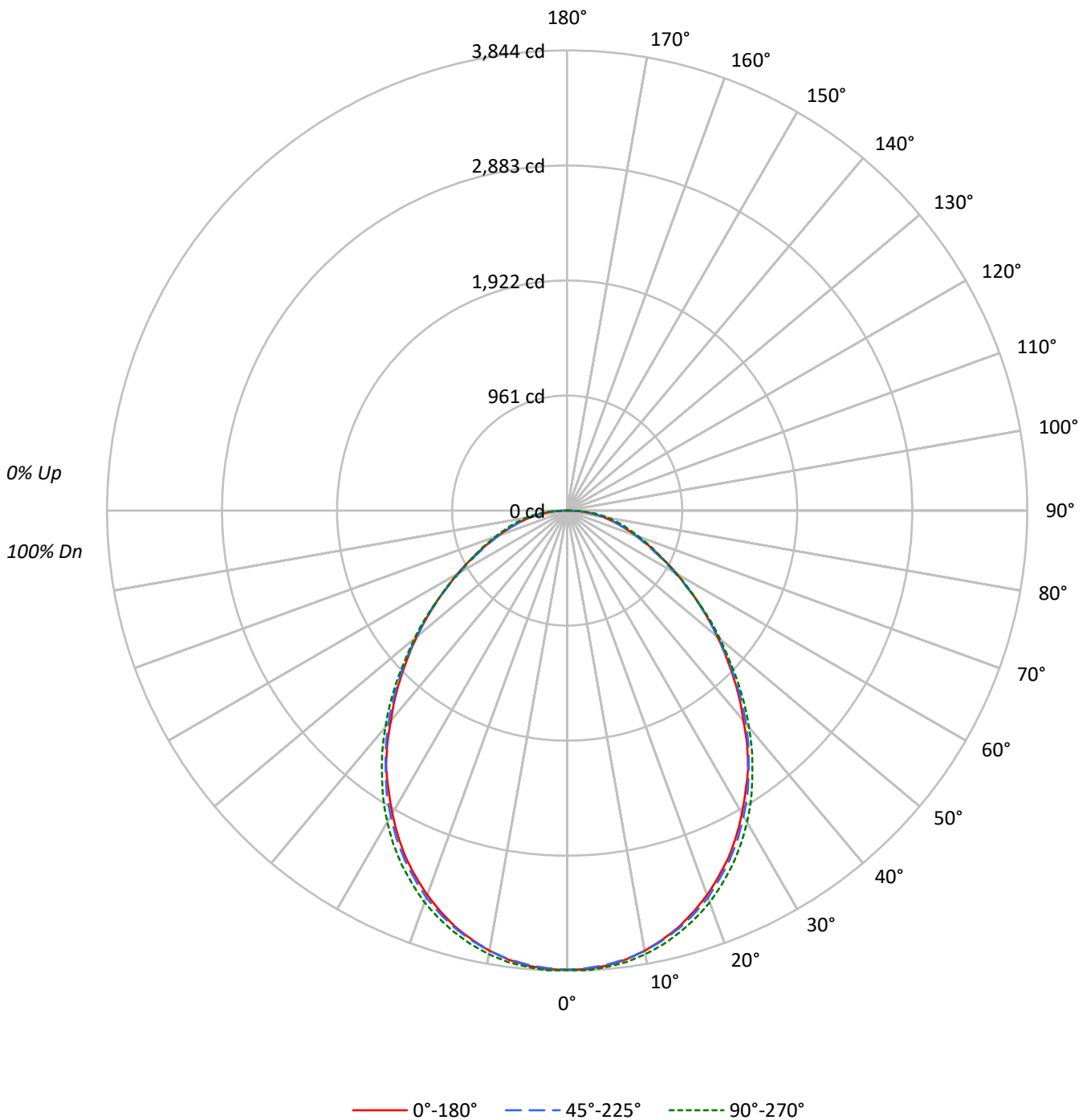
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10324	10324	10324
5°	10304	10284	10334
10°	10202	10202	10283
15°	10033	10064	10156
20°	9787	9850	9976
25°	9482	9548	9700
30°	9078	9158	9341
35°	8656	8680	8861
40°	8043	8159	8301
45°	7468	7538	7650
50°	6862	6862	6969
55°	6293	6224	6259
60°	5696	5597	5676
65°	5195	5078	5242
70°	4799	4771	5002
75°	4624	4585	5044
80°	4669	4669	5353
85°	4878	5107	6126



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	361.8	4.2
10°-20°	1018.4	11.7
20°-30°	1480.8	17.0
30°-40°	1657.5	19.0
40°-50°	1529.8	17.6
50°-60°	1193.8	13.7
60°-70°	808.1	9.3
70°-80°	482.6	5.5
80°-90°	181.3	2.1
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°	2861.0	32.8
0°-40°	4518.5	51.9
0°-60°	7242.2	83.1
0°-90°	8714.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8714.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3837	3837	3837	3837	3837	
5°	3815	3807	3807	3822	3826	362
15°	3601	3601	3612	3634	3646	1013
25°	3194	3194	3216	3249	3267	1467
35°	2635	2631	2642	2683	2697	1639
45°	1962	1973	1981	1996	2010	1514
55°	1341	1330	1327	1334	1334	1197
65°	816	808	798	812	823	812
75°	445	441	441	467	485	472
85°	158	154	165	191	198	168
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3836.6	3836.6	3836.6	3836.6	3836.6
2.5°	3832.9	3825.6	3825.6	3836.6	3844.0
5°	3814.6	3807.2	3807.2	3821.9	3825.6
7.5°	3781.5	3777.8	3777.8	3792.5	3803.5
10°	3733.7	3730.0	3733.7	3748.4	3763.1
12.5°	3671.2	3671.2	3678.6	3697.0	3711.7
15°	3601.4	3601.4	3612.5	3634.5	3645.5
17.5°	3513.2	3516.9	3531.6	3557.3	3568.4
20°	3417.7	3425.0	3439.7	3461.8	3483.8
22.5°	3307.4	3314.8	3329.5	3362.6	3377.3
25°	3193.5	3193.5	3215.6	3248.6	3267.0
27.5°	3061.2	3064.9	3086.9	3123.7	3142.1
30°	2921.6	2932.6	2947.3	2980.4	3006.1
32.5°	2774.6	2785.6	2804.0	2840.7	2859.1
35°	2634.9	2631.2	2642.3	2682.7	2697.4
37.5°	2469.5	2473.2	2487.9	2517.3	2535.7
40°	2289.5	2307.9	2322.6	2344.6	2363.0
42.5°	2131.5	2142.5	2153.5	2175.6	2190.3
45°	1962.4	1973.4	1980.8	1995.5	2010.2
47.5°	1797.0	1800.7	1811.7	1819.1	1830.1
50°	1639.0	1642.7	1639.0	1650.0	1664.7
52.5°	1484.7	1481.0	1481.0	1484.7	1506.7
55°	1341.3	1330.3	1326.6	1334.0	1334.0
57.5°	1183.3	1179.7	1179.7	1176.0	1194.4
60°	1058.4	1047.4	1040.0	1047.4	1054.7
62.5°	929.8	918.7	911.4	926.1	926.1
65°	815.8	808.5	797.5	812.2	823.2
67.5°	705.6	698.2	694.6	712.9	727.6
70°	610.0	606.4	606.4	624.7	635.8
72.5°	521.8	518.2	518.2	543.9	554.9
75°	444.7	441.0	441.0	466.7	485.1
77.5°	367.5	363.8	374.8	396.9	415.3
80°	301.3	297.7	301.3	330.7	345.4
82.5°	227.8	227.8	235.2	264.6	279.3
85°	158.0	154.3	165.4	191.1	198.4
87.5°	80.8	84.5	88.2	102.9	102.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)