

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: P475915

Luminaire Tested: **22GR-LD5-85-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475915
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8705.6 lumens
Efficiency: N/A
Efficacy: 134.3 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

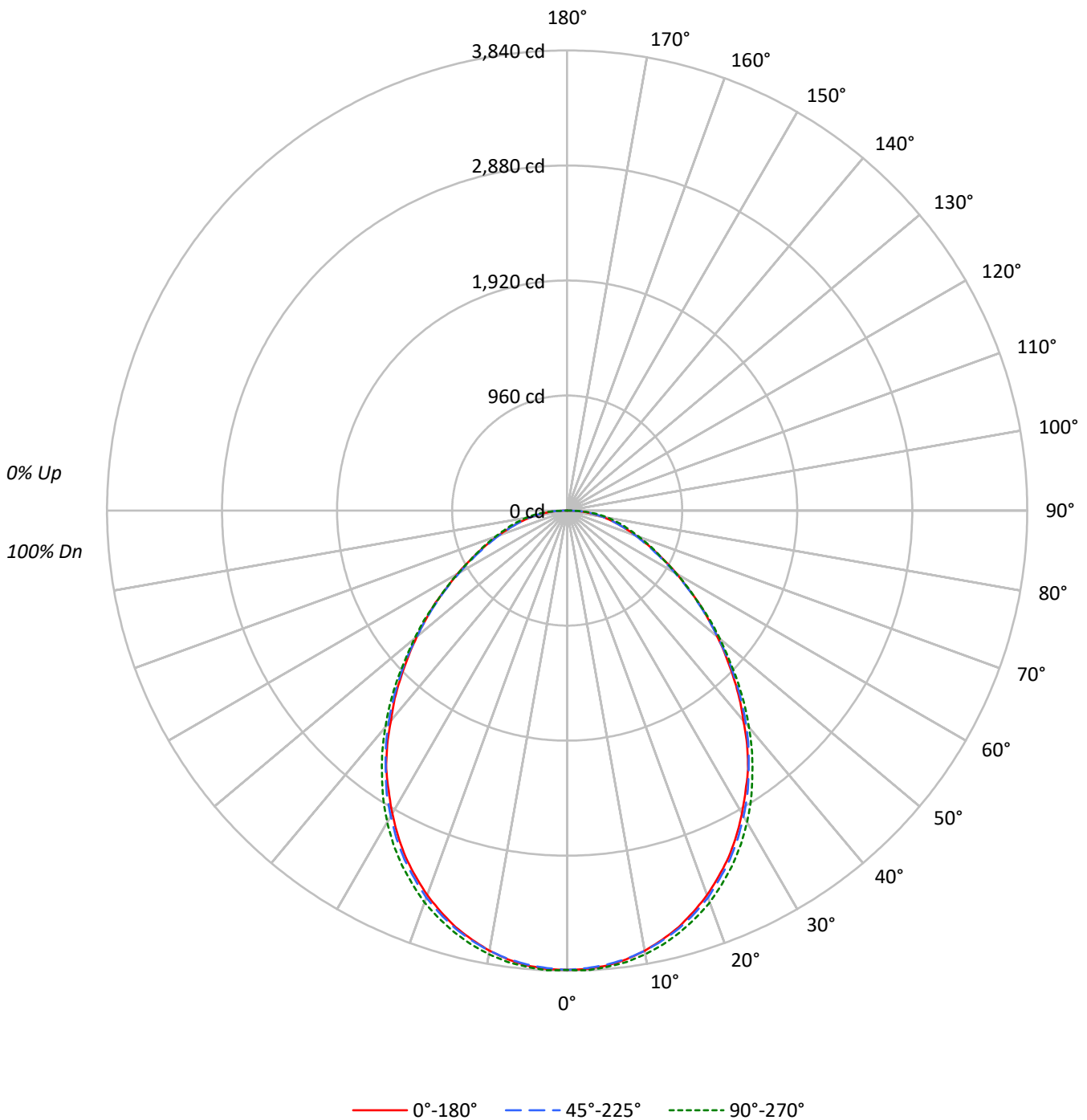
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475915

CATALOG NUMBER: 22GR-LD5-85-F1-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475915

CATALOG NUMBER: 22GR-LD5-85-F1-UNV-L840-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	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°	10314	10314	10314
5°	10294	10274	10324
10°	10192	10192	10273
15°	10023	10054	10146
20°	9777	9841	9967
25°	9473	9538	9691
30°	9069	9149	9331
35°	8647	8672	8852
40°	8035	8151	8293
45°	7461	7531	7642
50°	6855	6855	6962
55°	6287	6218	6252
60°	5690	5592	5671
65°	5189	5073	5237
70°	4795	4766	4997
75°	4618	4581	5038
80°	4665	4665	5348
85°	4875	5101	6123



TEST NUMBER: P475915

CATALOG NUMBER: 22GR-LD5-85-F1-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	361.4	4.2
10°-20°	1017.4	11.7
20°-30°	1479.3	17.0
30°-40°	1655.9	19.0
40°-50°	1528.3	17.6
50°-60°	1192.6	13.7
60°-70°	807.3	9.3
70°-80°	482.1	5.5
80°-90°	181.1	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°	2858.2	32.8
0°-40°	4514.1	51.9
0°-60°	7235.1	83.1
0°-90°	8705.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8705.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3833	3833	3833	3833	3833	
5°	3811	3804	3804	3818	3822	361
15°	3598	3598	3609	3631	3642	1012
25°	3190	3190	3212	3245	3264	1465
35°	2632	2629	2640	2680	2695	1637
45°	1960	1972	1979	1994	2008	1512
55°	1340	1329	1325	1333	1333	1196
65°	815	808	797	811	822	812
75°	444	441	441	466	485	472
85°	158	154	165	191	198	168
90°	0	0	0	0	0	



TEST NUMBER: P475915

CATALOG NUMBER: 22GR-LD5-85-F1-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3832.9	3832.9	3832.9	3832.9	3832.9
2.5°	3829.2	3821.8	3821.8	3832.9	3840.2
5°	3810.8	3803.5	3803.5	3818.2	3821.8
7.5°	3777.8	3774.1	3774.1	3788.8	3799.8
10°	3730.1	3726.4	3730.1	3744.7	3759.4
12.5°	3667.6	3667.6	3675.0	3693.3	3708.0
15°	3597.9	3597.9	3608.9	3630.9	3642.0
17.5°	3509.8	3513.5	3528.1	3553.8	3564.9
20°	3414.3	3421.7	3436.4	3458.4	3480.4
22.5°	3304.2	3311.5	3326.2	3359.3	3373.9
25°	3190.4	3190.4	3212.4	3245.4	3263.8
27.5°	3058.2	3061.9	3083.9	3120.6	3139.0
30°	2918.7	2929.7	2944.4	2977.4	3003.1
32.5°	2771.8	2782.9	2801.2	2837.9	2856.3
35°	2632.3	2628.7	2639.7	2680.1	2694.7
37.5°	2467.1	2470.8	2485.5	2514.9	2533.2
40°	2287.2	2305.6	2320.3	2342.3	2360.7
42.5°	2129.4	2140.4	2151.4	2173.4	2188.1
45°	1960.5	1971.5	1978.8	1993.5	2008.2
47.5°	1795.3	1798.9	1810.0	1817.3	1828.3
50°	1637.4	1641.1	1637.4	1648.4	1663.1
52.5°	1483.2	1479.5	1479.5	1483.2	1505.2
55°	1340.0	1329.0	1325.3	1332.7	1332.7
57.5°	1182.2	1178.5	1178.5	1174.8	1193.2
60°	1057.3	1046.3	1039.0	1046.3	1053.7
62.5°	928.8	917.8	910.5	925.2	925.2
65°	815.0	807.7	796.7	811.4	822.4
67.5°	704.9	697.6	693.9	712.2	726.9
70°	609.4	605.8	605.8	624.1	635.1
72.5°	521.3	517.7	517.7	543.4	554.4
75°	444.2	440.6	440.6	466.3	484.6
77.5°	367.1	363.5	374.5	396.5	414.9
80°	301.0	297.4	301.0	330.4	345.1
82.5°	227.6	227.6	235.0	264.3	279.0
85°	157.9	154.2	165.2	190.9	198.3
87.5°	80.8	84.4	88.1	102.8	102.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)