

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: P234099

Luminaire Tested: **22GR-LD5-90-F1-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-F1-UNV-L940-CD1-U
Description: METALUX 2X2 GRLED TROFFER
WITH F1 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7732.3 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

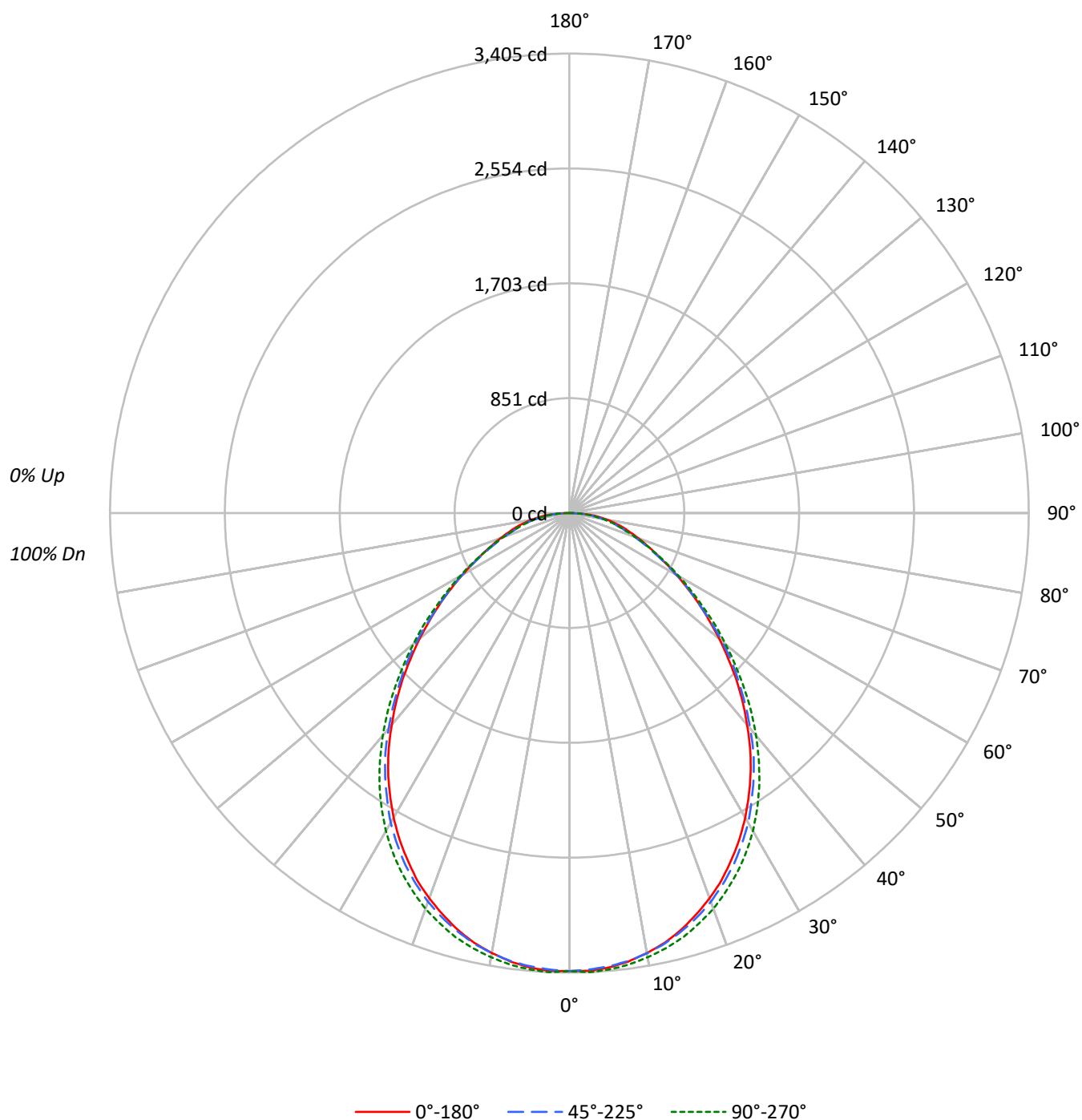
Input Watts (W): 85.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62		
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54		
5	78	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48		
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42		
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40	38		
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36	34		
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31		
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10871	10871	10871
5°	10866	10837	10912
10°	10764	10770	10869
15°	10600	10636	10790
20°	10352	10444	10633
25°	10029	10169	10391
30°	9633	9799	10058
35°	9161	9308	9596
40°	8566	8708	8993
45°	7930	8053	8288
50°	7222	7339	7527
55°	6521	6541	6731
60°	5849	5872	6010
65°	5329	5220	5343
70°	5073	4788	4872
75°	5105	4618	4640
80°	5295	4666	4633
85°	5802	4946	4681



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.7	4.1
10°-20°	905.9	11.7
20°-30°	1326.0	17.1
30°-40°	1490.8	19.3
40°-50°	1374.8	17.8
50°-60°	1059.6	13.7
60°-70°	699.2	9.0
70°-80°	407.0	5.3
80°-90°	148.3	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°	2552.6	33.0
0°-40°	4043.4	52.3
0°-60°	6477.8	83.8
0°-90°	7732.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7732.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3394	3394	3394	3394	3394	
5°	3380	3373	3371	3387	3394	320
15°	3197	3197	3208	3237	3255	900
25°	2838	2853	2878	2917	2941	1305
35°	2343	2354	2381	2429	2454	1461
45°	1751	1753	1778	1814	1830	1348
55°	1168	1166	1172	1191	1206	1048
65°	703	700	689	694	705	705
75°	413	395	373	366	375	435
85°	158	156	135	124	127	167
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3394.5	3394.5	3394.5	3394.5	3394.5
2.5°	3394.5	3387.3	3385.6	3398.1	3405.3
5°	3380.1	3373.0	3371.2	3387.3	3394.5
7.5°	3351.4	3346.1	3347.8	3365.8	3374.7
10°	3310.1	3308.3	3311.9	3331.7	3342.5
12.5°	3261.7	3259.9	3267.1	3288.6	3303.0
15°	3197.1	3197.1	3207.9	3236.6	3254.6
17.5°	3120.0	3125.4	3141.5	3170.2	3190.0
20°	3037.4	3042.9	3064.4	3096.7	3120.0
22.5°	2945.9	2953.2	2974.7	3014.1	3033.9
25°	2838.3	2852.7	2877.8	2917.3	2940.6
27.5°	2727.1	2743.2	2766.5	2815.0	2836.5
30°	2605.1	2615.9	2649.9	2694.8	2719.9
32.5°	2475.9	2486.7	2515.3	2569.2	2590.8
35°	2343.2	2353.9	2380.8	2429.2	2454.4
37.5°	2199.6	2208.6	2240.9	2278.6	2305.5
40°	2048.9	2061.4	2083.0	2127.8	2151.2
42.5°	1901.8	1907.1	1930.4	1975.3	1993.3
45°	1751.0	1752.9	1778.0	1813.8	1830.0
47.5°	1595.0	1598.6	1629.1	1650.6	1666.8
50°	1449.6	1451.4	1473.0	1492.7	1510.7
52.5°	1304.4	1304.4	1315.1	1336.6	1359.9
55°	1168.0	1166.2	1171.6	1191.3	1205.6
57.5°	1038.8	1037.0	1044.2	1056.8	1067.5
60°	913.2	909.6	916.8	924.0	938.3
62.5°	801.9	805.6	796.6	807.4	818.1
65°	703.3	699.7	688.9	694.4	705.1
67.5°	618.9	613.6	595.6	599.2	611.8
70°	541.8	531.0	511.4	511.4	520.3
72.5°	471.9	461.1	435.9	437.7	441.4
75°	412.6	394.7	373.2	366.0	375.0
77.5°	348.0	333.7	314.0	308.6	312.2
80°	287.1	276.3	253.0	245.8	251.2
82.5°	227.8	218.9	192.0	186.6	188.4
85°	157.9	156.1	134.6	123.8	127.4
87.5°	84.4	86.1	70.0	62.8	66.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)