

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: P225824

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P225824
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-A19/156-UNV-L930-CD1-U
Description: METALUX GR 1X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1923.9 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

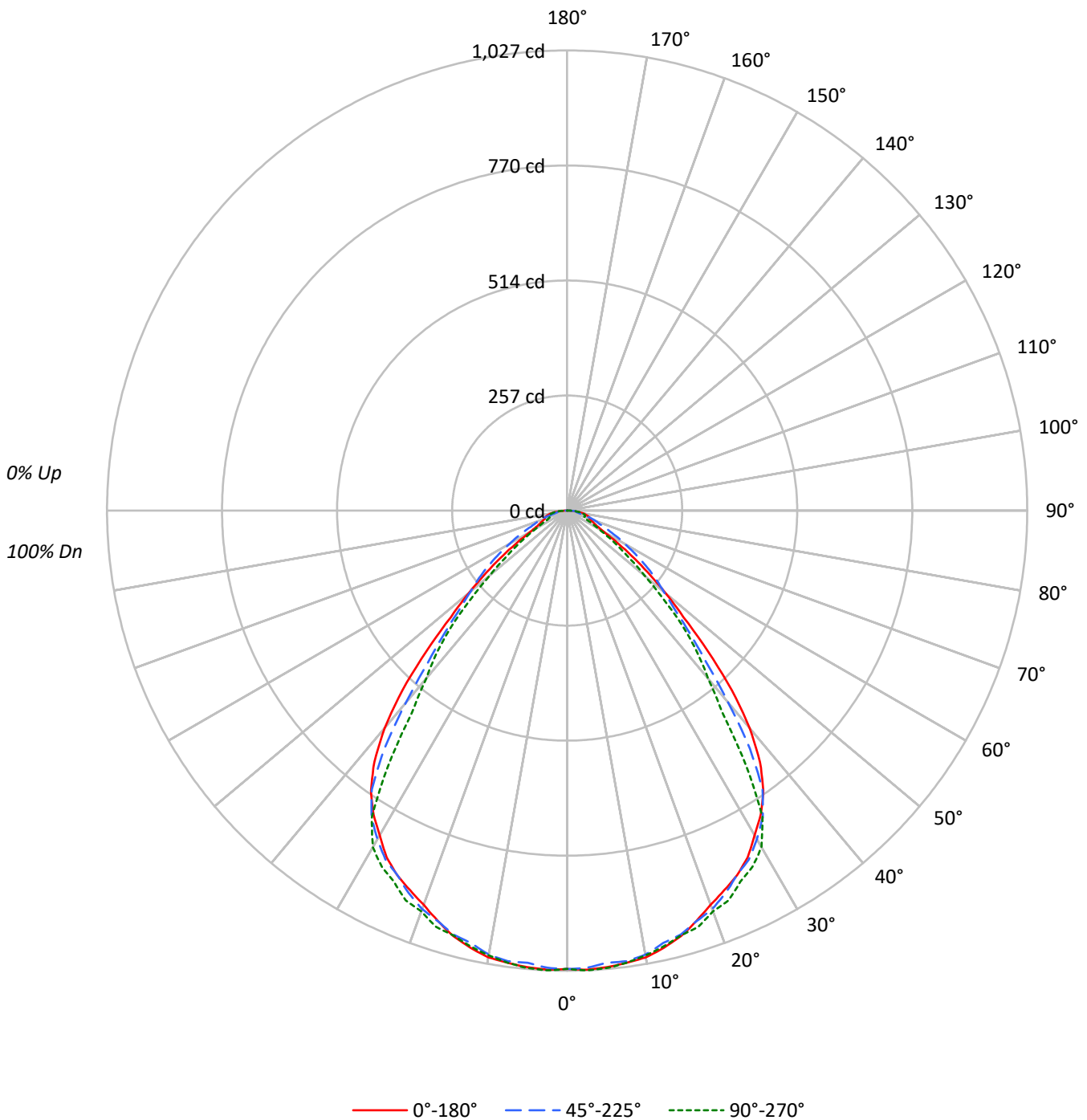
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3447	3447	3447
5°	3459	3426	3466
10°	3464	3443	3449
15°	3429	3417	3424
20°	3357	3394	3413
25°	3337	3335	3399
30°	3256	3295	3376
35°	3140	3127	2873
40°	2788	2460	2154
45°	2116	1841	1742
50°	1501	1473	1182
55°	1027	1258	812
60°	636	1003	543
65°	524	773	393
70°	521	672	403
75°	625	482	539
80°	718	444	675
85°	680	785	765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	5.0
10°-20°	277.1	14.4
20°-30°	416.7	21.7
30°-40°	454.2	23.6
40°-50°	318.1	16.5
50°-60°	180.0	9.4
60°-70°	98.5	5.1
70°-80°	59.7	3.1
80°-90°	22.6	1.2
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°	790.8	41.1
0°-40°	1245.0	64.7
0°-60°	1743.1	90.6
0°-90°	1923.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1923.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1023	1023	1023	1023	1023	
5°	1023	1021	1013	1025	1025	97
15°	983	980	980	994	982	276
25°	898	899	897	918	914	412
35°	763	760	760	721	698	470
45°	444	463	386	381	366	345
55°	175	209	214	212	138	160
65°	66	108	97	122	49	67
75°	48	69	37	73	41	50
85°	18	29	20	25	20	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1023.1	1023.1	1023.1	1023.1	1023.1
2.5°	1025.7	1024.4	1021.3	1027.5	1027.0
5°	1022.6	1020.9	1012.9	1024.8	1024.8
7.5°	1018.2	1013.8	1014.3	1020.9	1017.8
10°	1012.5	1005.0	1006.4	1008.1	1008.1
12.5°	999.3	992.3	988.7	994.4	996.2
15°	983.0	980.4	979.5	993.6	981.6
17.5°	960.1	965.8	960.6	972.0	973.8
20°	936.3	947.4	946.4	954.3	951.8
22.5°	916.9	924.0	924.0	933.7	941.6
25°	897.6	899.3	897.1	917.8	914.3
27.5°	872.5	871.2	878.1	888.8	895.8
30°	836.8	837.2	846.9	861.0	867.6
32.5°	804.2	800.2	812.2	818.3	811.2
35°	763.3	759.7	760.1	721.4	698.5
37.5°	707.3	710.4	669.9	598.9	569.0
40°	633.8	639.9	559.3	506.5	489.7
42.5°	544.8	546.6	458.5	441.3	430.3
45°	444.0	463.3	386.3	381.4	365.5
47.5°	351.9	388.0	323.7	326.8	288.9
50°	286.3	322.4	281.0	282.3	225.5
52.5°	226.3	261.6	247.9	244.0	177.0
55°	174.9	209.2	214.1	212.3	138.3
57.5°	128.6	165.6	179.7	186.3	106.6
60°	94.3	135.2	148.8	162.1	80.6
62.5°	74.9	117.1	122.0	141.3	62.5
65°	65.7	107.9	96.9	122.4	49.3
67.5°	58.6	102.6	78.8	108.3	43.2
70°	52.9	92.5	68.2	96.9	40.9
72.5°	52.9	81.0	53.7	85.9	41.4
75°	48.0	69.1	37.0	72.7	41.4
77.5°	42.7	59.0	27.7	59.0	38.8
80°	37.0	46.2	22.9	45.4	34.8
82.5°	27.3	34.8	19.8	33.9	28.2
85°	17.6	28.6	20.3	24.7	19.8
87.5°	8.4	14.5	12.8	12.4	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)