

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: P225837

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P225837  
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-LD5-20-A19/156-UNV-L940-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: 1725.2 lumens  
Efficiency: N/A  
Efficacy: 99.7 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

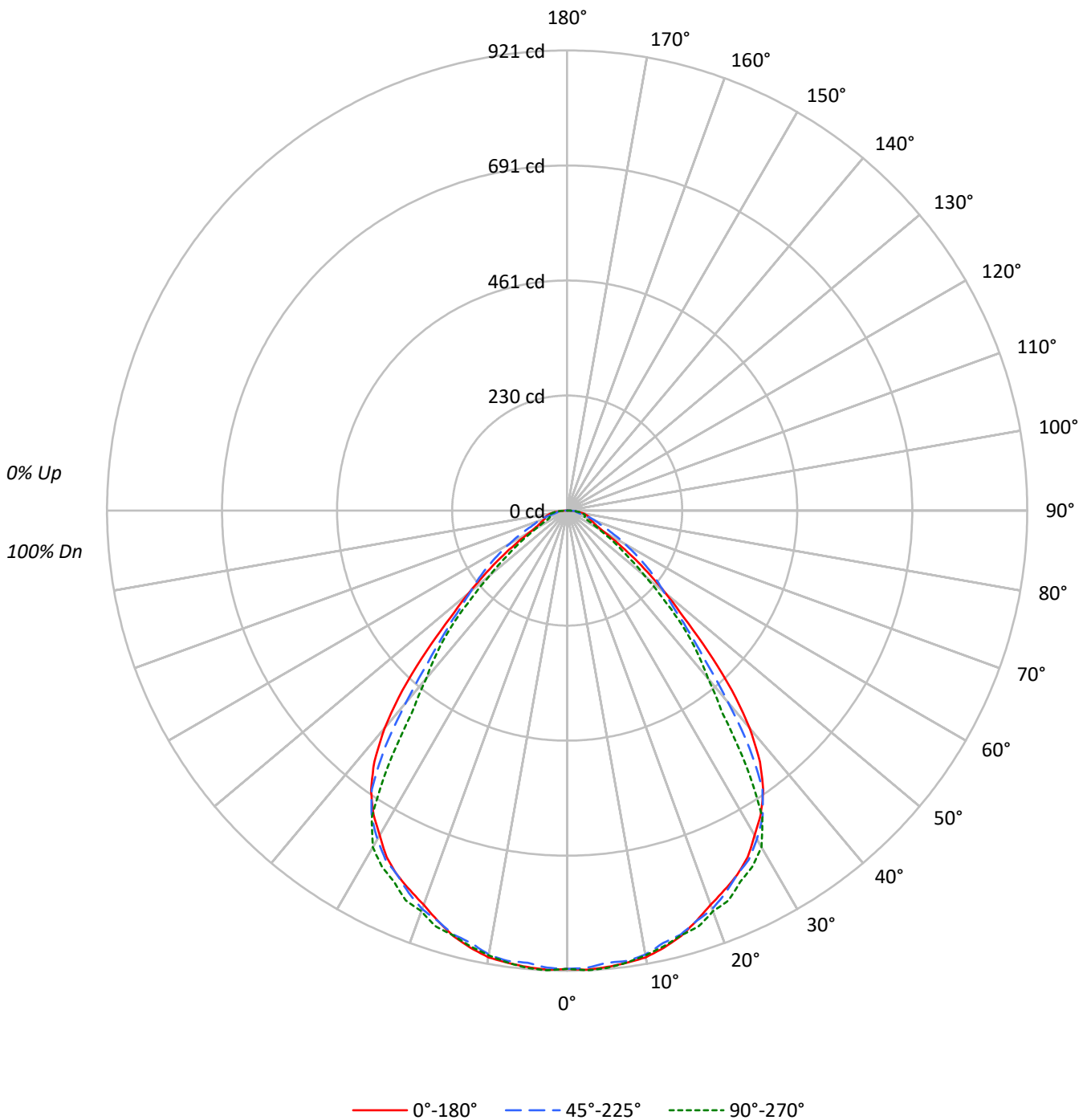
Input Watts (W): 17.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3091	3091	3091
5°	3102	3072	3108
10°	3106	3088	3093
15°	3075	3064	3071
20°	3011	3043	3060
25°	2992	2991	3048
30°	2920	2955	3027
35°	2815	2804	2576
40°	2500	2206	1931
45°	1897	1650	1562
50°	1346	1321	1060
55°	921	1128	728
60°	569	900	487
65°	469	693	352
70°	467	603	362
75°	561	432	484
80°	644	400	605
85°	611	700	688



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.0	5.0
10°-20°	248.4	14.4
20°-30°	373.6	21.7
30°-40°	407.3	23.6
40°-50°	285.2	16.5
50°-60°	161.4	9.4
60°-70°	88.3	5.1
70°-80°	53.6	3.1
80°-90°	20.3	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°	709.1	41.1
0°-40°	1116.4	64.7
0°-60°	1563.0	90.6
0°-90°	1725.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1725.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	917	915	908	919	919	87
15°	881	879	878	891	880	248
25°	805	806	804	823	820	370
35°	684	681	682	647	626	422
45°	398	416	346	342	328	309
55°	157	188	192	190	124	143
65°	59	97	87	110	44	60
75°	43	62	33	65	37	45
85°	16	26	18	22	18	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	917.4	917.4	917.4	917.4	917.4
2.5°	919.8	918.6	915.8	921.3	920.9
5°	917.0	915.4	908.3	918.9	918.9
7.5°	913.1	909.1	909.4	915.4	912.6
10°	907.9	901.2	902.4	903.9	903.9
12.5°	896.0	889.8	886.6	891.7	893.3
15°	881.4	879.1	878.3	890.9	880.2
17.5°	860.9	866.0	861.3	871.5	873.2
20°	839.6	849.4	848.6	855.8	853.4
22.5°	822.2	828.5	828.5	837.2	844.3
25°	804.8	806.4	804.4	823.0	819.8
27.5°	782.3	781.1	787.4	797.0	803.2
30°	750.4	750.7	759.4	772.0	778.0
32.5°	721.1	717.6	728.2	733.8	727.4
35°	684.4	681.2	681.6	646.9	626.3
37.5°	634.2	637.0	600.6	537.1	510.2
40°	568.3	573.8	501.6	454.2	439.1
42.5°	488.5	490.1	411.1	395.7	385.8
45°	398.1	415.5	346.3	342.0	327.7
47.5°	315.5	348.0	290.2	293.0	259.0
50°	256.7	289.0	252.0	253.1	202.2
52.5°	203.0	234.6	222.3	218.8	158.8
55°	156.8	187.6	192.0	190.3	124.0
57.5°	115.3	148.5	161.2	167.0	95.5
60°	84.5	121.3	133.5	145.3	72.2
62.5°	67.2	105.0	109.4	126.8	56.1
65°	58.8	96.8	86.9	109.8	44.2
67.5°	52.5	92.0	70.7	97.2	38.7
70°	47.4	82.9	61.2	86.9	36.7
72.5°	47.4	72.7	48.2	77.0	37.2
75°	43.1	62.0	33.2	65.2	37.2
77.5°	38.3	52.9	24.9	52.9	34.7
80°	33.2	41.5	20.6	40.7	31.2
82.5°	24.5	31.2	17.8	30.4	25.3
85°	15.8	25.6	18.1	22.1	17.8
87.5°	7.5	13.1	11.4	11.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)