

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: P291474

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291474  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-2700K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1570.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

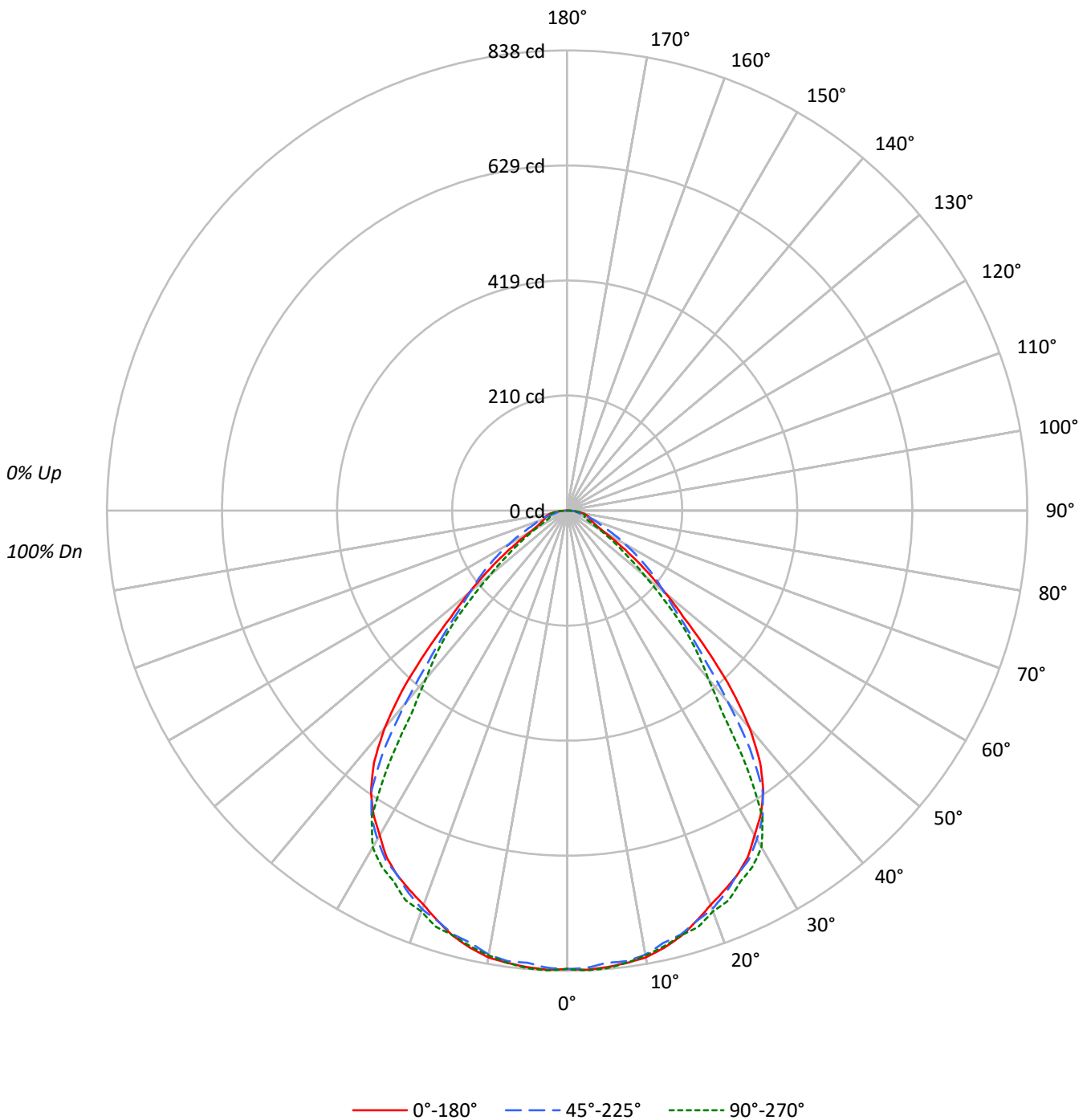
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2247	2247	2247
5°	2254	2233	2259
10°	2258	2244	2248
15°	2235	2227	2232
20°	2188	2212	2224
25°	2175	2174	2215
30°	2122	2147	2200
35°	2046	2038	1872
40°	1817	1603	1404
45°	1379	1200	1135
50°	978	960	770
55°	669	820	529
60°	414	654	354
65°	341	504	257
70°	339	438	263
75°	408	314	351
80°	468	290	440
85°	445	509	500



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.2	5.0
10°-20°	226.1	14.4
20°-30°	340.0	21.7
30°-40°	370.7	23.6
40°-50°	259.5	16.5
50°-60°	146.9	9.4
60°-70°	80.4	5.1
70°-80°	48.7	3.1
80°-90°	18.5	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°	645.3	41.1
0°-40°	1016.0	64.7
0°-60°	1422.4	90.6
0°-90°	1570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1570.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	834	833	827	836	836	79
15°	802	800	799	811	801	226
25°	732	734	732	749	746	336
35°	623	620	620	589	570	384
45°	362	378	315	311	298	281
55°	143	171	175	173	113	130
65°	54	88	79	100	40	55
75°	39	56	30	59	34	41
85°	14	23	16	20	16	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	834.9	834.9	834.9	834.9	834.9
2.5°	837.0	835.9	833.4	838.5	838.1
5°	834.5	833.1	826.6	836.3	836.3
7.5°	830.9	827.3	827.7	833.1	830.6
10°	826.2	820.1	821.2	822.6	822.6
12.5°	815.5	809.7	806.8	811.5	812.9
15°	802.2	800.0	799.3	810.8	801.1
17.5°	783.5	788.1	783.8	793.2	794.6
20°	764.1	773.0	772.3	778.8	776.6
22.5°	748.3	754.0	754.0	761.9	768.4
25°	732.4	733.9	732.1	749.0	746.1
27.5°	712.0	710.9	716.6	725.3	731.0
30°	682.8	683.2	691.1	702.6	708.0
32.5°	656.2	653.0	662.7	667.7	662.0
35°	622.8	619.9	620.3	588.7	570.0
37.5°	577.2	579.7	546.6	488.8	464.3
40°	517.2	522.2	456.4	413.3	399.6
42.5°	444.6	446.0	374.1	360.1	351.1
45°	362.3	378.1	315.2	311.2	298.3
47.5°	287.2	316.6	264.2	266.7	235.8
50°	233.6	263.1	229.3	230.4	184.0
52.5°	184.7	213.5	202.3	199.1	144.5
55°	142.7	170.7	174.7	173.2	112.8
57.5°	104.9	135.1	146.6	152.0	87.0
60°	76.9	110.3	121.5	132.3	65.8
62.5°	61.1	95.6	99.6	115.4	51.0
65°	53.5	88.1	79.1	99.9	40.3
67.5°	47.8	83.7	64.3	88.4	35.2
70°	43.1	75.5	55.7	79.1	33.4
72.5°	43.1	66.1	43.8	70.1	33.8
75°	39.2	56.4	30.2	59.3	33.8
77.5°	34.9	48.2	22.6	48.2	31.6
80°	30.2	37.7	18.7	37.0	28.4
82.5°	22.3	28.4	16.2	27.7	23.0
85°	14.4	23.4	16.5	20.1	16.2
87.5°	6.8	11.9	10.4	10.1	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)