

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: P234074

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234074
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-LD5-60-A19/156-UNV-L935-CD1-U
Description: METALUX 1X4 GRLED TROFFER
WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4978.4 lumens
Efficiency: N/A
Efficacy: 83.1 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

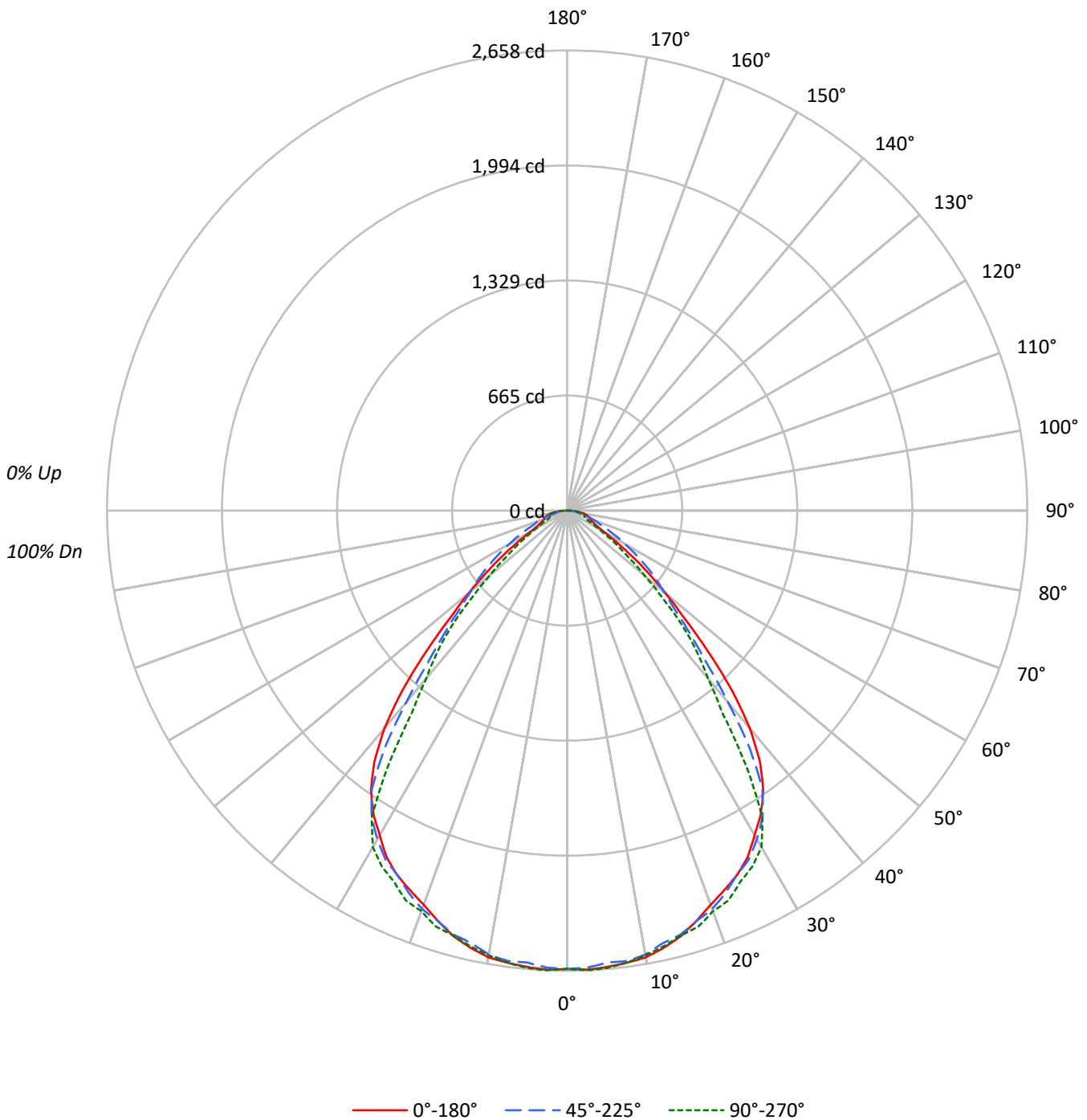
Input Watts (W): 59.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8920	8920	8920
5°	8951	8866	8970
10°	8964	8910	8925
15°	8873	8841	8861
20°	8688	8782	8831
25°	8635	8631	8796
30°	8425	8527	8735
35°	8124	8091	7435
40°	7213	6366	5574
45°	5474	4762	4507
50°	3883	3812	3059
55°	2658	3254	2102
60°	1644	2596	1406
65°	1354	2000	1018
70°	1348	1740	1044
75°	1617	1246	1394
80°	1857	1149	1746
85°	1763	2026	1983



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.2	5.0
10°-20°	716.9	14.4
20°-30°	1078.2	21.7
30°-40°	1175.4	23.6
40°-50°	823.0	16.5
50°-60°	465.9	9.4
60°-70°	254.9	5.1
70°-80°	154.5	3.1
80°-90°	58.6	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°	2046.3	41.1
0°-40°	3221.6	64.7
0°-60°	4510.5	90.6
0°-90°	4978.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4978.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2647	2647	2647	2647	2647	
5°	2646	2642	2621	2652	2652	252
15°	2544	2537	2534	2571	2540	715
25°	2322	2327	2321	2375	2366	1067
35°	1975	1966	1967	1867	1807	1217
45°	1149	1199	999	987	946	892
55°	452	541	554	549	358	414
65°	170	279	251	317	128	174
75°	124	179	96	188	107	129
85°	46	74	52	64	51	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2647.3	2647.3	2647.3	2647.3	2647.3
2.5°	2654.2	2650.7	2642.8	2658.7	2657.6
5°	2646.2	2641.6	2621.1	2651.9	2651.9
7.5°	2634.8	2623.4	2624.5	2641.6	2633.6
10°	2620.0	2600.7	2604.1	2608.6	2608.6
12.5°	2585.8	2567.6	2558.4	2573.3	2577.8
15°	2543.6	2536.8	2534.5	2571.0	2540.2
17.5°	2484.4	2499.2	2485.5	2515.2	2519.7
20°	2422.8	2451.3	2449.0	2469.6	2462.7
22.5°	2372.7	2391.0	2391.0	2416.0	2436.5
25°	2322.5	2327.1	2321.4	2375.0	2365.9
27.5°	2257.6	2254.2	2272.4	2299.8	2318.0
30°	2165.3	2166.4	2191.5	2227.9	2245.0
32.5°	2081.0	2070.7	2101.5	2117.4	2099.2
35°	1975.0	1965.9	1967.0	1866.7	1807.4
37.5°	1830.2	1838.2	1733.4	1549.9	1472.4
40°	1639.9	1655.9	1447.3	1310.5	1267.3
42.5°	1409.7	1414.3	1186.3	1141.9	1113.4
45°	1148.8	1198.9	999.4	986.9	945.9
47.5°	910.5	1004.0	837.6	845.6	747.6
50°	740.8	834.2	727.1	730.5	583.5
52.5°	585.7	676.9	641.6	631.4	458.2
55°	452.5	541.3	553.9	549.3	357.8
57.5°	332.8	428.5	465.0	482.0	275.8
60°	243.9	349.9	385.2	419.4	208.6
62.5°	193.7	303.1	315.7	365.8	161.8
65°	169.8	279.2	250.8	316.8	127.7
67.5°	151.6	265.5	204.0	280.3	111.7
70°	136.8	239.4	176.6	250.8	106.0
72.5°	136.8	209.7	139.1	222.2	107.1
75°	124.2	178.9	95.7	188.0	107.1
77.5°	110.6	152.7	71.8	152.7	100.3
80°	95.7	119.7	59.2	117.4	90.0
82.5°	70.6	90.0	51.3	87.7	72.9
85°	45.6	74.0	52.4	63.8	51.3
87.5°	21.7	37.6	33.1	31.9	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)