

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: P291520

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291520
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-LD5-40-A19/156-UNV-L92765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3240.0 lumens
Efficiency: N/A
Efficacy: 97.0 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

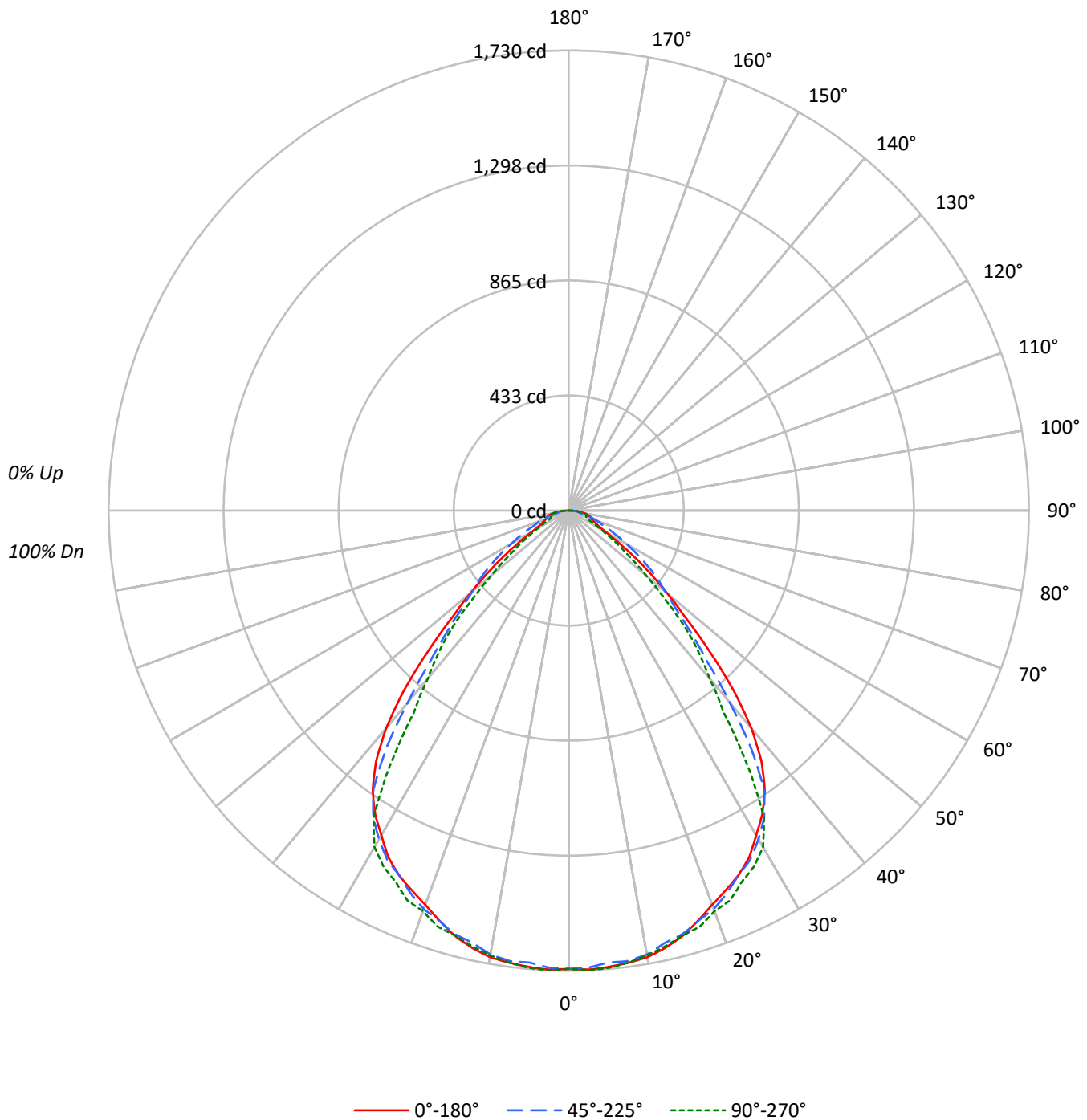
Input Watts (W): 33.387
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4636	4636	4636
5°	4652	4608	4662
10°	4659	4631	4639
15°	4612	4595	4606
20°	4515	4564	4590
25°	4488	4486	4572
30°	4379	4432	4540
35°	4222	4205	3864
40°	3749	3309	2897
45°	2845	2475	2343
50°	2018	1981	1590
55°	1381	1691	1093
60°	854	1349	730
65°	704	1039	529
70°	700	905	543
75°	840	648	725
80°	965	598	908
85°	917	1053	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	5.0
10°-20°	466.6	14.4
20°-30°	701.7	21.7
30°-40°	764.9	23.6
40°-50°	535.6	16.5
50°-60°	303.2	9.4
60°-70°	165.9	5.1
70°-80°	100.5	3.1
80°-90°	38.1	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°	1331.7	41.1
0°-40°	2096.6	64.7
0°-60°	2935.4	90.6
0°-90°	3240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3240.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1722	1719	1706	1726	1726	164
15°	1655	1651	1650	1673	1653	466
25°	1512	1514	1511	1546	1540	694
35°	1285	1279	1280	1215	1176	792
45°	748	780	650	642	616	581
55°	294	352	360	358	233	269
65°	110	182	163	206	83	114
75°	81	116	62	122	70	84
85°	30	48	34	42	33	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.9	1722.9	1722.9	1722.9	1722.9
2.5°	1727.4	1725.1	1719.9	1730.3	1729.6
5°	1722.2	1719.2	1705.8	1725.9	1725.9
7.5°	1714.7	1707.3	1708.1	1719.2	1714.0
10°	1705.1	1692.5	1694.7	1697.7	1697.7
12.5°	1682.9	1671.0	1665.1	1674.7	1677.7
15°	1655.4	1651.0	1649.5	1673.2	1653.2
17.5°	1616.8	1626.5	1617.6	1636.9	1639.8
20°	1576.8	1595.3	1593.9	1607.2	1602.8
22.5°	1544.2	1556.0	1556.0	1572.3	1585.7
25°	1511.5	1514.5	1510.8	1545.6	1539.7
27.5°	1469.3	1467.0	1478.9	1496.7	1508.6
30°	1409.2	1409.9	1426.2	1450.0	1461.1
32.5°	1354.3	1347.6	1367.6	1378.0	1366.2
35°	1285.3	1279.4	1280.1	1214.9	1176.3
37.5°	1191.1	1196.3	1128.1	1008.7	958.2
40°	1067.3	1077.7	941.9	852.9	824.7
42.5°	917.4	920.4	772.1	743.2	724.6
45°	747.6	780.2	650.4	642.3	615.6
47.5°	592.6	653.4	545.1	550.3	486.5
50°	482.1	542.9	473.2	475.4	379.7
52.5°	381.2	440.6	417.6	410.9	298.2
55°	294.4	352.3	360.5	357.5	232.9
57.5°	216.6	278.9	302.6	313.7	179.5
60°	158.7	227.7	250.7	272.9	135.7
62.5°	126.1	197.3	205.4	238.1	105.3
65°	110.5	181.7	163.2	206.2	83.1
67.5°	98.6	172.8	132.8	182.5	72.7
70°	89.0	155.8	115.0	163.2	69.0
72.5°	89.0	136.5	90.5	144.6	69.7
75°	80.8	116.4	62.3	122.4	69.7
77.5°	71.9	99.4	46.7	99.4	65.3
80°	62.3	77.9	38.6	76.4	58.6
82.5°	46.0	58.6	33.4	57.1	47.5
85°	29.7	48.2	34.1	41.5	33.4
87.5°	14.1	24.5	21.5	20.8	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)