

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: P291405

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291405
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-LD5-32-A19/156-UNV-L82765-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3105.0 lumens
Efficiency: N/A
Efficacy: 120.5 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

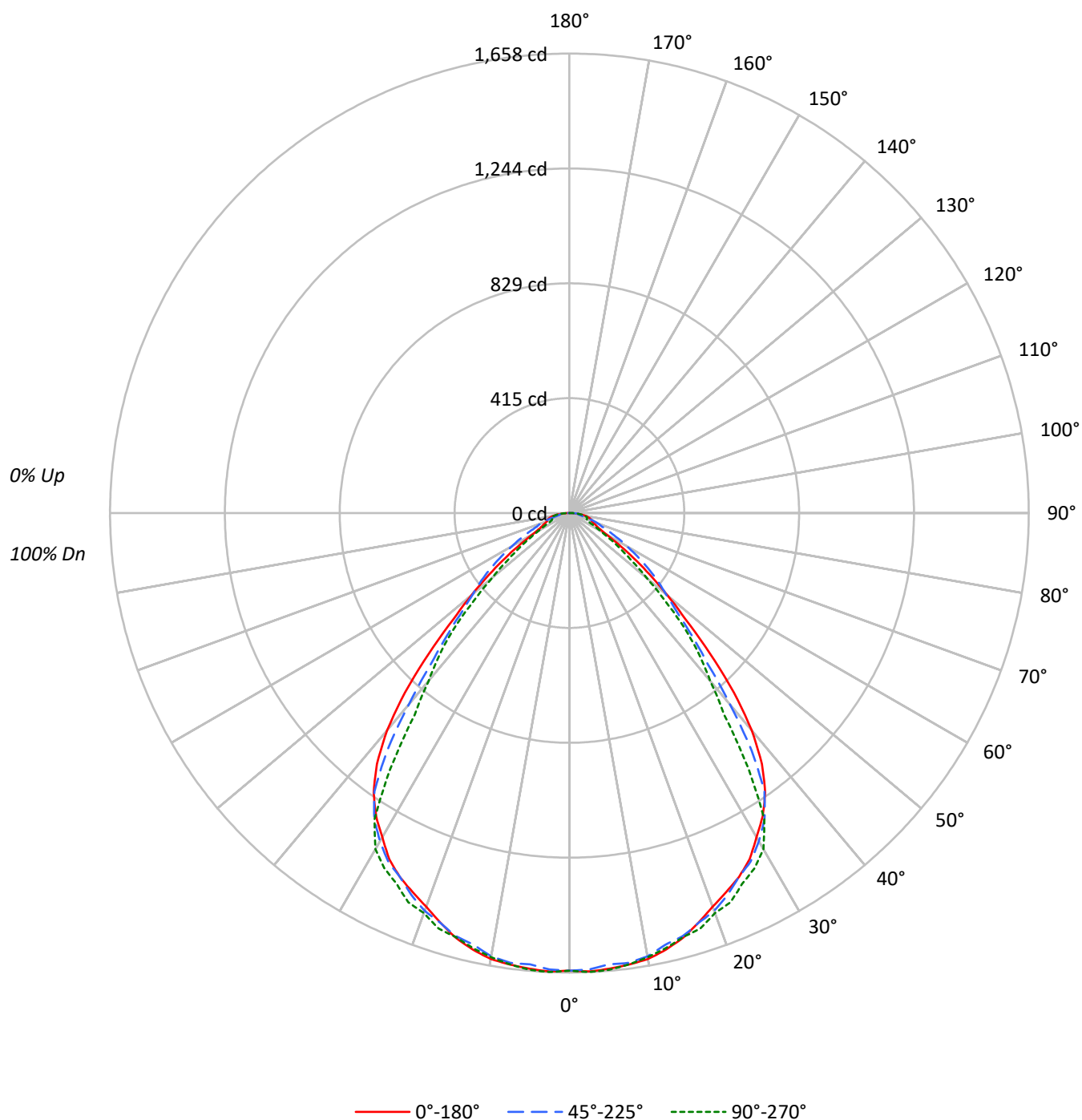
Input Watts (W): 25.761
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4443	4443	4443
5°	4458	4416	4468
10°	4465	4438	4446
15°	4420	4404	4414
20°	4327	4374	4399
25°	4301	4299	4381
30°	4196	4247	4351
35°	4047	4030	3703
40°	3593	3171	2777
45°	2727	2372	2245
50°	1934	1899	1523
55°	1324	1620	1047
60°	819	1293	700
65°	674	996	507
70°	671	867	520
75°	806	621	695
80°	925	573	871
85°	877	1010	988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	5.0
10°-20°	447.1	14.4
20°-30°	672.4	21.7
30°-40°	733.1	23.6
40°-50°	513.3	16.5
50°-60°	290.6	9.4
60°-70°	159.0	5.1
70°-80°	96.4	3.1
80°-90°	36.5	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°	1276.2	41.1
0°-40°	2009.3	64.7
0°-60°	2813.1	90.6
0°-90°	3105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1651	1651	1651	1651	1651	
5°	1650	1648	1635	1654	1654	157
15°	1586	1582	1581	1604	1584	446
25°	1448	1451	1448	1481	1476	665
35°	1232	1226	1227	1164	1127	759
45°	716	748	623	616	590	556
55°	282	338	345	343	223	258
65°	106	174	156	198	80	109
75°	78	112	60	117	67	80
85°	28	46	33	40	32	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1651.1	1651.1	1651.1	1651.1	1651.1
2.5°	1655.4	1653.3	1648.3	1658.2	1657.5
5°	1650.4	1647.6	1634.8	1654.0	1654.0
7.5°	1643.3	1636.2	1636.9	1647.6	1642.6
10°	1634.1	1622.0	1624.1	1627.0	1627.0
12.5°	1612.7	1601.4	1595.7	1604.9	1607.8
15°	1586.4	1582.2	1580.8	1603.5	1584.3
17.5°	1549.5	1558.7	1550.2	1568.7	1571.5
20°	1511.1	1528.9	1527.4	1540.2	1536.0
22.5°	1479.8	1491.2	1491.2	1506.8	1519.6
25°	1448.5	1451.4	1447.8	1481.2	1475.6
27.5°	1408.0	1405.9	1417.3	1434.3	1445.7
30°	1350.5	1351.2	1366.8	1389.6	1400.2
32.5°	1297.9	1291.5	1310.7	1320.6	1309.2
35°	1231.8	1226.1	1226.8	1164.2	1127.3
37.5°	1141.5	1146.5	1081.1	966.6	918.3
40°	1022.8	1032.7	902.7	817.4	790.4
42.5°	879.2	882.1	739.9	712.2	694.4
45°	716.5	747.7	623.3	615.5	589.9
47.5°	567.9	626.2	522.4	527.4	466.3
50°	462.0	520.3	453.5	455.6	363.9
52.5°	365.3	422.2	400.2	393.8	285.7
55°	282.2	337.6	345.4	342.6	223.2
57.5°	207.5	267.2	290.0	300.7	172.0
60°	152.1	218.2	240.2	261.6	130.1
62.5°	120.8	189.1	196.9	228.2	100.9
65°	105.9	174.1	156.4	197.6	79.6
67.5°	94.5	165.6	127.2	174.8	69.7
70°	85.3	149.3	110.2	156.4	66.1
72.5°	85.3	130.8	86.7	138.6	66.8
75°	77.5	111.6	59.7	117.3	66.8
77.5°	68.9	95.2	44.8	95.2	62.5
80°	59.7	74.6	37.0	73.2	56.2
82.5°	44.1	56.2	32.0	54.7	45.5
85°	28.4	46.2	32.7	39.8	32.0
87.5°	13.5	23.5	20.6	19.9	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)