

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: P291396

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291396
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-LD5-28-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: 2736.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

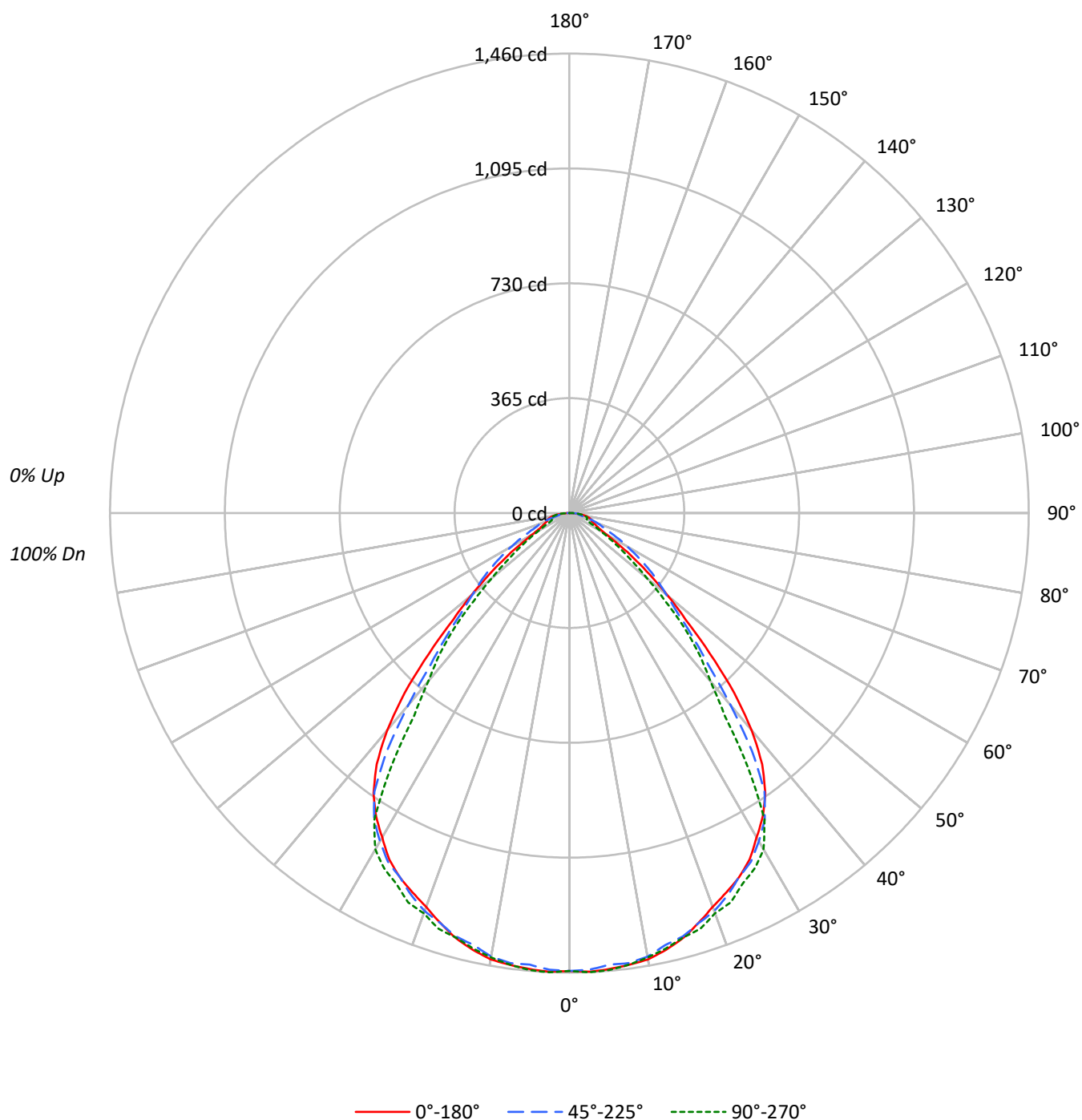
Input Watts (W): 22.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3915	3915	3915
5°	3928	3891	3937
10°	3935	3910	3917
15°	3894	3880	3889
20°	3813	3854	3876
25°	3790	3788	3861
30°	3698	3742	3834
35°	3566	3551	3263
40°	3166	2794	2446
45°	2402	2090	1978
50°	1704	1673	1343
55°	1166	1428	923
60°	721	1139	617
65°	594	877	446
70°	592	764	458
75°	710	547	612
80°	815	505	767
85°	775	889	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	5.0
10°-20°	394.0	14.4
20°-30°	592.5	21.7
30°-40°	645.9	23.6
40°-50°	452.3	16.5
50°-60°	256.0	9.4
60°-70°	140.1	5.1
70°-80°	84.9	3.1
80°-90°	32.2	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°	1124.6	41.1
0°-40°	1770.5	64.7
0°-60°	2478.8	90.6
0°-90°	2736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1454	1452	1440	1457	1457	138
15°	1398	1394	1393	1413	1396	393
25°	1276	1279	1276	1305	1300	586
35°	1085	1080	1081	1026	993	669
45°	631	659	549	542	520	490
55°	249	298	304	302	197	227
65°	93	153	138	174	70	96
75°	68	98	53	103	59	71
85°	25	41	29	35	28	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1454.9	1454.9	1454.9	1454.9	1454.9
2.5°	1458.7	1456.8	1452.4	1461.2	1460.5
5°	1454.3	1451.8	1440.5	1457.4	1457.4
7.5°	1448.0	1441.7	1442.4	1451.8	1447.4
10°	1439.9	1429.2	1431.1	1433.6	1433.6
12.5°	1421.1	1411.1	1406.0	1414.2	1416.7
15°	1397.9	1394.1	1392.9	1412.9	1396.0
17.5°	1365.3	1373.5	1366.0	1382.2	1384.8
20°	1331.5	1347.2	1345.9	1357.2	1353.4
22.5°	1304.0	1314.0	1314.0	1327.8	1339.0
25°	1276.4	1278.9	1275.8	1305.2	1300.2
27.5°	1240.7	1238.8	1248.8	1263.9	1273.9
30°	1190.0	1190.6	1204.4	1224.4	1233.8
32.5°	1143.6	1138.0	1154.9	1163.7	1153.6
35°	1085.4	1080.4	1081.0	1025.9	993.3
37.5°	1005.8	1010.2	952.6	851.8	809.2
40°	901.2	910.0	795.4	720.2	696.4
42.5°	774.7	777.2	652.0	627.6	611.9
45°	631.3	658.9	549.3	542.4	519.8
47.5°	500.4	551.8	460.3	464.7	410.9
50°	407.1	458.5	399.6	401.5	320.7
52.5°	321.9	372.0	352.6	347.0	251.8
55°	248.6	297.5	304.4	301.9	196.7
57.5°	182.9	235.5	255.5	264.9	151.6
60°	134.0	192.3	211.7	230.5	114.6
62.5°	106.5	166.6	173.5	201.0	88.9
65°	93.3	153.4	137.8	174.1	70.1
67.5°	83.3	145.9	112.1	154.1	61.4
70°	75.2	131.5	97.1	137.8	58.2
72.5°	75.2	115.2	76.4	122.1	58.9
75°	68.3	98.3	52.6	103.3	58.9
77.5°	60.8	83.9	39.5	83.9	55.1
80°	52.6	65.8	32.6	64.5	49.5
82.5°	38.8	49.5	28.2	48.2	40.1
85°	25.1	40.7	28.8	35.1	28.2
87.5°	11.9	20.7	18.2	17.5	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)