

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: P291499

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291499
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-L92765-W2A1-U-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2641.0 lumens
Efficiency: N/A
Efficacy: 115.4 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

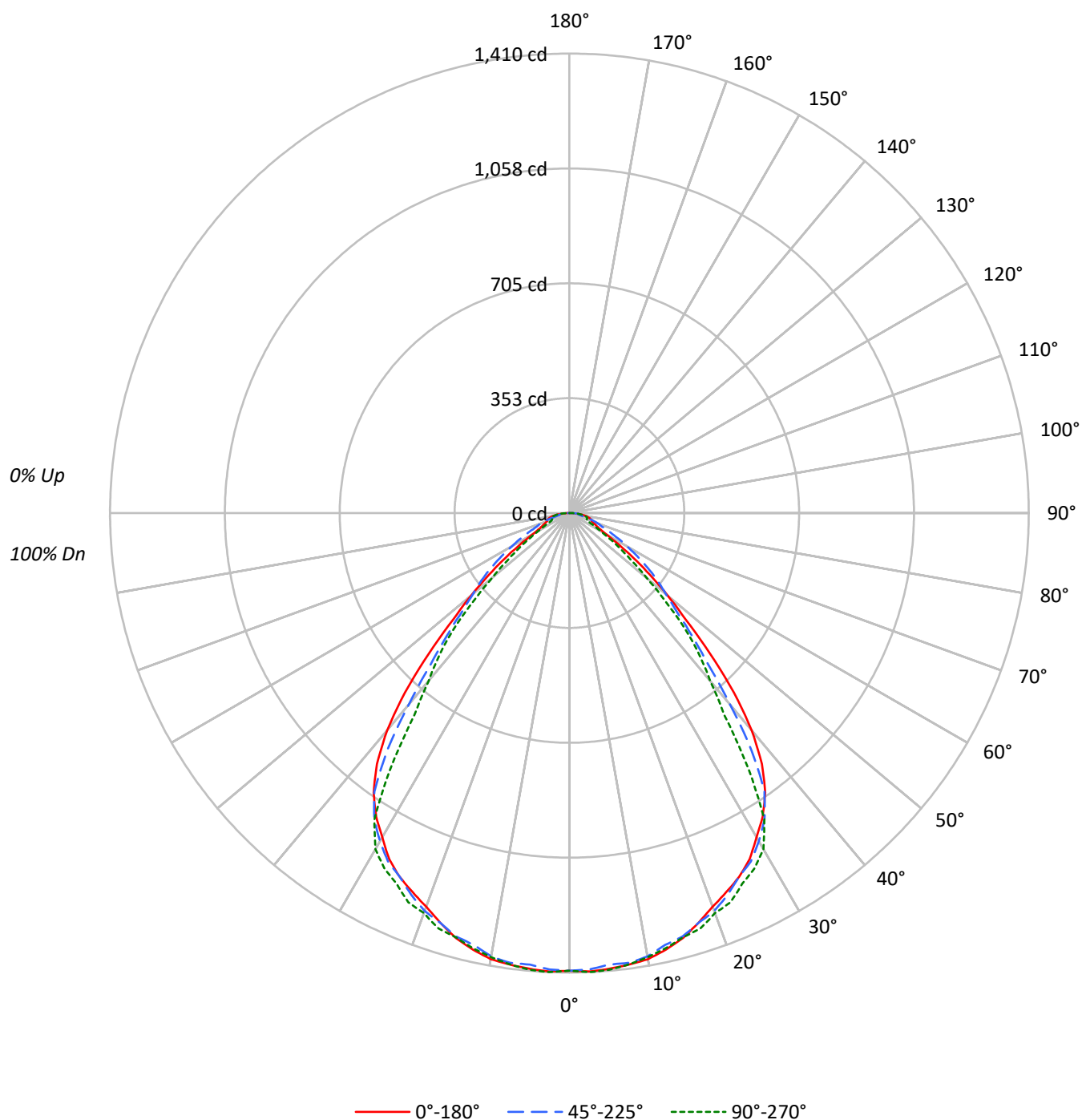
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3779	3779	3779
5°	3792	3756	3800
10°	3798	3775	3781
15°	3759	3746	3754
20°	3681	3720	3741
25°	3658	3657	3727
30°	3569	3613	3701
35°	3442	3428	3150
40°	3056	2697	2362
45°	2319	2018	1910
50°	1645	1615	1296
55°	1126	1378	890
60°	696	1100	595
65°	574	847	431
70°	570	737	442
75°	685	528	591
80°	787	487	741
85°	747	858	840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	5.0
10°-20°	380.3	14.4
20°-30°	572.0	21.7
30°-40°	623.5	23.6
40°-50°	436.6	16.5
50°-60°	247.1	9.4
60°-70°	135.2	5.1
70°-80°	82.0	3.1
80°-90°	31.1	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°	1085.5	41.1
0°-40°	1709.0	64.7
0°-60°	2392.8	90.6
0°-90°	2641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2641.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1404	1404	1404	1404	1404	
5°	1404	1401	1390	1407	1407	134
15°	1349	1346	1344	1364	1348	379
25°	1232	1234	1232	1260	1255	566
35°	1048	1043	1044	990	959	646
45°	609	636	530	524	502	473
55°	240	287	294	291	190	219
65°	90	148	133	168	68	93
75°	66	95	51	100	57	68
85°	24	39	28	34	27	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1404.4	1404.4	1404.4	1404.4	1404.4
2.5°	1408.0	1406.2	1402.0	1410.4	1409.8
5°	1403.8	1401.4	1390.5	1406.8	1406.8
7.5°	1397.7	1391.7	1392.3	1401.4	1397.1
10°	1389.9	1379.6	1381.4	1383.8	1383.8
12.5°	1371.7	1362.1	1357.2	1365.1	1367.5
15°	1349.4	1345.7	1344.5	1363.9	1347.6
17.5°	1317.9	1325.8	1318.5	1334.3	1336.7
20°	1285.3	1300.4	1299.2	1310.1	1306.4
22.5°	1258.7	1268.4	1268.4	1281.7	1292.5
25°	1232.1	1234.5	1231.5	1259.9	1255.1
27.5°	1197.6	1195.8	1205.5	1220.0	1229.7
30°	1148.7	1149.3	1162.6	1181.9	1191.0
32.5°	1103.9	1098.5	1114.8	1123.3	1113.6
35°	1047.7	1042.9	1043.5	990.3	958.8
37.5°	970.9	975.1	919.5	822.2	781.1
40°	870.0	878.4	767.8	695.2	672.3
42.5°	747.8	750.3	629.3	605.8	590.7
45°	609.4	636.0	530.2	523.5	501.8
47.5°	483.0	532.6	444.3	448.6	396.6
50°	393.0	442.5	385.7	387.5	309.5
52.5°	310.7	359.1	340.4	334.9	243.0
55°	240.0	287.2	293.8	291.4	189.8
57.5°	176.5	227.3	246.7	255.7	146.3
60°	129.4	185.6	204.3	222.5	110.6
62.5°	102.8	160.8	167.5	194.1	85.8
65°	90.1	148.1	133.0	168.1	67.7
67.5°	80.4	140.9	108.2	148.7	59.2
70°	72.5	127.0	93.7	133.0	56.2
72.5°	72.5	111.2	73.8	117.9	56.8
75°	65.9	94.9	50.8	99.8	56.8
77.5°	58.6	81.0	38.1	81.0	53.2
80°	50.8	63.5	31.4	62.3	47.8
82.5°	37.5	47.8	27.2	46.6	38.7
85°	24.2	39.3	27.8	33.9	27.2
87.5°	11.5	20.0	17.5	16.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)