

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: P291347

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291347
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-LD5-24-A19/156-UNV-L83050-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: 2346.0 lumens
Efficiency: N/A
Efficacy: 128.7 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

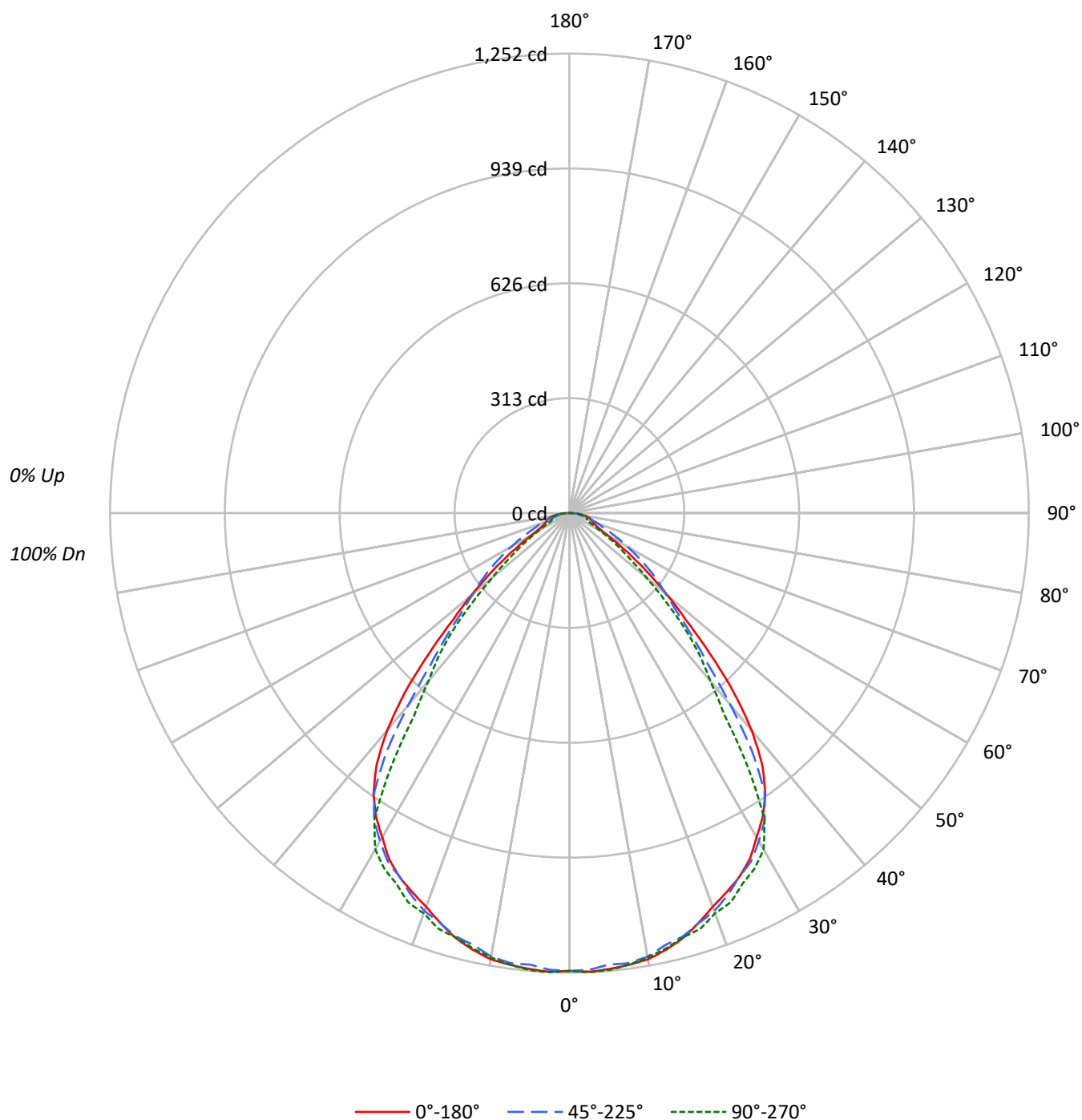
Input Watts (W): 18.228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3357	3357	3357
5°	3368	3337	3376
10°	3374	3353	3359
15°	3339	3327	3335
20°	3269	3305	3323
25°	3250	3248	3310
30°	3170	3209	3287
35°	3057	3045	2798
40°	2715	2396	2098
45°	2060	1792	1696
50°	1461	1434	1151
55°	1000	1225	791
60°	618	977	529
65°	509	752	383
70°	507	655	393
75°	608	469	525
80°	699	432	657
85°	664	763	747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	5.0
10°-20°	337.8	14.4
20°-30°	508.1	21.7
30°-40°	553.9	23.6
40°-50°	387.8	16.5
50°-60°	219.5	9.4
60°-70°	120.1	5.1
70°-80°	72.8	3.1
80°-90°	27.6	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°	964.3	41.1
0°-40°	1518.1	64.7
0°-60°	2125.5	90.6
0°-90°	2346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2346.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1247	1245	1235	1250	1250	119
15°	1199	1195	1194	1212	1197	337
25°	1094	1097	1094	1119	1115	503
35°	931	926	927	880	852	573
45°	541	565	471	465	446	420
55°	213	255	261	259	169	195
65°	80	132	118	149	60	82
75°	58	84	45	89	50	61
85°	22	35	25	30	24	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.5	1247.5	1247.5	1247.5	1247.5
2.5°	1250.7	1249.1	1245.4	1252.9	1252.3
5°	1247.0	1244.8	1235.2	1249.7	1249.7
7.5°	1241.6	1236.2	1236.8	1244.8	1241.1
10°	1234.6	1225.5	1227.1	1229.3	1229.3
12.5°	1218.5	1209.9	1205.6	1212.6	1214.8
15°	1198.6	1195.4	1194.3	1211.5	1197.0
17.5°	1170.7	1177.7	1171.3	1185.2	1187.4
20°	1141.7	1155.1	1154.1	1163.7	1160.5
22.5°	1118.1	1126.7	1126.7	1138.5	1148.2
25°	1094.5	1096.6	1093.9	1119.2	1114.9
27.5°	1063.8	1062.2	1070.8	1083.7	1092.3
30°	1020.3	1020.9	1032.7	1049.9	1057.9
32.5°	980.6	975.8	990.3	997.8	989.2
35°	930.7	926.4	926.9	879.6	851.7
37.5°	862.5	866.2	816.8	730.4	693.8
40°	772.8	780.3	682.0	617.6	597.2
42.5°	664.3	666.4	559.0	538.1	524.7
45°	541.3	565.0	471.0	465.1	445.7
47.5°	429.1	473.1	394.7	398.5	352.3
50°	349.1	393.1	342.6	344.2	275.0
52.5°	276.0	319.0	302.3	297.5	215.9
55°	213.2	255.1	261.0	258.8	168.6
57.5°	156.8	201.9	219.1	227.2	130.0
60°	114.9	164.9	181.5	197.6	98.3
62.5°	91.3	142.8	148.8	172.4	76.3
65°	80.0	131.6	118.1	149.3	60.1
67.5°	71.4	125.1	96.1	132.1	52.6
70°	64.4	112.8	83.2	118.1	49.9
72.5°	64.4	98.8	65.5	104.7	50.5
75°	58.5	84.3	45.1	88.6	50.5
77.5°	52.1	72.0	33.8	72.0	47.3
80°	45.1	56.4	27.9	55.3	42.4
82.5°	33.3	42.4	24.2	41.4	34.4
85°	21.5	34.9	24.7	30.1	24.2
87.5°	10.2	17.7	15.6	15.0	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)