

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: P291389

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291389
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-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2383.0 lumens
Efficiency: N/A
Efficacy: 128.1 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

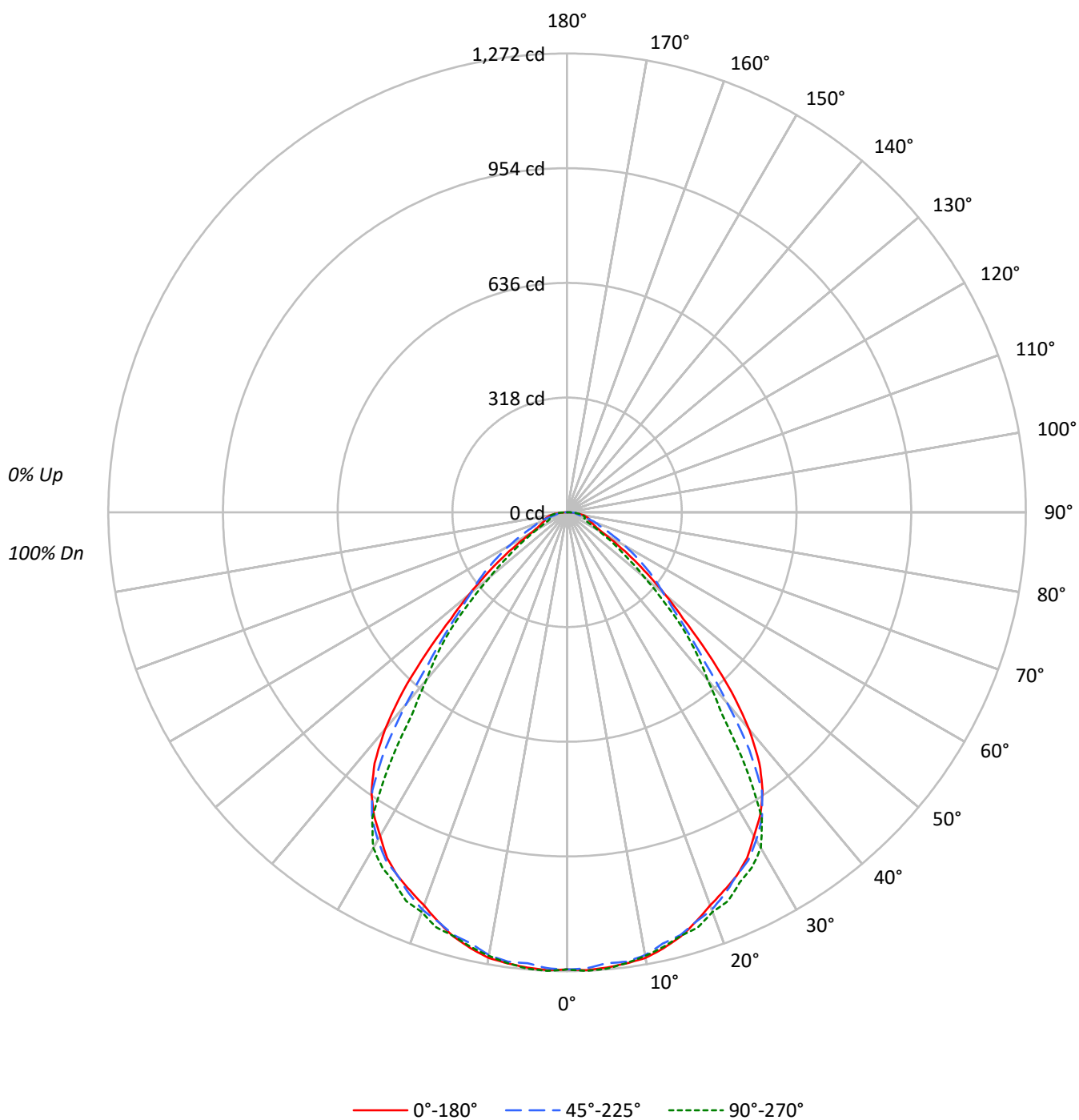
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3410	3410	3410
5°	3421	3389	3429
10°	3427	3406	3412
15°	3392	3380	3387
20°	3321	3357	3376
25°	3301	3299	3362
30°	3220	3260	3339
35°	3105	3093	2842
40°	2758	2434	2131
45°	2093	1821	1723
50°	1485	1457	1169
55°	1016	1244	804
60°	628	992	537
65°	518	764	389
70°	515	666	399
75°	619	476	533
80°	710	440	668
85°	673	775	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	5.0
10°-20°	343.2	14.4
20°-30°	516.1	21.7
30°-40°	562.6	23.6
40°-50°	393.9	16.5
50°-60°	223.0	9.4
60°-70°	122.0	5.1
70°-80°	74.0	3.1
80°-90°	28.0	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°	979.5	41.1
0°-40°	1542.1	64.7
0°-60°	2159.0	90.6
0°-90°	2383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1267	1267	1267	1267	1267	
5°	1267	1264	1255	1269	1269	120
15°	1218	1214	1213	1231	1216	342
25°	1112	1114	1111	1137	1132	511
35°	945	941	942	894	865	582
45°	550	574	478	472	453	427
55°	217	259	265	263	171	198
65°	81	134	120	152	61	84
75°	60	86	46	90	51	62
85°	22	36	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°	1267.2	1267.2	1267.2	1267.2	1267.2
2.5°	1270.5	1268.8	1265.0	1272.6	1272.1
5°	1266.6	1264.5	1254.6	1269.4	1269.4
7.5°	1261.2	1255.7	1256.3	1264.5	1260.6
10°	1254.1	1244.8	1246.5	1248.6	1248.6
12.5°	1237.7	1229.0	1224.6	1231.7	1233.9
15°	1217.5	1214.3	1213.2	1230.6	1215.9
17.5°	1189.2	1196.3	1189.7	1203.9	1206.1
20°	1159.7	1173.4	1172.3	1182.1	1178.8
22.5°	1135.7	1144.5	1144.5	1156.5	1166.3
25°	1111.7	1113.9	1111.2	1136.8	1132.4
27.5°	1080.6	1079.0	1087.7	1100.8	1109.5
30°	1036.4	1037.0	1049.0	1066.4	1074.6
32.5°	996.1	991.2	1005.9	1013.5	1004.8
35°	945.3	941.0	941.5	893.5	865.2
37.5°	876.1	879.9	829.7	741.9	704.8
40°	785.0	792.6	692.8	627.3	606.6
42.5°	674.8	677.0	567.9	546.6	532.9
45°	549.9	573.9	478.4	472.4	452.8
47.5°	435.9	480.6	400.9	404.8	357.8
50°	354.6	399.3	348.0	349.7	279.3
52.5°	280.4	324.0	307.1	302.2	219.3
55°	216.6	259.1	265.1	262.9	171.3
57.5°	159.3	205.1	222.6	230.7	132.0
60°	116.7	167.5	184.4	200.7	99.8
62.5°	92.7	145.1	151.1	175.1	77.5
65°	81.3	133.6	120.0	151.6	61.1
67.5°	72.6	127.1	97.6	134.2	53.5
70°	65.5	114.6	84.6	120.0	50.7
72.5°	65.5	100.4	66.6	106.4	51.3
75°	59.5	85.6	45.8	90.0	51.3
77.5°	52.9	73.1	34.4	73.1	48.0
80°	45.8	57.3	28.4	56.2	43.1
82.5°	33.8	43.1	24.5	42.0	34.9
85°	21.8	35.5	25.1	30.5	24.5
87.5°	10.4	18.0	15.8	15.3	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)