

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: P291387

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291387
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-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: 2291.0 lumens
Efficiency: N/A
Efficacy: 125.0 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

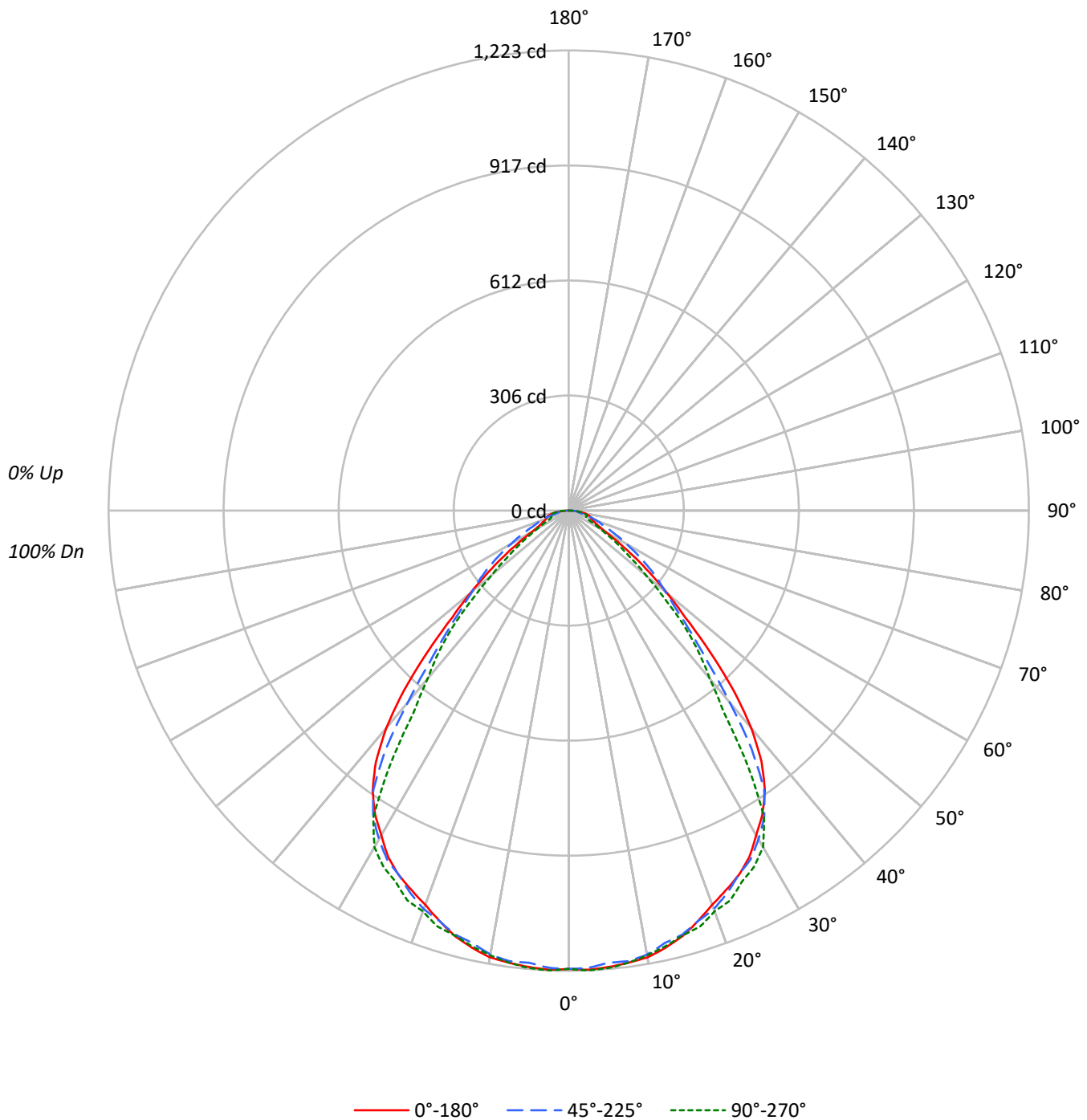
Input Watts (W): 18.321
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3278	3278	3278
5°	3289	3258	3297
10°	3295	3274	3280
15°	3261	3249	3257
20°	3193	3227	3245
25°	3173	3172	3233
30°	3096	3134	3210
35°	2985	2974	2733
40°	2651	2340	2049
45°	2012	1750	1657
50°	1427	1401	1124
55°	977	1196	773
60°	604	954	517
65°	497	735	374
70°	495	640	384
75°	595	459	513
80°	683	423	642
85°	648	744	729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	5.0
10°-20°	329.9	14.4
20°-30°	496.1	21.7
30°-40°	540.9	23.6
40°-50°	378.7	16.5
50°-60°	214.4	9.4
60°-70°	117.3	5.1
70°-80°	71.1	3.1
80°-90°	27.0	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°	941.7	41.1
0°-40°	1482.5	64.7
0°-60°	2075.7	90.6
0°-90°	2291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1218	1216	1206	1220	1220	116
15°	1170	1167	1166	1183	1169	329
25°	1069	1071	1068	1093	1089	491
35°	909	905	905	859	832	560
45°	529	552	460	454	435	411
55°	208	249	255	253	165	190
65°	78	128	115	146	59	80
75°	57	82	44	86	49	59
85°	21	34	24	29	24	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218.3	1218.3	1218.3	1218.3	1218.3
2.5°	1221.4	1219.8	1216.2	1223.5	1223.0
5°	1217.7	1215.6	1206.2	1220.4	1220.4
7.5°	1212.5	1207.3	1207.8	1215.6	1212.0
10°	1205.7	1196.8	1198.3	1200.4	1200.4
12.5°	1189.9	1181.6	1177.4	1184.2	1186.3
15°	1170.5	1167.4	1166.3	1183.1	1169.0
17.5°	1143.3	1150.1	1143.8	1157.4	1159.5
20°	1115.0	1128.1	1127.0	1136.5	1133.3
22.5°	1091.9	1100.3	1100.3	1111.8	1121.2
25°	1068.8	1070.9	1068.3	1092.9	1088.7
27.5°	1038.9	1037.3	1045.7	1058.3	1066.7
30°	996.4	997.0	1008.5	1025.3	1033.1
32.5°	957.6	952.9	967.1	974.4	966.0
35°	908.8	904.7	905.2	859.0	831.8
37.5°	842.2	845.9	797.7	713.2	677.6
40°	754.7	762.0	666.0	603.1	583.2
42.5°	648.7	650.8	545.9	525.5	512.4
45°	528.6	551.7	459.9	454.2	435.3
47.5°	419.0	462.0	385.5	389.1	344.0
50°	340.9	383.9	334.6	336.2	268.5
52.5°	269.6	311.5	295.3	290.5	210.8
55°	208.2	249.1	254.9	252.8	164.7
57.5°	153.1	197.2	214.0	221.8	126.9
60°	112.2	161.0	177.3	193.0	96.0
62.5°	89.2	139.5	145.3	168.3	74.5
65°	78.1	128.5	115.4	145.8	58.7
67.5°	69.7	122.2	93.9	129.0	51.4
70°	62.9	110.1	81.3	115.4	48.8
72.5°	62.9	96.5	64.0	102.3	49.3
75°	57.2	82.3	44.1	86.5	49.3
77.5°	50.9	70.3	33.0	70.3	46.2
80°	44.1	55.1	27.3	54.0	41.4
82.5°	32.5	41.4	23.6	40.4	33.6
85°	21.0	34.1	24.1	29.4	23.6
87.5°	10.0	17.3	15.2	14.7	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)