

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: P291486

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291486
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-L92765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2072.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

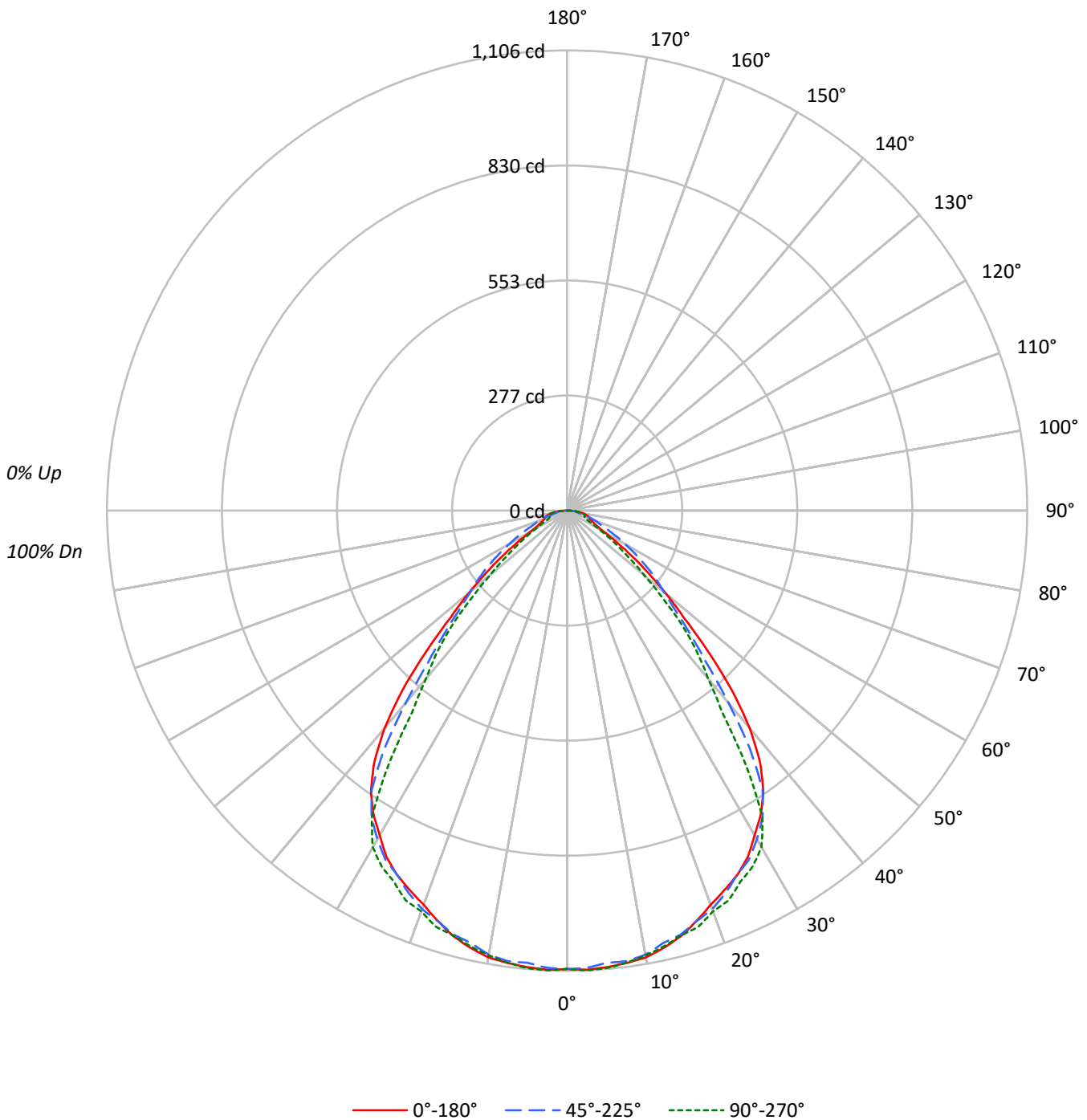
Input Watts (W): 18.414
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55	50	46	44
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48	42	38	37
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2965	2965	2965
5°	2975	2947	2981
10°	2980	2961	2967
15°	2949	2939	2945
20°	2888	2919	2935
25°	2870	2869	2924
30°	2800	2834	2903
35°	2700	2689	2471
40°	2398	2116	1853
45°	1819	1583	1498
50°	1291	1267	1016
55°	883	1081	699
60°	546	863	467
65°	450	664	338
70°	448	578	347
75°	538	414	464
80°	617	383	581
85°	587	673	658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	5.0
10°-20°	298.4	14.4
20°-30°	448.7	21.7
30°-40°	489.2	23.6
40°-50°	342.5	16.5
50°-60°	193.9	9.4
60°-70°	106.1	5.1
70°-80°	64.3	3.1
80°-90°	24.4	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°	851.6	41.1
0°-40°	1340.8	64.7
0°-60°	1877.2	90.6
0°-90°	2072.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2072.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1101	1099	1091	1104	1104	105
15°	1059	1056	1055	1070	1057	298
25°	967	968	966	988	985	444
35°	822	818	819	777	752	506
45°	478	499	416	411	394	371
55°	188	225	230	229	149	172
65°	71	116	104	132	53	73
75°	52	74	40	78	45	54
85°	19	31	22	27	21	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1101.8	1101.8	1101.8	1101.8	1101.8
2.5°	1104.7	1103.2	1099.9	1106.6	1106.1
5°	1101.3	1099.4	1090.9	1103.7	1103.7
7.5°	1096.6	1091.8	1092.3	1099.4	1096.1
10°	1090.4	1082.4	1083.8	1085.7	1085.7
12.5°	1076.2	1068.6	1064.8	1071.0	1072.9
15°	1058.6	1055.8	1054.9	1070.0	1057.2
17.5°	1034.0	1040.1	1034.5	1046.8	1048.7
20°	1008.4	1020.2	1019.3	1027.8	1025.0
22.5°	987.5	995.1	995.1	1005.5	1014.1
25°	966.6	968.5	966.2	988.5	984.7
27.5°	939.6	938.2	945.8	957.1	964.7
30°	901.2	901.7	912.1	927.3	934.4
32.5°	866.1	861.8	874.6	881.3	873.7
35°	822.0	818.2	818.6	776.9	752.2
37.5°	761.7	765.1	721.4	645.1	612.8
40°	682.5	689.2	602.4	545.4	527.4
42.5°	586.7	588.6	493.8	475.3	463.4
45°	478.1	499.0	416.0	410.7	393.7
47.5°	379.0	417.9	348.6	351.9	311.1
50°	308.3	347.2	302.6	304.0	242.8
52.5°	243.8	281.7	267.0	262.8	190.7
55°	188.3	225.3	230.5	228.6	148.9
57.5°	138.5	178.3	193.5	200.6	114.8
60°	101.5	145.6	160.3	174.5	86.8
62.5°	80.6	126.2	131.4	152.3	67.4
65°	70.7	116.2	104.3	131.9	53.1
67.5°	63.1	110.5	84.9	116.7	46.5
70°	56.9	99.6	73.5	104.3	44.1
72.5°	56.9	87.3	57.9	92.5	44.6
75°	51.7	74.5	39.8	78.3	44.6
77.5°	46.0	63.6	29.9	63.6	41.7
80°	39.8	49.8	24.7	48.9	37.5
82.5°	29.4	37.5	21.3	36.5	30.4
85°	19.0	30.8	21.8	26.6	21.3
87.5°	9.0	15.7	13.8	13.3	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)