

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: P291006

Luminaire Tested: **14GR-LD5-28-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A-UNV-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2958.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

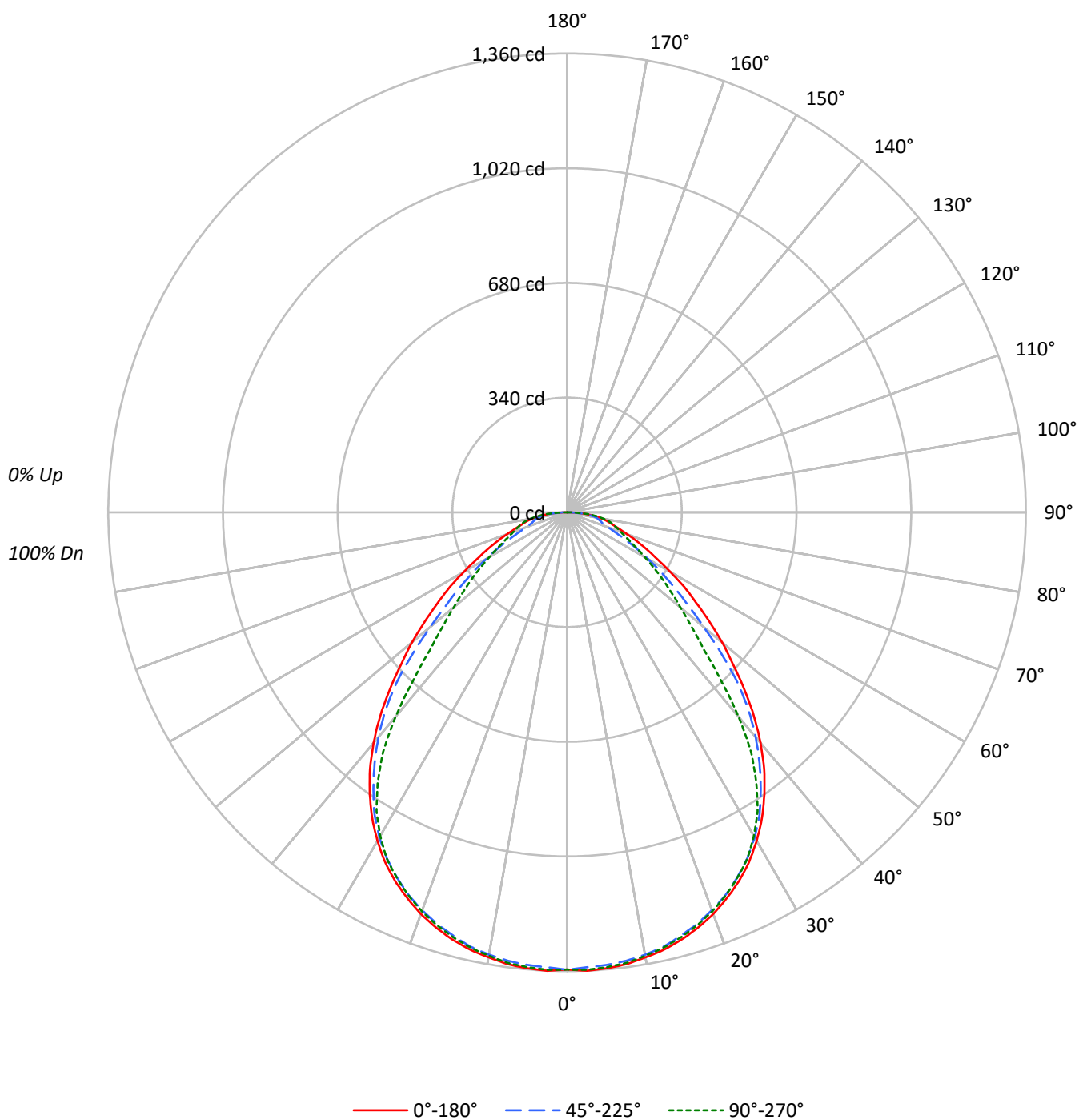
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74		74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64		64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44		44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		40
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36		36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33		33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3648	3648	3648
5°	3665	3638	3656
10°	3661	3638	3648
15°	3654	3621	3633
20°	3628	3594	3604
25°	3580	3545	3547
30°	3493	3456	3441
35°	3349	3288	3214
40°	3135	3055	2780
45°	2831	2724	2173
50°	2511	2212	1838
55°	2192	1815	1621
60°	1900	1494	1431
65°	1667	1198	1321
70°	1486	1017	1330
75°	1450	1072	1486
80°	1607	1353	1703
85°	1677	1442	1995



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	4.3
10°-20°	368.4	12.5
20°-30°	551.1	18.6
30°-40°	622.1	21.0
40°-50°	527.8	17.8
50°-60°	357.1	12.1
60°-70°	213.2	7.2
70°-80°	133.5	4.5
80°-90°	56.2	1.9
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°	1048.2	35.4
0°-40°	1670.3	56.5
0°-60°	2555.2	86.4
0°-90°	2958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1357	1353	1347	1356	1353	129
15°	1312	1309	1300	1309	1304	370
25°	1206	1202	1194	1200	1195	554
35°	1020	1013	1001	992	978	635
45°	744	747	716	614	571	573
55°	467	445	387	346	346	421
65°	262	217	188	201	208	262
75°	140	124	103	136	143	150
85°	54	52	47	60	65	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1355.5	1355.5	1355.5	1355.5	1355.5
2.5°	1360.3	1356.2	1350.0	1358.2	1357.5
5°	1356.9	1352.7	1346.6	1356.2	1353.4
7.5°	1350.7	1347.2	1341.1	1350.0	1347.2
10°	1339.7	1336.9	1331.4	1339.0	1334.9
12.5°	1328.0	1325.9	1319.1	1325.9	1321.8
15°	1311.5	1308.8	1299.8	1308.8	1304.0
17.5°	1290.9	1287.5	1279.9	1287.5	1283.3
20°	1266.9	1262.7	1255.2	1262.7	1258.6
22.5°	1238.0	1234.6	1227.7	1234.6	1229.1
25°	1205.7	1201.6	1194.0	1199.5	1194.7
27.5°	1168.6	1163.1	1156.3	1160.4	1157.6
30°	1124.0	1117.1	1112.3	1112.3	1107.5
32.5°	1075.2	1070.4	1062.1	1057.3	1051.1
35°	1019.5	1012.7	1001.0	992.1	978.3
37.5°	959.8	951.5	937.1	914.4	895.9
40°	892.4	882.1	869.8	825.1	791.4
42.5°	820.3	818.2	796.9	720.7	674.0
45°	744.0	746.8	715.9	613.5	570.9
47.5°	667.1	676.7	620.4	520.1	498.1
50°	599.8	603.2	528.3	451.4	439.0
52.5°	530.4	524.9	450.7	397.1	388.2
55°	467.2	445.2	386.8	346.3	345.6
57.5°	411.5	371.0	330.5	300.2	303.7
60°	353.1	307.8	277.6	261.1	265.9
62.5°	301.6	258.3	231.5	226.7	235.0
65°	261.8	217.1	188.2	200.6	207.5
67.5°	224.0	186.2	153.2	182.7	185.5
70°	188.9	161.4	129.2	168.3	169.0
72.5°	160.1	142.9	112.0	152.5	154.6
75°	139.5	124.4	103.1	136.0	142.9
77.5°	122.3	106.5	95.5	117.5	129.2
80°	103.7	85.9	87.3	98.2	109.9
82.5°	79.7	66.6	69.4	81.1	89.3
85°	54.3	51.5	46.7	60.5	64.6
87.5°	28.9	27.5	24.0	34.4	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)