

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: P290623

Luminaire Tested: **14GR-LD5-32-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290623  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-32-F1-UNV-L82765-W2A1-U-4500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3322.0 lumens  
Efficiency: N/A  
Efficacy: 127.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

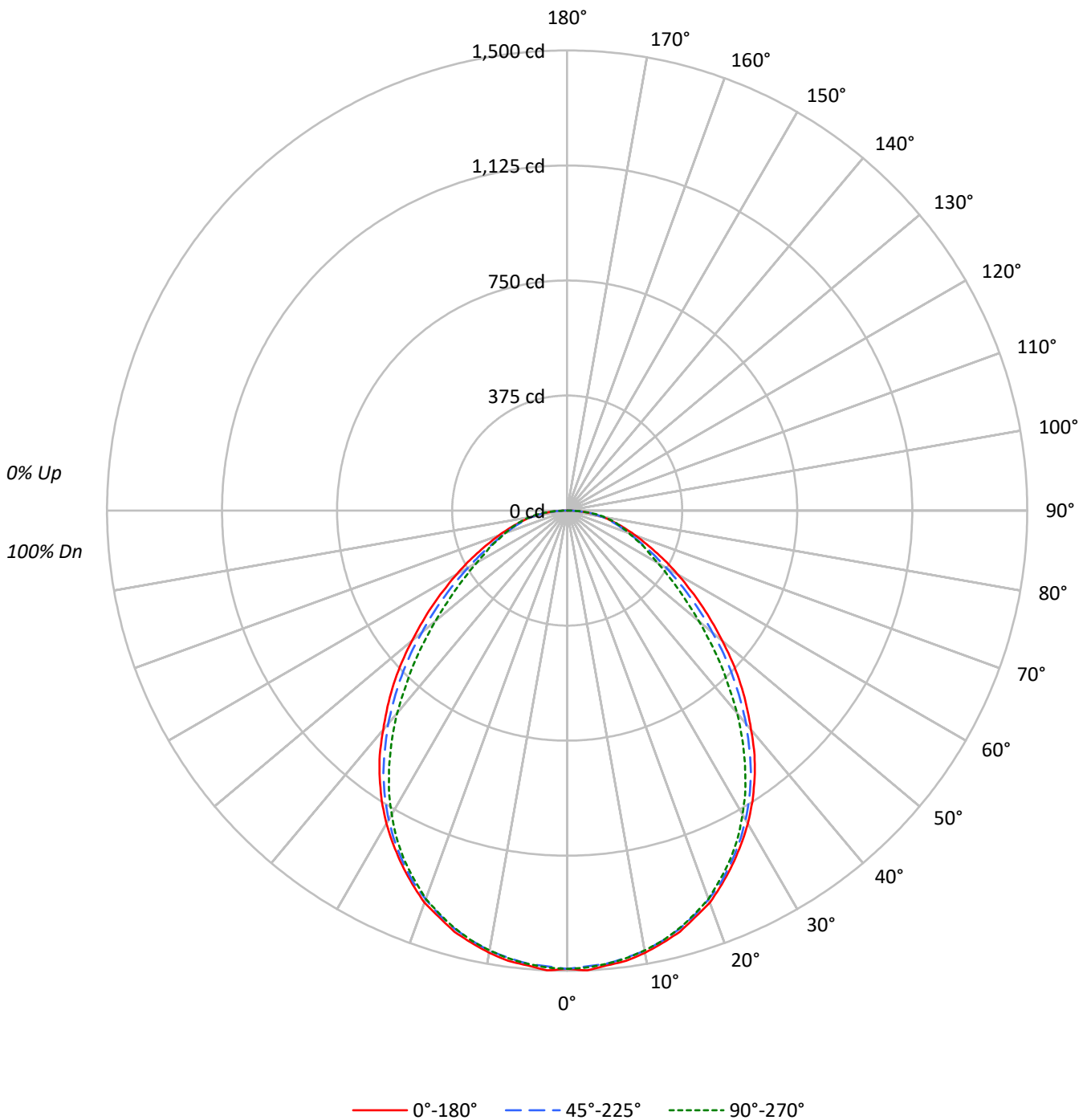
Input Watts (W): 26.133  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4020	4020	4020
5°	4019	4005	4007
10°	3999	3980	3978
15°	3958	3935	3929
20°	3895	3862	3857
25°	3782	3757	3730
30°	3660	3615	3554
35°	3500	3432	3320
40°	3277	3186	3028
45°	3043	2906	2695
50°	2761	2588	2346
55°	2497	2286	2051
60°	2242	2004	1828
65°	2012	1789	1750
70°	1858	1666	1684
75°	1774	1671	1765
80°	1793	1782	1923
85°	1859	1834	2044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.0	4.2
10°-20°	398.7	12.0
20°-30°	582.3	17.5
30°-40°	648.8	19.5
40°-50°	584.6	17.6
50°-60°	437.0	13.2
60°-70°	288.3	8.7
70°-80°	176.0	5.3
80°-90°	65.3	2.0
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°	1122.0	33.8
0°-40°	1770.9	53.3
0°-60°	2792.5	84.1
0°-90°	3322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3322.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1488	1486	1483	1490	1483	141
15°	1421	1416	1412	1421	1410	400
25°	1274	1269	1266	1268	1256	586
35°	1065	1056	1045	1026	1010	664
45°	800	791	764	729	708	615
55°	532	524	487	447	437	477
65°	316	306	281	270	275	317
75°	171	168	161	166	170	182
85°	60	58	59	66	66	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1494.0	1494.0	1494.0	1494.0	1494.0
2.5°	1500.1	1493.2	1487.1	1496.3	1490.9
5°	1487.9	1486.4	1482.6	1490.2	1483.3
7.5°	1480.3	1475.0	1470.4	1479.5	1471.9
10°	1463.5	1460.5	1456.7	1464.3	1455.9
12.5°	1443.0	1439.9	1436.1	1445.3	1436.1
15°	1420.9	1415.6	1412.5	1420.9	1410.2
17.5°	1388.9	1386.6	1382.1	1390.4	1379.8
20°	1360.0	1351.6	1348.5	1354.6	1347.0
22.5°	1318.1	1312.0	1311.2	1315.0	1302.1
25°	1273.9	1269.4	1265.5	1267.8	1256.4
27.5°	1227.5	1221.4	1216.8	1216.1	1203.9
30°	1178.0	1170.4	1163.5	1157.4	1143.7
32.5°	1123.9	1114.8	1105.6	1095.7	1081.3
35°	1065.3	1056.1	1044.7	1026.5	1010.5
37.5°	1003.6	992.9	974.7	953.3	937.4
40°	932.8	927.5	906.9	879.5	862.0
42.5°	866.5	860.5	834.6	804.1	780.5
45°	799.5	791.2	763.7	728.7	708.2
47.5°	731.0	722.6	692.2	648.8	630.5
50°	659.4	654.9	618.3	578.7	560.4
52.5°	593.9	588.6	551.3	511.7	494.9
55°	532.3	523.9	487.3	447.0	437.1
57.5°	470.6	461.4	427.2	392.9	386.1
60°	416.5	405.1	372.4	345.7	339.6
62.5°	365.5	352.6	325.1	304.6	301.5
65°	316.0	306.1	281.0	269.6	274.9
67.5°	273.4	263.5	245.2	240.6	239.1
70°	236.1	226.9	211.7	213.2	214.0
72.5°	201.8	196.5	185.0	188.8	191.9
75°	170.6	167.5	160.7	166.0	169.8
77.5°	142.4	140.1	137.1	141.6	147.7
80°	115.7	114.2	115.0	118.0	124.1
82.5°	89.1	86.0	88.3	94.4	98.2
85°	60.2	57.9	59.4	65.5	66.2
87.5°	28.2	28.2	27.4	32.0	32.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)