

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: P290587

Luminaire Tested: **14GR-LD5-43-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290587  
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-LD5-43-F1-UNV-L83050-W2A1-U-3000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4123.0 lumens  
Efficiency: N/A  
Efficacy: 113.1 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

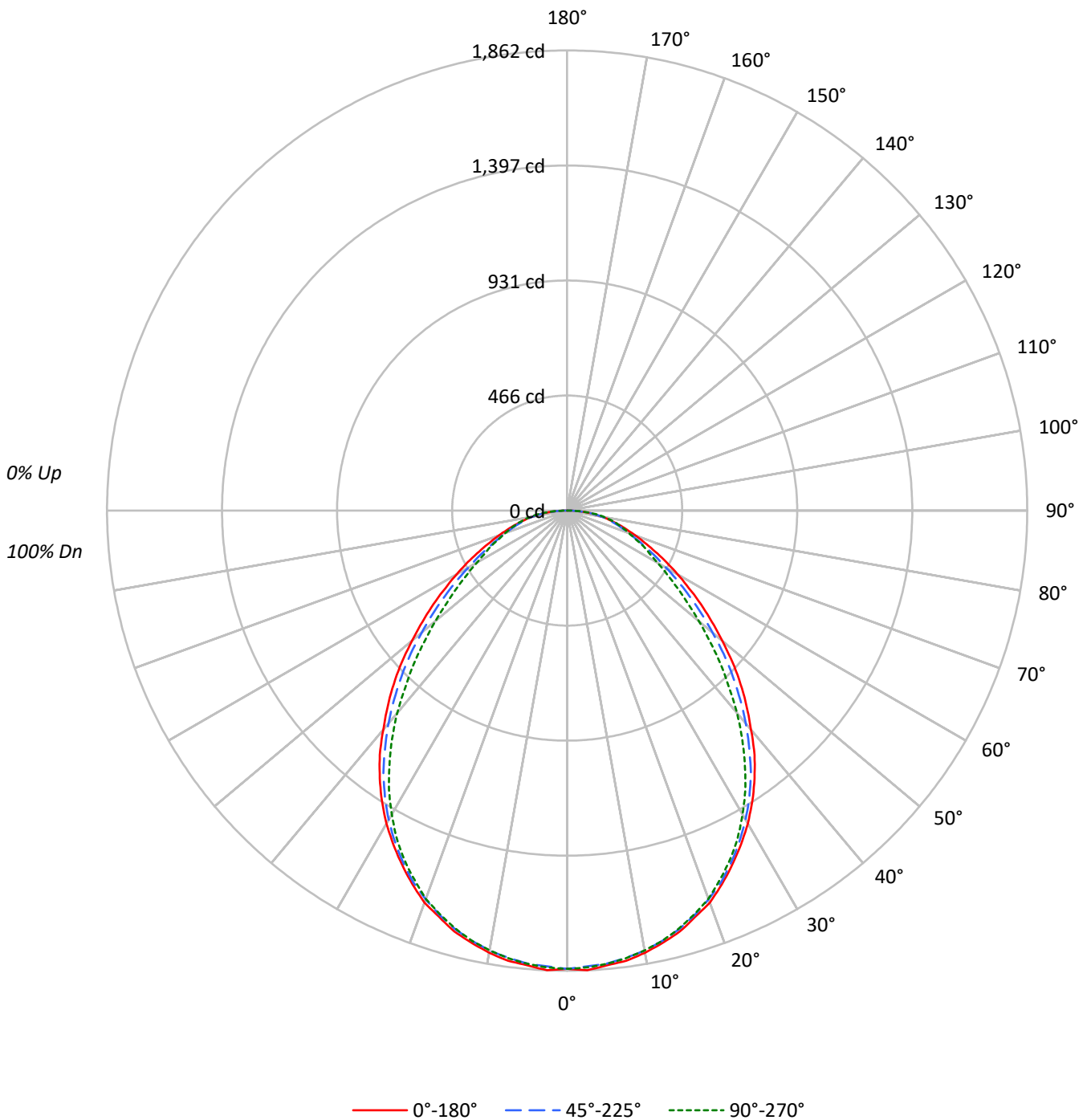
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	4990	4990	4990
5°	4988	4970	4973
10°	4963	4940	4938
15°	4913	4884	4876
20°	4834	4793	4787
25°	4695	4664	4630
30°	4543	4487	4411
35°	4343	4259	4120
40°	4067	3954	3758
45°	3776	3607	3345
50°	3426	3213	2912
55°	3099	2837	2545
60°	2782	2487	2268
65°	2497	2220	2173
70°	2305	2067	2090
75°	2201	2073	2191
80°	2225	2211	2386
85°	2306	2276	2538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.0	4.2
10°-20°	494.9	12.0
20°-30°	722.7	17.5
30°-40°	805.3	19.5
40°-50°	725.6	17.6
50°-60°	542.4	13.2
60°-70°	357.8	8.7
70°-80°	218.4	5.3
80°-90°	81.0	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°	1392.6	33.8
0°-40°	2197.9	53.3
0°-60°	3465.8	84.1
0°-90°	4123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4123.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1847	1845	1840	1850	1841	176
15°	1764	1757	1753	1764	1750	496
25°	1581	1575	1571	1574	1559	728
35°	1322	1311	1297	1274	1254	824
45°	992	982	948	904	879	764
55°	661	650	605	555	542	592
65°	392	380	349	335	341	393
75°	212	208	199	206	211	226
85°	75	72	74	81	82	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1854.2	1854.2	1854.2	1854.2	1854.2
2.5°	1861.8	1853.3	1845.7	1857.1	1850.4
5°	1846.7	1844.8	1840.0	1849.5	1841.0
7.5°	1837.2	1830.6	1824.9	1836.3	1826.8
10°	1816.4	1812.6	1807.9	1817.4	1807.0
12.5°	1790.9	1787.1	1782.4	1793.7	1782.4
15°	1763.5	1756.9	1753.1	1763.5	1750.3
17.5°	1723.8	1721.0	1715.3	1725.7	1712.5
20°	1687.9	1677.5	1673.7	1681.3	1671.8
22.5°	1635.9	1628.3	1627.4	1632.1	1616.1
25°	1581.1	1575.4	1570.7	1573.5	1559.4
27.5°	1523.4	1515.9	1510.2	1509.3	1494.1
30°	1462.0	1452.6	1444.1	1436.5	1419.5
32.5°	1394.9	1383.6	1372.2	1359.9	1342.0
35°	1322.1	1310.8	1296.6	1273.9	1254.1
37.5°	1245.6	1232.4	1209.7	1183.2	1163.4
40°	1157.7	1151.1	1125.6	1091.5	1069.8
42.5°	1075.5	1067.9	1035.8	998.0	968.7
45°	992.3	981.9	947.9	904.4	878.9
47.5°	907.3	896.9	859.1	805.2	782.5
50°	818.4	812.8	767.4	718.2	695.6
52.5°	737.2	730.5	684.2	635.1	614.3
55°	660.6	650.2	604.8	554.8	542.5
57.5°	584.1	572.7	530.2	487.7	479.1
60°	517.0	502.8	462.1	429.1	421.5
62.5°	453.6	437.6	403.5	378.0	374.2
65°	392.2	379.9	348.7	334.6	341.2
67.5°	339.3	327.0	304.3	298.6	296.8
70°	293.0	281.6	262.7	264.6	265.6
72.5°	250.4	243.8	229.7	234.4	238.2
75°	211.7	207.9	199.4	206.0	210.7
77.5°	176.7	173.9	170.1	175.8	183.3
80°	143.6	141.8	142.7	146.5	154.0
82.5°	110.6	106.8	109.6	117.2	121.9
85°	74.7	71.8	73.7	81.3	82.2
87.5°	35.0	35.0	34.0	39.7	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)