

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: P290650

Luminaire Tested: **14GR-LD5-43-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290650
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-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: 4432.0 lumens
Efficiency: N/A
Efficacy: 119.1 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

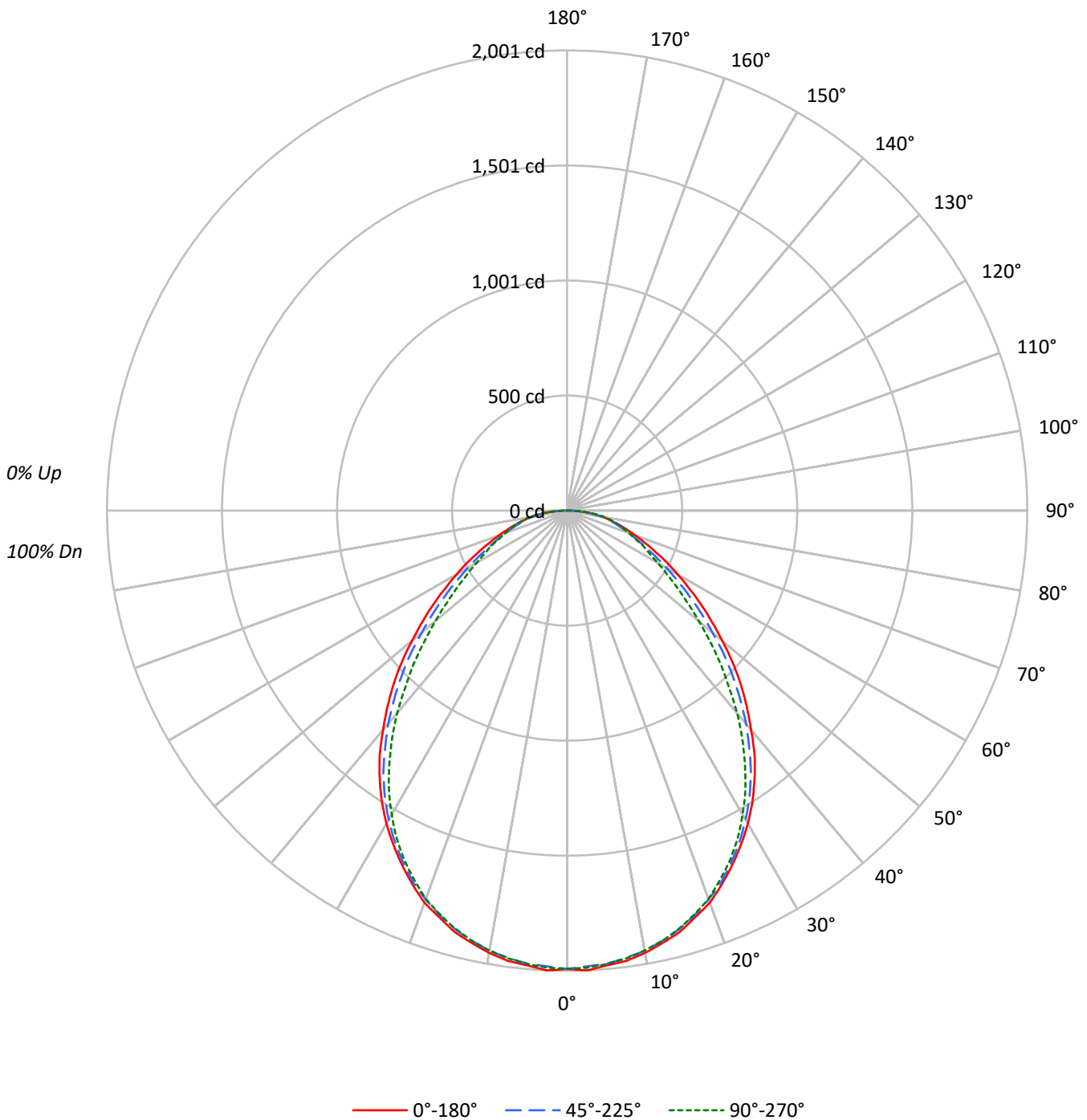
Input Watts (W): 37.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5364	5364	5364
5°	5362	5343	5346
10°	5335	5310	5308
15°	5281	5250	5241
20°	5196	5152	5146
25°	5046	5013	4977
30°	4883	4823	4741
35°	4669	4579	4429
40°	4372	4250	4040
45°	4059	3878	3596
50°	3683	3453	3130
55°	3331	3050	2736
60°	2991	2674	2439
65°	2684	2387	2335
70°	2478	2222	2246
75°	2366	2229	2355
80°	2393	2377	2566
85°	2479	2445	2729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	4.2
10°-20°	531.9	12.0
20°-30°	776.8	17.5
30°-40°	865.6	19.5
40°-50°	780.0	17.6
50°-60°	583.0	13.2
60°-70°	384.6	8.7
70°-80°	234.8	5.3
80°-90°	87.1	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°	1497.0	33.8
0°-40°	2362.6	53.3
0°-60°	3725.6	84.1
0°-90°	4432.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4432.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1993	1993	1993	1993	1993	
5°	1985	1983	1978	1988	1979	189
15°	1896	1888	1884	1896	1881	534
25°	1700	1694	1688	1692	1676	782
35°	1421	1409	1394	1369	1348	886
45°	1067	1056	1019	972	945	821
55°	710	699	650	596	583	636
65°	422	408	375	360	367	423
75°	228	224	214	222	226	243
85°	80	77	79	87	88	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1993.2	1993.2	1993.2	1993.2	1993.2
2.5°	2001.3	1992.2	1984.0	1996.2	1989.1
5°	1985.1	1983.0	1977.9	1988.1	1979.0
7.5°	1974.9	1967.8	1961.7	1973.9	1963.7
10°	1952.5	1948.5	1943.4	1953.6	1942.4
12.5°	1925.1	1921.1	1916.0	1928.2	1916.0
15°	1895.7	1888.5	1884.5	1895.7	1881.4
17.5°	1853.0	1849.9	1843.8	1855.0	1840.8
20°	1814.4	1803.2	1799.1	1807.3	1797.1
22.5°	1758.5	1750.4	1749.4	1754.4	1737.2
25°	1699.6	1693.5	1688.4	1691.5	1676.2
27.5°	1637.6	1629.5	1623.4	1622.4	1606.1
30°	1571.6	1561.4	1552.3	1544.2	1525.9
32.5°	1499.5	1487.3	1475.1	1461.9	1442.6
35°	1421.2	1409.0	1393.8	1369.4	1348.1
37.5°	1338.9	1324.7	1300.3	1271.9	1250.6
40°	1244.5	1237.4	1209.9	1173.4	1150.0
42.5°	1156.1	1148.0	1113.4	1072.8	1041.3
45°	1066.7	1055.5	1018.9	972.2	944.8
47.5°	975.3	964.1	923.4	865.5	841.2
50°	879.8	873.7	824.9	772.1	747.7
52.5°	792.4	785.3	735.5	682.7	660.3
55°	710.1	698.9	650.2	596.3	583.1
57.5°	627.8	615.6	569.9	524.2	515.1
60°	555.7	540.5	496.8	461.2	453.1
62.5°	487.6	470.4	433.8	406.4	402.3
65°	421.6	408.4	374.9	359.6	366.7
67.5°	364.7	351.5	327.1	321.0	319.0
70°	314.9	302.7	282.4	284.5	285.5
72.5°	269.2	262.1	246.9	251.9	256.0
75°	227.6	223.5	214.4	221.5	226.5
77.5°	190.0	186.9	182.9	189.0	197.1
80°	154.4	152.4	153.4	157.5	165.6
82.5°	118.9	114.8	117.8	126.0	131.1
85°	80.3	77.2	79.2	87.4	88.4
87.5°	37.6	37.6	36.6	42.7	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)