

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: P290690

Luminaire Tested: **14GR-LD5-20-F1-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290690
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-LD5-20-F1-UNV-L92765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1615.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

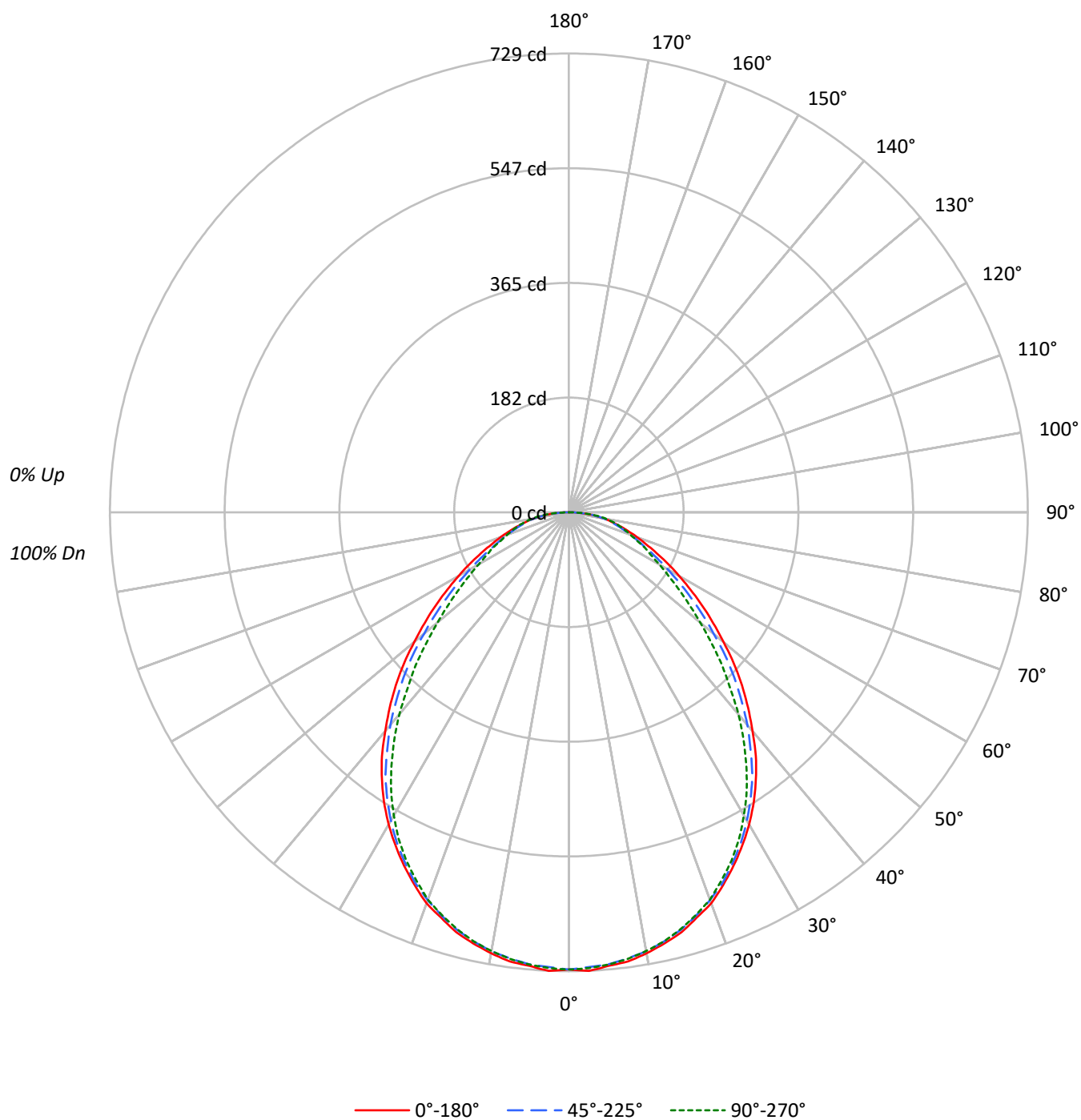
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1954	1954	1954
5°	1954	1947	1948
10°	1944	1935	1934
15°	1925	1913	1910
20°	1893	1877	1875
25°	1839	1827	1814
30°	1780	1757	1728
35°	1701	1668	1614
40°	1593	1549	1472
45°	1479	1413	1310
50°	1342	1258	1141
55°	1214	1111	997
60°	1090	974	889
65°	978	870	851
70°	903	810	818
75°	862	812	859
80°	872	866	934
85°	902	892	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	4.2
10°-20°	193.8	12.0
20°-30°	283.1	17.5
30°-40°	315.4	19.5
40°-50°	284.2	17.6
50°-60°	212.4	13.2
60°-70°	140.1	8.7
70°-80°	85.5	5.3
80°-90°	31.7	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°	545.5	33.8
0°-40°	860.9	53.3
0°-60°	1357.6	84.1
0°-90°	1615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1615.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	723	723	721	724	721	69
15°	691	688	687	691	686	194
25°	619	617	615	616	611	285
35°	518	513	508	499	491	323
45°	389	385	371	354	344	299
55°	259	255	237	217	212	232
65°	154	149	137	131	134	154
75°	83	81	78	81	83	89
85°	29	28	29	32	32	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.3	726.3	726.3	726.3	726.3
2.5°	729.3	725.9	723.0	727.4	724.8
5°	723.3	722.6	720.8	724.5	721.1
7.5°	719.6	717.1	714.8	719.3	715.6
10°	711.5	710.0	708.2	711.9	707.8
12.5°	701.5	700.0	698.2	702.6	698.2
15°	690.8	688.2	686.7	690.8	685.6
17.5°	675.2	674.1	671.9	676.0	670.8
20°	661.2	657.1	655.6	658.6	654.9
22.5°	640.8	637.8	637.5	639.3	633.0
25°	619.3	617.1	615.3	616.4	610.8
27.5°	596.7	593.8	591.6	591.2	585.3
30°	572.7	569.0	565.6	562.7	556.0
32.5°	546.4	542.0	537.5	532.7	525.7
35°	517.9	513.4	507.9	499.0	491.2
37.5°	487.9	482.7	473.8	463.5	455.7
40°	453.5	450.9	440.9	427.6	419.1
42.5°	421.3	418.3	405.7	390.9	379.4
45°	388.7	384.6	371.3	354.3	344.3
47.5°	355.4	351.3	336.5	315.4	306.5
50°	320.6	318.4	300.6	281.3	272.5
52.5°	288.7	286.2	268.0	248.8	240.6
55°	258.8	254.7	236.9	217.3	212.5
57.5°	228.8	224.3	207.7	191.0	187.7
60°	202.5	196.9	181.0	168.1	165.1
62.5°	177.7	171.4	158.1	148.1	146.6
65°	153.6	148.8	136.6	131.0	133.6
67.5°	132.9	128.1	119.2	117.0	116.2
70°	114.8	110.3	102.9	103.7	104.0
72.5°	98.1	95.5	90.0	91.8	93.3
75°	82.9	81.4	78.1	80.7	82.6
77.5°	69.2	68.1	66.6	68.9	71.8
80°	56.3	55.5	55.9	57.4	60.3
82.5°	43.3	41.8	42.9	45.9	47.8
85°	29.2	28.1	28.9	31.8	32.2
87.5°	13.7	13.7	13.3	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)